About This PDF

This PDF file is a compilation of all of the Student Resource Word documents that are a part of this NAF course. You may want to use it as a student workbook for this course.

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AOIT Web Design

Lesson 1

Course Introduction

Student Resources

Resource	Description
Student Resource 1.1	Anticipation Guide: Web Design
Student Resource 1.2	Taxonomy: Web Design Terms

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Student Resource 1.1

Anticipation Guide: Web Design

*Student Name:*_____ *Date:*_____

Welcome to the AOIT Web Design course! Over the next few months, you'll learn a great deal about the job of a website creator, whose role may include project planning, designing, building, or writing content for websites. Perhaps even more important, you'll learn and practice real-life web development skills that you can use today, such as choosing and using web development tools, planning and building a website, and attracting visitors to your site.

This is a hands-on course. That means you'll not only learn facts and concepts, but also have lots of opportunities to practice what you learn, including creating your own website. You'll also get to meet a number of professionals in the web industry. They will give you an opportunity to find out if website creation or related professions such as graphic design, project management, and content writing are careers you'd be interested in pursuing.

Directions: For each of the statements below, underline "I agree" if you think the statement is accurate and "I disagree" if you disagree with it. Write one reason to explain your guess.

A website's success is determined by how many visitors it has.	
My guess:	**I agree** **I disagree**
My reason:	
I learned:	
The most important information that designers need to know to build a successful website is what the goals are for the site.	
My guess:	**I agree** **I disagree**
My reason:	
I learned:	

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The best way to design a website is to start by studying another one with similar goals.	
My guess:	**I agree** **I disagree**
My reason:	
I learned:	
All websites work equally well on all browsers.	
My guess:	**I agree** **I disagree**
My reason:	
I learned:	
Good websites will gain popularity easily and don't need to be promoted.	
My guess:	**I agree** **I disagree**
My reason:	
I learned:	
There are many different types of career opportunities in the web industry, and many new opportunities are developing in the field.	
My guess:	**I agree** **I disagree**
My reason:	
I learned:	

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Student Resource 1.2

Taxonomy: Web Design Terms

*Student Name:*_____ *Date:*_____

Think of terms related to the topic of web design. Write them on this list in alphabetical order.

A	
B	
C	
D	
E	
F	
G	
H	
I	
J	
K	
L	
M	
N	
O	
P	
Q	
R	
S	
T	
U	
V	
W	
X	
Y	
Z	

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AOIT Web Design

Lesson 2

Looking at the World Wide Web

Student Resources

Resource	Description
Student Resource 2.1	Reading: Creating PowerPoint Presentations
Student Resource 2.2	Research Outline: Presentation Topics and Subtopics
Student Resource 2.3	Reference List: Relevant Websites for Research Projects
Student Resource 2.4	Assignment Sheet: PowerPoint Presentation
Student Resource 2.5	Guidelines: Cornell Note Taking

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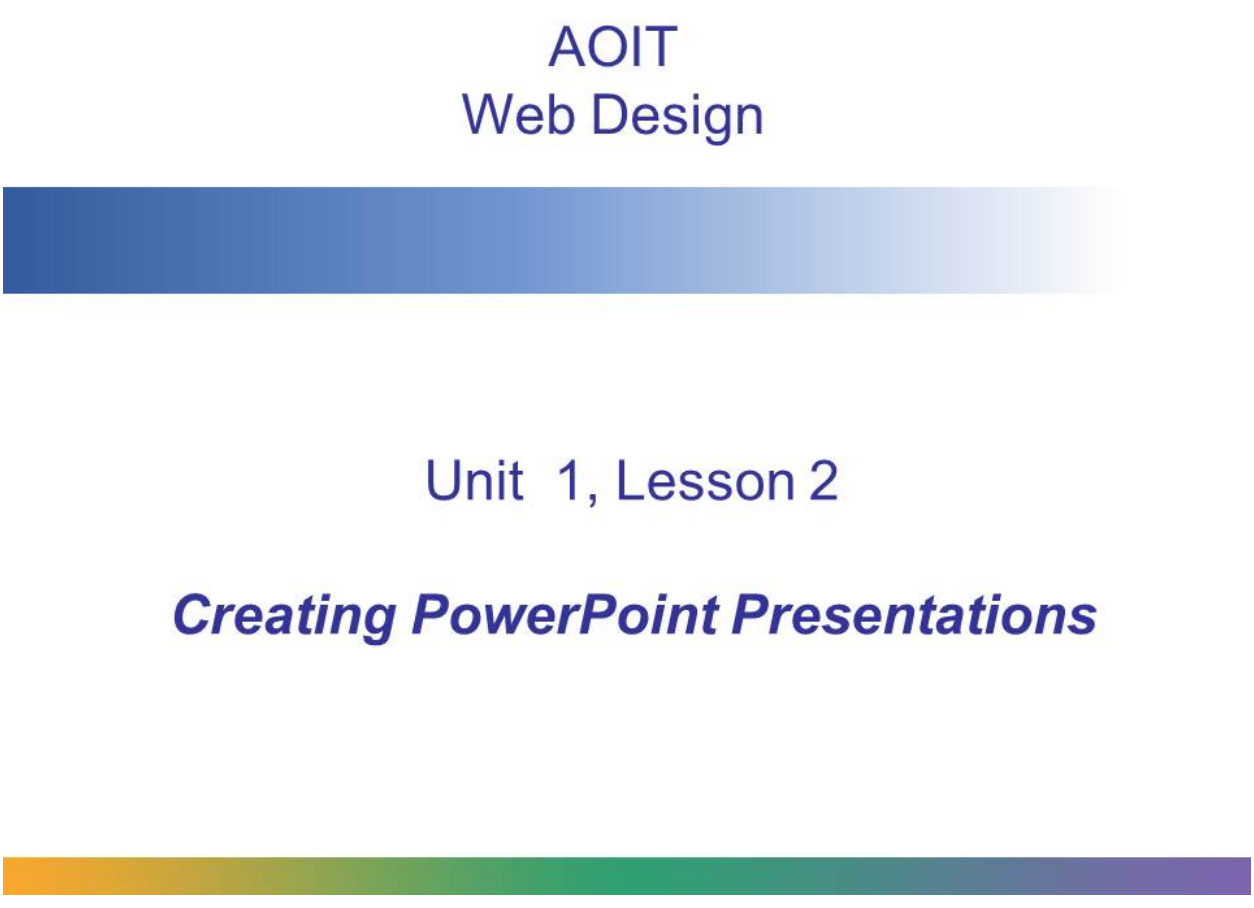
Student Resource 2.1

Reading: Creating PowerPoint Presentations



This presentation explains the best practices in content and design for making PowerPoint presentations.

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Simple, clear slides are keys to success

Guideline	Why?
Keep the slides simple.	The audience will get lost in crowded and confusing slides.
Use clear learning objectives.	Learning is more effective when it's focused.
Make the information friendly.	The audience will stay more engaged if the information feels good to them.
Avoid lectures.	The audience will check out if they're bored.

When are PowerPoint presentations appropriate instructional materials?

PowerPoint presentations give you an opportunity to disseminate information in a visual and oral way to your audience. Keep the slides simple and add important and interesting information like examples and explanations as you speak.

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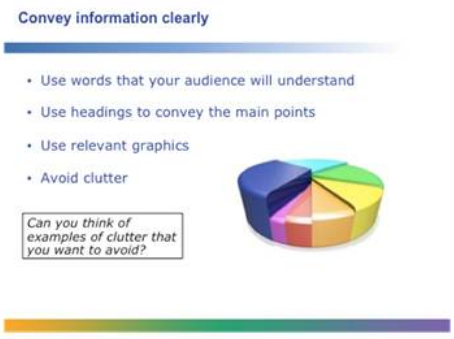
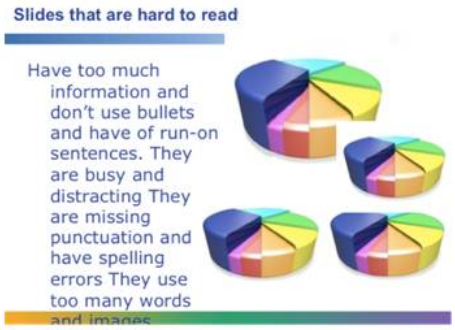
Make slides easy to read

- Use clear font styles and sizes large enough to read.
- Limit text on slides.
- Use light-colored backgrounds.
- Use dark-colored text.



Good design



Bad design

All these features make your PowerPoint presentations easy to read from anywhere in the room.

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Explain your learning objectives

- Make clear what you want your audience to learn.
- Present information in multiple ways.
- Summarize information at the end of the presentation.

Use charts and graphs to present information in multiple ways or to summarize.

Learning objectives are the important points you want everyone to remember. Explain them and add more detail in the notes than what is on the slide. Some students retain information better by seeing it, some by hearing it, and some by writing it down, so ask everyone to take notes. Do not be afraid to repeat important information.

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Convey information clearly

- Use words that your audience will understand.
- Use headings to convey the main points.
- Use relevant graphics.
- Avoid clutter.

Can you think of examples of clutter that you want to avoid?

While it can be tempting to make slides with lots of graphics, fancy fonts, and animation, remember that the purpose of a PowerPoint slide is to convey information clearly. Use graphs and charts to illustrate numerical data; use pictures and clip art that enhance the information. Use animation only when necessary. Remember to avoid putting information on a slide that doesn't relate to the content or that could confuse the audience. When it comes to PowerPoint, simple is best.

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Present your slides in your own words

- Avoid reading slides word for word.
- Practice ahead of time to be confident.
- Add information and examples as you speak.
- Allow time for note taking.
- Answer questions from the audience.

Your presentation gives you the opportunity to use examples and to include other supplemental information that will help your audience relate to the information. Use your own words—don't just read the slides. You can use the Notes portion of each slide to write notes about what you want to say when you present the slide.

When you speak, make sure you are facing your audience and looking at them; avoid turning your back to your audience and looking at your slides. Pause after each slide to give your audience time to take notes. You might consider saying, "What are your questions?" instead of "Do you have any questions?" after each slide. Often, when we ask, "Do you have any questions?" people automatically say, "No." Also, if you have time, you can ask the audience to share information that will enrich the discussion.

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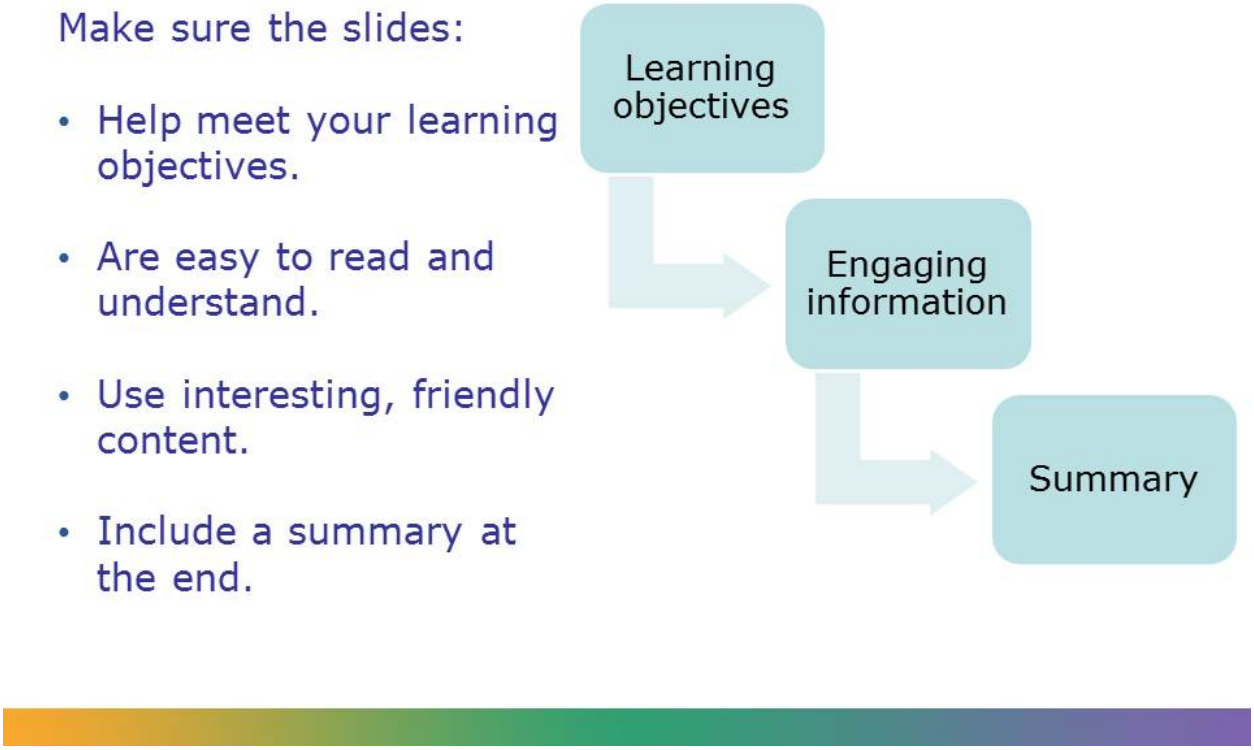
Summarize your presentation at the end



The final slide should summarize what the other slides said. Do your best to make the presentation interesting to your audience, but remember that the number-one goal of a PowerPoint presentation is to give out information clearly!

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Student Resource 2.2

Research Outline: Presentation Topics and Subtopics

Directions: This resource provides a list of subtopics for you to explore in your research for your PowerPoint presentation. Your presentation should cover the topics listed in the outline for your topic as a minimum. Use the list of relevant websites in Student Resource 2.3, Reference List: Relevant Websites for Research Projects, to research your topic. Feel free to add any information you find particularly useful or relevant.

Topic 1: How the web works and how documents are transferred

1. How information is shared on the Internet
    a. Web
    b. Email
    c. FTP
    d. Social media and other web communication channels such as Facebook and Twitter
2. How documents are connected to each other via hypertext links, creating a "web" of information
    a. Websites
    b. Web pages
    c. Home pages
    d. Actual documents such as PDFs and forms
3. How data and documents are transferred using standardized methods called protocols
    a. HTTP
    b. HTTPS
    c. Role of World Wide Web Consortium (W3C) in developing standards

Topic 2: The roles that computer servers and browsers play in how the web works

1. Definitions of *server* and *browser*
2. URLs
    a. Definition/purpose of URL
    b. Parts of a URL
    c. Purpose of index/default files
    d. URL aliasing
3. How browsers display pages
4. How mobile browsers display pages

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Topic 3: How web pages are made

1. HTML
2. CSS
3. Site maps
4. Navigation
5. Flash
6. JavaScript
7. PHP, ASP, or Ruby on Rails

Topic 4: How e-commerce works

1. Technical transaction process including secure (HTTPS) transactions using a certificate (SSL)
2. Advantages of e-commerce
3. Potential dangers of e-commerce
4. XSS

Topic 5: How the web was developed

1. Short history of the web
2. The dot-com crash (end of the Web 1.0 era) Web 2.0
3. Current trends in web development (include mobile development)

Topic 6: How social networks are developed

1. What are social networks?
2. History of social networks (before the Internet)
3. What do people use them for?
4. Possible impacts of social networks

Topic 7: How mobile websites are developed

1. What is a mobile website?
2. What are the differences between a mobile website, a responsive website, and a mobile app?
3. What are the pros and cons of a mobile website vs. a responsive website?
4. What is different about designing for the mobile web?
5. Issues with smaller screen sizes and imprecise finger tapping

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Student Resource 2.3

Reference List: Relevant Websites for Research Projects

"A Little History of the World Wide Web," World Wide Web Consortium (W3C).
http://www.w3.org/History.html
Covers 1945 to 1995.

"20 Things I Learned about Browsers and the Web," Google Chrome Team.
http://www.20thingsilearned.com/en-US/home
An introduction to web and browser terminology.

"How Does the Internet Work?" WiseGeek.
http://www.wisegeek.com/how-does-the-internet-work.htm

"How the Internet Really Works," NetLingo.
http://www.netlingo.com/more/cerfart.cfm
An easy-to-understand article by Vinton Cerf that summarizes how the Internet works.

"How Internet Infrastructure Works," Jeff Tyson, HowStuffWorks.
http://computer.howstuffworks.com/internet-infrastructure.htm

"The Causes of the Dot Com Crash," Ryan P. Allis, ZeroMillion.com.
http://www.zeromillion.com/econ/dot-com-crash.html

"Market Crashes: The Dotcom Crash," Andrew Beattie, Investopedia.
http://www.investopedia.com/features/crashes/crashes8.asp

"How Ecommerce Works," Paul Ciszewski, FindMyHosting.com.
http://www.findmyhosting.com/how-ecommerce-works/
A short, illustrated summary of how transactions occur in online business.

"How E-commerce Works," Marshall Brain, HowStuffWorks.
http://communication.howstuffworks.com/ecommerce.htm

"What Is Web 2.0?" Tim O'Reilly, O'Reilly Media.
http://www.oreilly.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html
The first page provides examples of Web 1.0 vs. Web 2.0 characteristics.

"Social Network Sites: Definition, History, and Scholarship," Danah M. Boyd and Nicole B. Ellison, Journal of Computer-Mediated Communication.
http://onlinelibrary.wiley.com/doi/10.1111/j.1083-6101.2007.00393.x/abstract

"Guidelines for Mobile Web Development," Smashing Magazine.
http://www.smashingmagazine.com/guidelines-for-mobile-web-development/

"Separate Mobile Website vs. Responsive Website," Brad Frost, Smashing Magazine.
http://www.smashingmagazine.com/2012/08/22/separate-mobile-website-vs-responsive-website-presidential-smackdown-edition/

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Student Resource 2.4

Assignment Sheet: PowerPoint Presentation

Directions: Use the guidelines below to create a three- to four-minute PowerPoint presentation about your web development topic. Then prepare as a group to present your presentation to the class. Review the assessment criteria before you begin your work.

Guidelines

- Divide up your outline among group members, and give each group member the responsibility to create slides for specific items in the outline.
- Make sure each slide contains a manageable chunk of information. Use as many slides as necessary to get the information across clearly.
- Include examples and illustrations.
- Use the Notes sections of the slide for background information that you want to tell the audience about.
- As a group, check each slide to make sure it is clear and concise and contains only the bullet points necessary.
- Check your presentation while you are working to ensure that you have included all the necessary elements in the presentation.
- Choose one or more members of your group to present to the class.

Make sure your presentation meets or exceeds the following assessment criteria:

- Each slide has a meaningful title that enhances understanding of the topic.
- Each slide has clear, easy-to-read, and easy-to-understand content.
- The presentation provides essential and accurate information about the main points of the subject.
- The images and graphics are clear, relevant, and helpful.
- The presentation includes contributions from all group members.
- The presentation is engaging, and each slide is accompanied by relevant explanations rather than just a word-for-word reading of the slide.
- The presenter faces the audience and establishes eye contact.
- The presentation is neat, with no grammatical or spelling errors.

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Student Resource 2.5

Guidelines: Cornell Note Taking

Directions: Cornell Notes is an effective system that has been in use since the 1950s. Use this method or the one your teacher instructs you to while listening to your classmates' presentations to get the essential information you need on paper. For Cornell Notes, divide your page into two columns. During the lecture, summarize what you hear in the right-hand column. After the lecture, pull out the important words, phrases, and definitions and write them in the left-hand column so that you can use them as prompts. Then follow steps two through five listed below to help you study.

Left-Hand Column

Important words,

phrases, and

definitions.

Right-Hand Column

Step one, during the lecture or presentation:
Record what you hear in short, summarizing sentences.

Step two, immediately after the presentation:
Write questions about what you've heard to help you remember the information and to help you study later.

Step three, when you're studying:
Cover the right-hand column and recite what you remember by looking at the important words, phrases, and definitions.

Step four, before tests and quizzes:
Reflect on the notes and ask yourself questions about them like: What is important about this concept? How do these ideas fit with what I already know?

Step five, every week:
Review all your notes for at least 10 minutes.

Bottom of the Page

After class, **summarize** the notes you took at the bottom of each page.

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AOIT Web Design

Lesson 3

Exploring Websites

Student Resources

Resource	Description
Student Resource 3.1	Chart: Website Categorization
Student Resource 3.2	Analysis: Successful and Unsuccessful Websites
Student Resource 3.3	Writing Assignment: Evaluating Web Design

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Student Resource 3.1

Chart: Website Categorization

*Student Name:*_____ *Date:*_____

Directions: An early step in designing or evaluating a website is clarifying the main purposes of the website. There are millions of websites, and most of them can be categorized into one or more of the following purposes. Listen carefully and take notes in the Characteristics column as your teacher discusses and gives examples of each type of website. Then, look at your class list of websites and list each site in its proper category.

Website Categories

Category and Examples	Characteristics
Web Portal: Example websites:	
Search Engine: Example websites:	
Informational: Example websites:	
News: Example websites:	
Commercial (E-commerce): Example websites:	
Educational: Example websites:	

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Category and Examples	Characteristics
Entertainment: Example websites:	
Advocacy: Example websites:	
Blog: Example websites:	
Personal: Example websites:	
Social Networking (Community): Example websites:	
Social Bookmarking: Example websites:	
Video/Media Sharing: Example websites:	
Wiki: Example websites:	
Financial Transaction: Example websites:	

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Student Resource 3.2

Analysis: Successful and Unsuccessful Websites

*Student Name:*_____ *Date:*_____

Directions: Follow the instructions below to analyze what makes a website successful. First you will look at a successful site, and then you will look at an unsuccessful site. Keep this analysis worksheet to help you when you write your compare-and-contrast web design paragraph (Student Resource 3.3).

Successful Site

- Enter http://www.awwwards.com/awards-of-the-day in your web browser to access a site sponsored by Awwwards. This site recognizes and promotes the talent and effort of web designers, developers, and agencies that create unique digital experiences that are useful, innovative, intuitive, and beautiful.
- Click any award-winning site that looks interesting to you.
- Fill out the chart below, which includes the criteria on which each site was judged. For each of the characteristics listed, write specific comments about the site you chose. For instance, for Usability, write the ways the site is easy to use (easy-to-identify links, logical names of categories, obvious navigational bar—write down the details). Use the notes in your notebook along with your taxonomies to help you come up with the right words.

Name of website:	Date when it won an award:
URL	
Comment on the following characteristics for this site:	
Design	
Creativity	
Usability	
Content	

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Unsuccessful Site

Now enter http://www.angelfire.com/super/badwebs in your browser and complete this portion of the worksheet.

Type of site (category)	
Comment on the following characteristics for this site:	
Design	
Creativity	
Usability	
Content	

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Student Resource 3.3

Writing Assignment: Evaluating Web Design

Directions: Write a paragraph comparing and contrasting the successful site you looked at with the unsuccessful site you looked at. Use your analysis and notes from this lesson to help you form your comparison. Review the example that is part of this resource to get ideas about how to structure your paragraph. Before you start working, review the assessment criteria and make sure you understand how your work will be assessed.

What Your Paragraph Should Include

- A topic sentence that gives an opinion that is interesting and provocative
- At least two examples of successful web design practice (ease of use; satisfaction of user needs; clear and accessible information; effective communication capabilities; memorable, unfussy design)
- At least two examples of unsuccessful web design practice
- Two or three sentences that use your examples to compare and contrast successful and unsuccessful web design
- At least one sentence that expresses your opinion about successful and/or unsuccessful web design
- A conclusion statement that gives some insightful information about your subject

Make sure your paragraph meets or exceeds the following assessment criteria:

- The paragraph compares and contrasts one website with successful web design to one site with unsuccessful web design.
- The paragraph begins with a topic sentence that is interesting and provocative.
- The examples of successful web design practices are clear and easy to understand.
- The examples of unsuccessful web design practices are clear and easy to understand.
- Comparisons and contrasts help the reader understand why one site is more successful than the other.
- The paragraph ends with an insightful concluding sentence.
- All text is neat, with proper spelling and grammar.

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Example: What Makes a Good Photograph?

Some people might think it very appropriate that my tabby cat, Fred, has red, demon-like eyes in one of the photographs I have taken of him to put on my web page, but I don't think that captures his character at all. I would rather put good-quality photos on my web page because that better represents my skills. A successful photograph is one that captures the subject and the moment and is in focus. An unsuccessful photograph misses the moment, shows the subject inaccurately, is blurry or too dark, or has other problems. My first picture of Fred meets several criteria of what makes a good photo. Everything is in focus, including the mouse trying to scurry away. The composition is balanced, with the cat just off-center to the left and the mouse off to the right. It captures the moment accurately. The second photo, on the other hand, is not so successful. Everything is slightly blurry, even though Fred was just sitting there. Fred's eyes are glowing red, and the mouse is nowhere to be seen…possibly because it is hidden behind the large, very out-of-focus object on the right side of the screen—my thumb. Because the second photograph of Fred could make it look as if I don't know my camera from a camshaft, I will be uploading only the first photograph onto my web page. A good-quality photograph such as this will not only represent Fred better, but also show that I can exercise good judgment as a web designer.

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AOIT Web Design

Lesson 4

The Role of HTML

Student Resources

Resource	Description
Student Resource 4.1	Deduction: Deciphering HTML Code
Student Resource 4.2	Anticipation Guide: HTML Tags
Student Resource 4.3	Reading: How HTML Works
Student Resource 4.4	Reference: Most Important HTML Tags
Student Resource 4.5	Reference: Most Common HTML Mistakes
Student Resource 4.6	Guide: Sample Web Page Modification
Student Resource 4.7	Minor Project Work: Your Personal Web Page
Student Resource 4.8	Example: Web Page Sketch
Student Resource 4.9	Feedback Sheet: Peer Web Page

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Student Resource 4.1

Deduction: Deciphering HTML Code

*Student Names:*_____ *Date:*_____

Directions: Work with a partner and make your best guess as to what the different tags in this source code correspond to on Marina's web page. In the table on the last page of the worksheet, write what you think each of the HTML tags means. Use your own knowledge of web design and your deduction skills. Your teacher will lead you through the first example. Once you have completed number 1 with your teacher, do numbers 2–10 with your partner.

HTML Code for Marina's Web Page

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
    "http://www.w3.org/TR/html4/loose.dtd">
<html lang="en">

    <head>

          <meta http-equiv="content-type" content="text/html; charset=utf-
8">
          <meta name="Author" content="Marina S">
          <meta name="Description" content="This is a personal website that
I've created to help myself learn html.">

          <title>Marina's Web Page</title>



    </head>

<!-- I can write notes to myself that won't show up on the page. They are
wrapped inside an html comment tag. Notes to self are mainly for code
review purposes, so you don't forget who did what and why they did it (when
the code is shared by many in a team). -->

<body>

<h1>Marina's Web Page</h1>
```

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```
<div id="about">

    <h2>About Me</h2>

    <p>I am a junior at King High School. I have been enrolled in the <a
href="http://ait.echalk.com/">Academy of Information Technology</a> since
my sophomore year and enjoy the program because it is preparing me for
college and teaching me about one of my favorite things,
<em>computers!</em> So far, I'm most proficient with MS Word, Photoshop,
and Firefox.</p

    <p>Once I finish high school, I will attend a four-year college and
study Information Systems and/or Web Design. I will be doing my internship
this year at the Franklin Bank, where I'll be keeping their computers virus
free and updating their website. I am really excited to work with computers
in a professional environment and increase my computer skills.</p>

    <p>In my free time, I work at my parents' store and help take care of my
little brother. I usually work 25 hours a week at the store helping stock
the shelves and ringing up the customers. When we are not busy at the
store, I have time to do my homework there, so I do have some extra time to
train in karate, which I really love to do. I also like to play video
games, knit, and help my friends fix their computers.</p>

    <p><em>Thank you for visiting my page!</em></p>

    <h3>My top favorite video games:</h3>
    <ul>
          <li>Nintendogs</li>
          <li>Animal Crossing</li>
          <li>Super Mario Galaxy</li>
    </ul>

</div>

<div id="images">

    <h2>Pictures</h2>

    <img src="karate.jpg" width="534" height="800" />
    <p class="caption">Here I am practicing karate!</p>
```

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```
        <br />
        <img src="dogRufus.jpg" width="800" height="533" />
        <p class="caption">This is our dog Rufus.</p>

    </div>

    <div id="links">

    <h2>My Favorite Websites</h2>

    <p><strong>Please take a look at my two favorite websites!</strong></p>

    <ul>
              <li><a href="http://dogtime.com/">Dogtime.com</a></li>
              <li><a href="http://www.youtube.com/">YouTube</a></li>
        </ul>

    </div>

    <hr />

    <div id="poem">

        <h2>Individual Choice</h2>
        <h3>This is a poem I wrote:</h3>

        <blockquote>

        Without the sun<br />
        Without strength<br />
        Without a goal<br />
        I cannot thrive<br /><br />

        Without belief<br />
        Without faith<br />
        Without support<br />
```

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```
        I am alone<br /><br />

        Without dreams<br />
        Without a course<br />
        Without desire<br />
        I will not succeed<br /><br />

        So I look to life<br />
        And believe in me <br />
        And know that I am truly who I want to be<br /><br />

        A girl of today<br />
        Preparing for tomorrow<br />
        But never forgetting who I am

        </blockquote>

    </div>

    </body>
    </html>
```

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HTML Markup	Meaning
1. `<title>`	
2. `<! … -->`	
3. `<body>`	
4. `<h1>`	
5. `<div>`	
6. `<h2>`	
7. `<p>`	
8. `<em>`	
9. `<img src="apples.jpg">`	
10. `<blockquote>`	

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Student Resource 4.2

Anticipation Guide: HTML Tags

Student Name:_____ Date:_____

Directions: For each of the HTML tags below, write how you think the tag affects the text on a web page in the "My guess" row. Give your reason in the "My reason" row. As you learn more about HTML code during this lesson, write what you learn in the "I learned" row.

	`<img src="image.jpg">`
My guess:	
My reason:	
I learned:	
	`<head>`
My guess:	
My reason:	
I learned:	
	`<ul>`
My guess:	
My reason:	
I learned:	
	`<body>`
My guess:	
My reason:	
I learned:	

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Student Resource 4.3

Reading: How HTML Works

What Is It?

HTML stands for *Hypertext Markup Language*, and it is the standard language that web designers use to make web pages. When a browser opens a page in HTML, it displays all the parts of the page—its text, its images, and its links—even though the HTML page has text only.

Why Do We Use HTML?

We use HTML so that web browsers can understand how to read web pages. HTML describes the structure of a web page by standardizing the elements contained on that page. Because it has become an international standard, HTML is used as the primary language on the World Wide Web. All web browsers can load a page written in HTML. Because HTML can be interpreted by any browser, a page written in HTML will work the same for all its users.

How Does HTML Work?

Web developers "mark up" the elements of a web page by using angle brackets (< >). The angle brackets and the information inside them, called *tags*, are not shown on the web page. Instead, the tags give structure to the content of the page. For example, a `<p>` tag sets off a paragraph, and an `<h1>` tag indicates a heading that will be big and bold. When web designers refer to *markup*, they mean both the content of the page and its tags. Web designers say that tags are "hidden." Tags are predefined words or acronyms and should always be written in lowercase letters.

Most HTML tags work in pairs that surround the content of the web page. For instance, in the sample web page in Student Resource 4.1, you can see the tag `<p>` at the beginning of the first paragraph about Marina. At the end of the paragraph, you can see this end tag: `</p>`. Start and end tags, which are also called *opening and closing brackets*, tell the browser how to display the information in between them. End tags are the same as the start tags, except that they have a slash after the first angle bracket. They "turn off" the instruction given by the start tag.

Look at the source code of any website by selecting View > Source (in Internet Explorer), and you will see many different start and end tags. It is always good to have a list handy of all the tags you need to build a web page. Ask your teacher for one, or look at http://www.webmonkey.com/2010/02/html_cheatsheet/ or http://www.tolweb.org/tree/learn/TreebuilderTools/AlltheHTML.html for a thorough list of HTML tags.

Think of HTML tags as being on a string. When the browser sees a start tag on the string, it will follow that command until it gets to the same end tag. Because of the way HTML is read by the browser, you can embed (or *nest*, as designers say) tags within other tags. For instance, all tags are embedded between the `<html>` and `</html>` tags. They are the first and last tags of all HTML documents since everything in between them is in HTML.

Basic Document Structure

All web pages written in HTML must follow a standard format. The basic sections of a web page are called *elements*; a standard page has three elements: the line that contains the HTML version information, the head section, and the body.

To show that it is written in HTML, a document begins with the start tag `<html>`. This tag is called the *root element* of the page.

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The head element comes next in the HTML document. It is designated by the <head> tag and contains general information about the web page, such as its title and style. The elements inside the head element usually are not displayed by the browser. According to the HTML standard, the only tags that should go inside the head section are: <title>, <link>, <base>, <script>, and <meta>.

- The <title> information is what will show up in the title bar of the browser window. This information will also be displayed as the name of the page in a user's bookmarks or favorites list.
- The <link> tag is used to define the relationship between a document and an external resource for the web page. Most often, the link tag references a cascading style sheet, which determines how the page looks when it is presented.
- The <base> tag defines the base location for the links on the page.
- The <script> tag links to external script sources (usually JavaScript), or surrounds non-HTML code that adds functionality to the page.
- The <meta> tag defines the meta elements, which specify page description, keywords, and any other information not provided through the other head elements and attributes.

The rest of the page will be in the body element. The <body> tag defines the section that contains all the text, images, and links that will show up on the page.

The following example shows the most simple of web pages.

```
<html>

<head>

<title>Simple Web Page</title>

</head>

<body>This is my first page.</body>

</html>
```

If it is possible, open a text editor and copy this simple page's HTML exactly. Save it as an HTML document (*.html) and reopen it in a web browser. You will see that the only text visible on this page is the title, "Simple Web Page," and the body, "This is my first page." All the other tags are invisible but will tell any browser to display this text as a web page.

HTML also allows web designers to put comments into the source code. These comments are invisible on the actual web page but give useful information to those looking at the code. In the sample web page in Student Resource 4.1, you can see comments in the source code. Comments are for two audiences: the original page author, who may wish to leave content reminders ("Find picture of dog."), and future code maintainers, who may wonder why something was done in a particular way on a complex page ("This next section checks the availability of the weather RSS feed and displays it."). Note that the future coder may be the original author who has forgotten why something was coded in a particular way long ago. Comment tags can also be very helpful in organizing web pages that contain an extensive amount of code. A comment tag is a combination of an exclamation point and two hyphens (a dash). It closes differently from other tags, using two hyphens and then a closing bracket. Here is an example: <!--This is a comment-->. Examples of common comment tags include <!--NAVIGATION BAR-->, <!--MAIN TEXT-->, and <!--FOOTER-->. By adding comment tags throughout the code, you make it easier to identify sections of your code as you scroll through. This not only helps you, but is useful for any other future code maintenance.

Of course, good web pages have many more elements than this example. It does not take long to learn the basics of HTML and begin creating your own pages. As long as all pages have the basic tags <html>, <head>, and <body>, they can be enhanced in many ways, by changing the look of the text, creating separate spaces such as paragraphs, making lists, and adding graphic elements.

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Empty Elements

Some elements in HTML are called *empty elements* because they do not have text content. The `<img>` element (image element) is empty because it commands the browser to go to the server to get a graphics file instead of displaying the image in the code. Because images require communication with the server, they use special instructions called *attributes,* which give needed information about an element. Image elements need to have a source attribute (`src`), which indicates the URL or file name of the image. Image elements also can have an `alt` attribute, which gives a textual description of the image in case the image itself does not show up on the page. The `alt` attribute also helps people with disabilities use the web and are important for that purpose.

This is sample HTML code for an image that shows a picture of a dog. The picture is in JPEG format. This code contains the two attributes of images, `src` and `alt`. (There are never spaces between an attribute, the equal sign, and the quotes containing the attribute.)

```
<img src="dog.jpg" alt="photo of dog" />
```

Style Sheets

You can use the `<link>` tag to reference style sheets to specify (for example) the background color of a web page, the color of an active hyperlink, and the color that the link turns after you click it. These content styling attributes can be defined in the tags placed directly around the content to be styled. However, as web pages become more complex, web designers find that they need a better way to describe what the page should look like. Using external (linked) style sheets makes it easy to specify the way the page is presented. Using an external cascading style sheet (CSS) is industry best practice. For example, in a style sheet, you can detail the amount of white space between text lines, the amount of indentation of each line, and the font size and typeface. The use of style sheets separates the content of the web page from its presentation so that you can change the presentation without revising the source HTML document. HTML describes what the content is, such as a paragraph of text (`<p>`), and a style sheet describes what a paragraph looks like on that web page—everything from font to the amount of space between paragraphs. Having a separate style sheet file also makes it possible to create multiple web pages that have a similar look and all use the same style sheet.

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Student Resource 4.4

Reference: Most Important HTML Tags

These tags are the most commonly used in HTML coding. Make sure to code them carefully so that your web page looks how you want it to!

Structural Tags	
`<html>`	HTML document—required in all HTML documents.
`<body>`	Body element—required in all HTML documents.
`<head>`	Head of the page—required in all HTML documents.
`<meta>`	Gives additional page information to the browser—invisible.
`<title>`	Document title.
Container Tags	
`<div>`	Encapsulates other page elements and divides the HTML document into sections. Web developers use this to group paragraphs and then, using a CSS style sheet, apply a style to the `<div>` tag instead of coding the same style for each paragraph element.
Heading and Text Tags	
`<blockquote>`	Long quotation—indents from both sides.
` `	Inserts single line break—an empty element. This tag requires a slash in XHTML because there is no closing tag; in HTML5, the trailing slash is not required.
`<h1>` to `<h6>`	Font size of header, `<h1>` (largest) to `<h6>` (smallest).
`<hr />`	Inserts a horizontal line—an empty element.
`<em>`	Emphasizes a word, typically by making it appear in italics.
`<p>`	Paragraph—to insert more space between two paragraphs, use two tags.

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Heading and Text Tags (continued)	
`<q>`	Quotation—puts text inside quotation marks.
`<strong>`	Emphasizes a word, typically by making it appear in boldface.
Graphic Elements	
`<img />`	Image—include the source (`src`) attribute with all `img` tags.
Links	
`<a href="URL">`	Creates a hyperlink.
Lists	
`<li>`	List item. Must be nested inside `<ul> </ul>` tags for an unordered list or `<ol> </ol>` tags for an ordered list.
`<ol>`	Ordered list—indicates the beginning and end of a list with list items (`li`) numbered.
`<ul>`	Unordered list—indicates the beginning and end of a list with list items (`li`) bulleted.

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Student Resource 4.5

Reference: Most Common HTML Mistakes

These are the most common problems web designers encounter when coding their pages. If you are having problems coding your page, look for these mistakes:

1. **Forgetting the slash in the closing tag:** Without the slash, the browser does not know to turn off the tag.

   Incorrect: `<h3>Mistakes I've Made<h3>`

   Correct: `<h3>Mistakes I've Made</h3>`

2. **Leaving out an angle bracket:** Browsers will ignore unknown tags; any missing elements are interpreted as unknown tags.

   Incorrect: `<emMistakes I've Made</em>`

   Correct: `<em>Mistakes I've Made</em>`

3. **Leaving out quotation marks in tags with attributes:** Quotation marks must surround the value of an attribute, such as the file name of an image source.

   Incorrect: `<img src="dogsplayingpoker.jpg>`

   Correct: `<img src="dogsplayingpoker.jpg">`

4. **Not "escaping" character symbols when you want them to appear as text on the page:** Because symbols such as <, >, &, and " are used in HTML, they must always be specially coded ("escaped") if you want them to appear on your web page.

   Incorrect: `<div id="character">` (assuming you want this code to display on your web page)

   Correct: `<div id="character">`

5. **Incorrectly inserting special characters:** To have a symbol such as © appear on your web page, or a "curly" quotation mark like you would see in a Word document, you must code those characters if you want them to appear correctly.

6. **Nesting elements incorrectly:** Nested tags must be closed in the reverse order they were opened.

   Incorrect: `<p><strong>My bold text</p></strong>`

   Correct: `<p><strong>My bold text</strong></p>`

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Student Resource 4.6

Guide: Sample Web Page Modification

*Student Name:*_____ *Date:*_____

Directions: Your teacher will give you access to Marina's sample web page. Follow the steps below to improve the look of the page.

Step One

Look carefully at Marina's sample web page. Decide on **two** changes you would like to make to the page to make it look better to you. Sketch a new version of the web page that shows it with the changes made.

Step Two

Look through your resources to find the tags you need to make the changes you want. Write the structure of your new HTML code here:

Note: If you cannot find the tags you need to make the changes you want to make, choose different changes that use tags that you can find.

Step Three

Open the sample web page in a text editor such as Notepad. Make your changes to the HTML code. Once you have changed the code, rename the file to show that it is yours. Best practice is to choose a file name that does not contain spaces, because web browsers cannot read the spaces correctly. So instead of naming your file "my web page.html," you may want to name the file "mywebpage.html" instead, so that the file will open up in your browser.

Now open the file in a web browser. Compare your web page to your sketch. If they match, you are finished. If not, revise your HTML code and repeat Step Three.

If necessary, ask for help from your classmates or teacher, or offer your help to any classmates you can!

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Student Resource 4.7

Minor Project Work: Your Personal Web Page

Directions: For your minor project, you will use HTML coding to create a web page about yourself. This web page will be posted on your class's website, so you want to do your best work. Follow your teacher's instructions to complete each of the steps of the minor project that are described below. Review the rubric that your teacher gives you so that you understand how your work will be assessed before you begin working.

Planning

Your web page should include the following sections. Plan the content for each section before you begin your sketch.

- An "About Me" section: This section of your web page will give a brief description of you. Be sure to include where you attend school, when you will graduate, why you are in AOIT, your internship or work experience (if you have it), and your interests outside of school. Remember to keep this section short. This section should be written in paragraph form.
- Photograph #1: This picture should be you alone. It can be a school photograph, a picture of you doing something you are interested in, or a picture of you at work or your internship. Include a caption (a short explanation below the photograph).
- Photograph #2: This picture can include other people if you wish. Include a caption.
- A list: This list can be ordered (with numbers) or unordered (with bullets). The example web page includes a list of the student's favorite video games.
- Links to your two favorite websites: Choose two websites that you like, and provide links to them so that those who visit your web page can click to visit your favorite sites.
- An "Individual Choice" section: You can include a poem, something you've written or created for AOIT or another class, or something else that reflects well on you. Remember who your audience is for this web page: potential internship providers, employers, or colleges, so think carefully about what to include.

Sketching

Sketch out a sample of your web page that shows what it should look like. In the margin of the sketch, write down the tags that you plan to use for each line. Keep in mind that you need to be able to create your web page with the HTML tags that you have learned, so you should be able to write tags for everything on your page. See the sample sketch in Student Resource 4.8, Example: Web Page Sketch, to get an idea of what your sketch should look like.

Coding

When your sketch is complete, use a text editor to write your HTML code. Save your file as an HTML file (*.html) and check it in your browser as you work. Remember to begin with the header information and then create the body part of your page. Remember to include comments in your code that explain what you are doing. Check your page often in a web browser as you are working to make sure things look as you expect.

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Testing and Troubleshooting

Look at your web page in a browser and note any items that do not look as they should, and then review the code in your text editor and try to find the problem. Use Student Resource 4.5, Reference: Most Common HTML Mistakes, to help you spot your mistakes.

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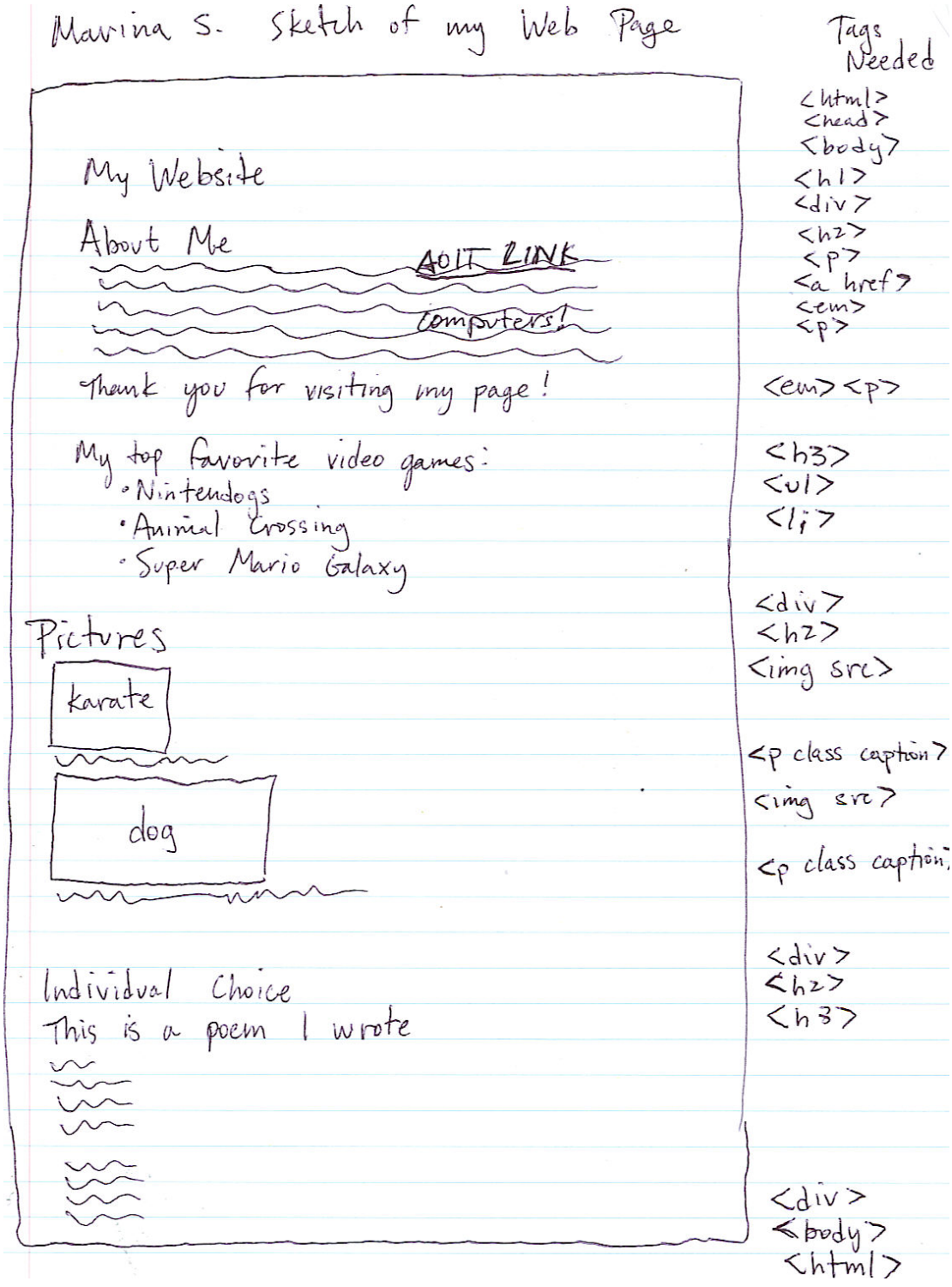
Student Resource 4.8

Example: Web Page Sketch

Directions: Use this example to help you sketch your web page.



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Student Resource 4.9

Feedback Sheet: Peer Web Page

Directions: You will be looking at five of your classmates' web pages and giving them each constructive feedback about their web pages. Choose the five web pages according to your teacher's instructions, and fill out the sections below. (Make a separate page with the prompts below for each web page you review.) Keep in mind that everyone will be making a change to their web pages based on this feedback, so be as specific as possible.

Your name:

Web page author:

What I like best:

What I want to know more about:

One change you may consider making is:

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AOIT Web Design

Lesson 5

Tools for Website Development

Student Resources

Resource	Description
Student Resource 5.1	Reading: Website Development Tools
Student Resource 5.2	Taxonomy: Website Development
Student Resource 5.3	Research: Website Development Tools
Student Resource 5.4	Tutorial Part 1: Getting Started with Dreamweaver
Student Resource 5.5	Tutorial Part 2: Creating and Modifying Web Pages
Student Resource 5.6	Tutorial Part 3: Creating a Website with a Home Page

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Student Resource 5.1

Reading: Website Development Tools

AOIT
Web Design

Unit 2, Lesson 5

Website Development Tools

This presentation gives an overview of the web development tools most commonly used by web designers today. It is in no way complete, as there are many tools available beyond these, most of which are specialized and require specific skills beyond the scope of this course.

While viewing this presentation, think about the websites you visit and how they integrate these tools.

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There are three main types of web authoring tools

- Text editors
- WYSIWYG editors
- Web-based publishing tools

Which types of web authoring tools have you used so far?

With a text editor, you can write HTML code to create pages that are the building blocks of web design. These editors allow you to edit both HTML and XHTML as well as CSS and JavaScript and other common coding languages. WordPad and Notepad are popular text editors that come preinstalled with the Windows operating system. TextEdit is a text editor that comes preinstalled with the Macintosh operating system. Notepad++ is a free text editor especially designed for programming. You can download Notepad++ from notepad-plus-plus.org. When you use these editors for HTML code, you have to save the file with the file extension *.html* or *.htm,* not *.txt.*

WYSIWYG (which stands for "What You See Is What You Get") editors allow you to create or modify web pages without writing the HTML code. Instead, you write what you want to see on the page, and the editor translates it into HTML code. Dreamweaver, Nvu (pronounced *N-view*), Office SharePoint, and iWeb are popular WYSIWYG editors. A popular WYSIWYG editor for the Mac OS is SeaMonkey.

Web-based publishing tools allow you to create web pages through a website. WordPress, Blogger, and Medium are popular web editors.

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Use text editors to write code in HTML

Advantages:

- You control coding
- Editor is inexpensive or free

HTML text in Notepad

Disadvantages:

- Manually writing HTML tags can be tedious
- Easy to make mistakes

When you use a text editor, you type both the content and the HTML tags that define the content as headings and paragraphs and such. When you are finished coding the page, you save the file with the file extension *.htm* or *.html*.

Most experienced web designers prefer to code directly in a text editor because it gives them more control and flexibility. They prefer to have control over what the web page looks like and how to organize the underlying code.

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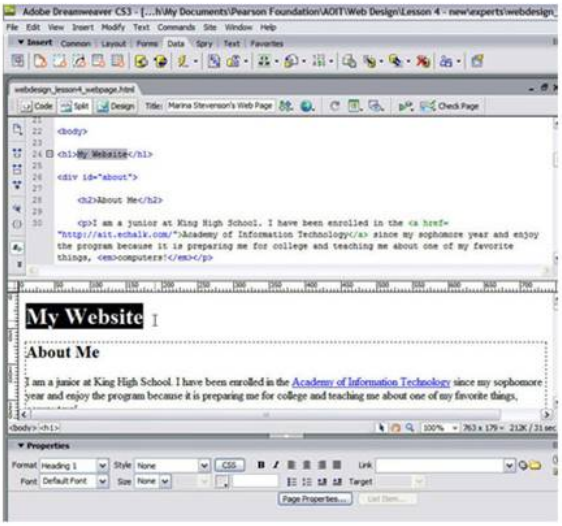
WYSIWYG editors show web pages as you write

Advantages:

- Knowing how to code HTML is optional
- Can create web pages quickly
- Fewer errors with HTML tags

Disadvantages:

- Less flexibility
- Code can be messier
- Coding mistakes difficult to troubleshoot without understanding code
- Must buy software



Dreamweaver editor

What other advantages or disadvantages can you think of?

WYSIWYG stands for “What You See Is What You Get.” So what you type on the page is actually what you will see when your web page is posted. You don’t have to manually enter any of the HTML tags or other coding. A WYSIWYG editor has toolbars and menus to make it easy for you to format your text. The final web pages should be very similar to what is displayed in the editor prior to publishing. Some WYSIWYG editors insert all kinds of extra information and create code that is pretty messy. To see an example of this, save a Microsoft Word document as a web page (.html), and then look at the source code. You will see many lines that are really not necessary for the web page, and a web designer would not consider this code to be clean.

Some WYSIWYG editors, such as Dreamweaver, let you see both the web page and the HTML code. This allows you to create clean code as you go.

Often a web page created with a WYSIWYG editor will not look exactly as you expected when it is published, and you will have to take additional measures such as modifying the HTML or the CSS directly in the code.

As you get more experience creating web pages, you may find that it is usually faster to code the page manually than to use a WYSIWYG editor. Additionally, the code you write yourself is oftentimes “cleaner” than the code that the WYSIWYG tool creates. Finally, if you always use a WYSIWYG editor and don’t learn to code HTML, you will likely be classified as a perpetual amateur and be trapped in the confines of what the WYSIWYG software allows you—which can become limiting.

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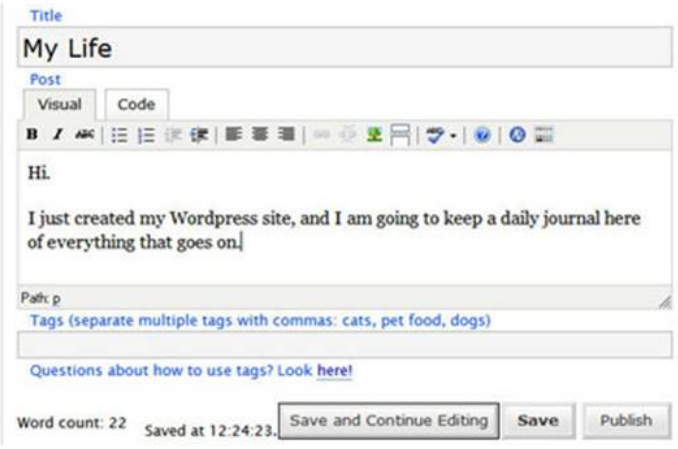
Web-based publishing tools make posting easy

Advantages:

- No HTML coding
- Easy to start creating pages
- Community aspect of social networking and blogging

Disadvantages:

- No control over code
- Page can be posted only on the social networking site



WordPress.com editor

Web-based publishing tools have a user-friendly interface based on Ajax. Ajax allows JavaScript to manage other technologies that dynamically change a web page when users interact with a feature. An example is Google's Suggest feature, which displays suggested search terms from a database based on the visitor's input into the search field. Without Ajax, the database could not be searched without reloading the entire page.

Web-based publishing tools allow users to go to a website where they can post pages directly. These tools are often used for social networking and blogging. Examples are Facebook, Xanga, Blogger, and WordPress.

One of the great advantages of a web-based publishing tool is its Content Management System (CMS). A CMS is a content and file management tool that makes it easy to publish, edit, and organize content, as well as collaborate with others on content. It also eliminates the need for FTP transfers. Nearly all commercial websites run their own CMS, because maintaining a large website is daunting without one.

Web-based publishing tools generally don't require knowledge of HTML. They have built-in templates and visual themes. Often there are additional templates that you can browse and install, though these may need to be purchased. They also may have add-on features, like adding a Twitter feed to your pages.

Some web-based publishing tools offer the ability to modify HTML, for more advanced users.

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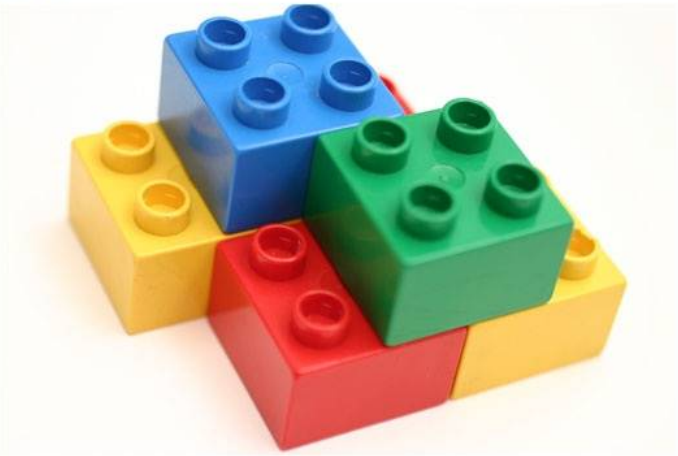
Websites have many building blocks

- HTML pages
- Cascading Style Sheets
- Graphics
- Animation
- Multimedia objects
- Client-side scripts
- Server-side scripts
- Navigation



This slide lists some of the basic web design components; each allows designers to add specific functions to their pages. The basics of each are explained in this presentation.

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HTML is the basis of all web pages

Use tags to define the content on the page:

- Structure headings, paragraphs, and lists
- Insert links
- Define how text is formatted
- Insert objects like images and multimedia

What else can you do with HTML?

HTML, or Hypertext Markup Language, describes the structure of the content on a web page by “marking up” text. It identifies certain text as links, headings, paragraphs, lists, and so on, and supplements the text with images, forms, and other objects. HTML is written in the form of tags, which are surrounded by angle brackets. HTML pages use special tags to embed graphics and animation in web pages.

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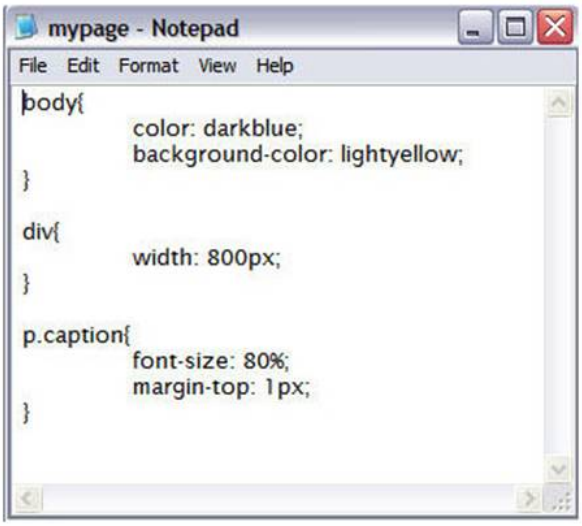
A CSS defines what all pages on a site look like

- CSS is the acronym for Cascading Style Sheets.
- CSS defines colors, fonts, layout, spacing, and other aspects of document presentation.
- An external CSS file reduces complexity and repetition in HTML pages.
- A CSS provides flexibility and control of a website's look and feel. It can help promote brand identity.



Sample CSS code

When designers create web pages, there are two main issues they must address: document content and document presentation.

Document content is written in HTML and includes all the text on the page. HTML also includes links to other pages, images, or multimedia and the formatting of the pages.

Although you can use HTML to control the document presentation, or how the page looks, it is nearly impossible to code web pages using HTML without CSS unless the pages are extremely basic. HTML and CSS function as a pair.

CSS allows you to establish style rules that dictate how the document will look. If you want several pages to have all or some of the same colors, layout, and text formatting, you can put your styles into a separate text document with the file extension *.css*. You can then reference the style sheet in your HTML documents with a simple link in the head. This saves a lot of time in developing websites, because you don't have to redo the work of coding this information for each web page of the site. For example, if a client wants to change the color of the header font, you can make the change once in the CSS file, and the header font will be updated automatically on each HTML web page.

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Graphics make web pages interesting

Graphics can include:

- Navigation bars
- Buttons
- Menus
- Photos
- Drawings
- Flowcharts
- Shapes

Graphics source files are referenced in the HTML file using an <img /> tag.

Use the PNG (.png) file format for images that have sharp contrast, like line drawings or other textual or icon graphics. But PNG images cannot be animated, so the GIF (.gif) file format is typically used for animated images. Use either PNG or GIF file format for cutout images that will need a transparent background. Use the JPEG (.jpg) format for photos or images that have realistic looking scenes and/or smooth variations of tone and color.

You may use an image editor like Adobe Photoshop to alter images. Alterations include cropping, rotating, changing colors, and adding artistic effects. You may use a drawing tool like Adobe Illustrator, Microsoft Visio, or Bohemian Coding Sketch (http://bohemiancoding.com/sketch) to create drawings, flowcharts, and shapes for your website, although you will typically need to "rasterize" the end product to create a JPEG or PNG file for use on the web.

Navigational elements like buttons, tabs, button bars, and menus can be created with graphics or directly with CSS, depending on the desired effect. Images can be managed using CSS rules for placement, color, and even interactive color and position effects. More elaborate effects can be built using the JavaScript programming language.

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Animation makes text or elements move

Animation can enhance a web page:

- Information on the page can become dynamic.
- It's a way to draw the user's eye to a particular spot on the page.

Dangers:

- Watch out for large file size.
- Too much movement will annoy site visitors.

Animation is often a series of frames that give the impression of moving footage. WYSIWYG editors include features to create your own animation. Flash animation is one method used to provide video and animated websites to users. The Flash graphical user interface (GUI) makes it easy for the novice website builder to create fluid, animated websites without having to write any code. However, since Flash animations often require a separate web browser plug-in and are not presented to users of Apple mobile devices, it is important for web developers to consider whether Flash is the right choice. JavaScript and CSS combined offer another way to create animated page effects, and video can now be streamed to all recent browsers. Since the advent of HTML5, the options for animating objects within a web page have become much more robust and effective.

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Use the <object> tag to insert multimedia objects

Multimedia objects:

- Flash (SWF) files
- QuickTime movies
- Shockwave movies
- Java applets
- ActiveX controls
- Silverlight
- ASF
- ASX
- WMA
- WMV

Inserting a Flash object using Dreamweaver

```
66  </script><noscript><object classid="clsid:D27CDB6E-AE6D-11cf-96B8-444553540000" codebase=
    "http://download.macromedia.com/pub/shockwave/cabs/flash/swflash.cab#version=7,0,0,0" width="10"
    height="10" id="FLVPlayer">
67          <param name="movie" value="FLVPlayer_Progressive.swf" />
68          <param name="salign" value="lt" />
69          <param name="quality" value="high" />
70          <param name="scale" value="noscale" />
71          <param name="FlashVars" value=
    "&MM_ComponentVersion=1&skinName=Clear_Skin_1&streamName=newflash&autoPlay=false&autoRewind=false"
     />
72          <embed src="FLVPlayer_Progressive.swf" flashvars=
    "&MM_ComponentVersion=1&skinName=Clear_Skin_1&streamName=newflash&autoPlay=false&autoRewind=false"
     quality="high" scale="noscale" width="10" height="10" name="FLVPlayer" salign="LT" type=
    "application/x-shockwave-flash" pluginspage=
    "http://www.adobe.com/shockwave/download/download.cgi?P1_Prod_Version=ShockwaveFlash" />
73  </object></noscript>
```

Inserting a Flash object in HTML code

The Flash browser plug-in allows designers to deliver a variety of multimedia file types to website visitors. The HTML code of the web page where the multimedia file will be displayed must reference the multimedia object in one of two ways:

- If you are writing HTML code with a text editor, you use the <object> tag to specify the source file and set its dimensions, parameters, and other attributes.
- If you are using a WYSIWYG editor, you specify the multimedia files that you want to embed in the web page using a GUI editor, as shown on the slide. In both cases, the actual HTML code will contain the <object> tag instructing the browser to load the multimedia file.

Video clips are popular multimedia objects to insert into web pages. They can be referenced within HTML files using either an <object> tag or a <video> tag.

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Client-side scripts dynamically change web pages

- *Client-side* means it runs locally on the user's browser.
- Client-side JavaScript (CSJS) is a client-side script used to write functions embedded in HTML pages.

Scripting languages allow web designers to create dynamic web pages. Some simple examples of JavaScript usage are:

1. Controlling the size, position, and look of a new window or pop-up.
2. Validating web form input values to make sure that they will be accepted before they are submitted to the server.
3. Changing page elements such as images, menus, and text based on user input. For example, you can use JavaScript to show and hide elements on a page based on user input. Or the JavaScript could show a new photo when the user clicks Next in an image gallery, and smoothly animate the change of the images.

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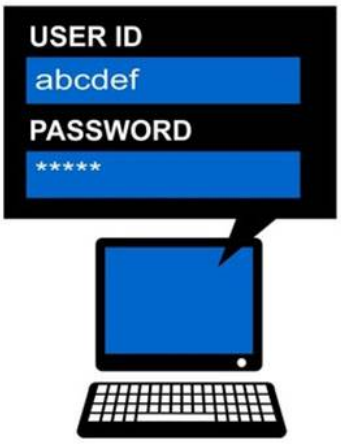
Server-side scripts generate pages for each user

- Use web-server technology
- Fulfill user's request by running a script directly on the web server
- Generate dynamic web pages



Server-side scripts allow the page to be generated differently for each user. The response of the page is customized based on the user's requirements, access rights, or queries into the data stores. The most commonly used server-side scripting technologies are .NET with SQL, and PHP with SQL.

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Use these elements to enhance your web pages

- Cascading Style Sheets (CSS)
- Graphics
- Animation
- Multimedia objects
- Client-side scripts
- Server-side scripts

What are some concrete examples of how each of these elements can improve your web pages?

These elements work together to make web pages interesting, dynamic, and polished. As you gain experience using each of them in web design, your pages will look more professional.

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Student Resource 5.2

Taxonomy: Website Development

*Student Name:*_____ *Date:*_____

Directions: Write the terms you know about website development tools and technologies next to the letter they begin with.

A	
B	
C	
D	
E	
F	
G	
H	
I	
J	
K	
L	
M	
N	
O	
P	
Q	
R	
S	
T	
U	
V	
W	
X	
Y	
Z	

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Student Resource 5.3

Research: Website Development Tools

Directions: Working with your group, research the web development tool that your teacher assigns to you. Use the websites listed below to begin your research. (You may also want to look at other websites.) Write notes about your tool on chart paper, using the headings listed below. After you complete your research, hang your chart paper on the wall to teach the rest of the class about your tool.

List these headings on your chart paper:

- Name of Tool
- How Designers Use It
- How Website Visitors Benefit from the Use of This Technology
- Example of a Website That Uses the Tool
  (Since you can't always tell what technologies a website is using, you may need to make an educated guess with supporting arguments.)
- Advantages and Disadvantages of This Tool
- Miscellaneous Information That Is Important to Know

Website development tool resources:

CSS

- CSS Introduction: http://www.w3schools.com/css/css_intro.asp

Graphics

- GIF: http://en.wikipedia.org/wiki/Graphics_Interchange_Format
- JPEG: http://en.wikipedia.org/wiki/JPEG
- Adobe: http://www.adobe.com/

Animation

- Animation Learning Guide for Flash:
  http://www.adobe.com/devnet/flash/learning_guide/animation.html
- Graphic Effects Learning Guide for Flash:
  http://www.adobe.com/devnet/flash/learning_guide/graphic_effects.html
- Flash Animation: http://en.wikipedia.org/wiki/Flash_animation
- Flash vs. JavaScript: http://logicpool.com/archives/30

Multimedia

- HTML Multimedia: http://www.w3schools.com/html/html_media.asp
- Video Learning Guide for Flash: http://www.adobe.com/devnet/flash/learning_guide/video.html
- HTML5 Video: http://www.w3schools.com/html/html_videos.asp
- Microsoft Silverlight: http://en.wikipedia.org/wiki/Microsoft_Silverlight
- How Streaming Video and Audio Work:
  http://electronics.howstuffworks.com/streaming-video-and-audio3.htm

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JavaScript

- Thau's JavaScript Tutorial: http://www.webmonkey.com/2010/02/javascript_tutorial/
- JavaScript Tutorial: http://www.w3schools.com/js/default.asp
- JavaScript Tutorials: http://www.javascriptkit.com/javatutors/
- jQuery: http://jquery.com (jQuery is a very popular open source JavaScript library that web developers can use to load simplified JavaScript code into their pages. This can vastly simplify what otherwise would be a complex task. In addition, jQuery also takes care of cross-browser compatibility issues.)

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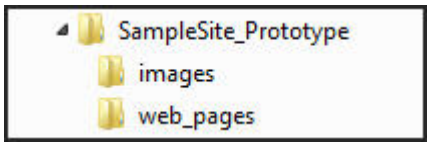
Student Resource 5.4

Tutorial Part 1: Getting Started with Dreamweaver

Directions: This tutorial will guide you through the first step in creating a website that you will be adding to over the next several lessons. Follow the instructions in this tutorial to set up a directory structure for your website, learn how to navigate in the Dreamweaver interface, revise your About Me web page, and then create additional web pages on the site.

Step 1: Setting Up the Directory Structure

On your local network or flash drive, in the location specified by your teacher, set up a directory structure exactly as shown in the following diagram.



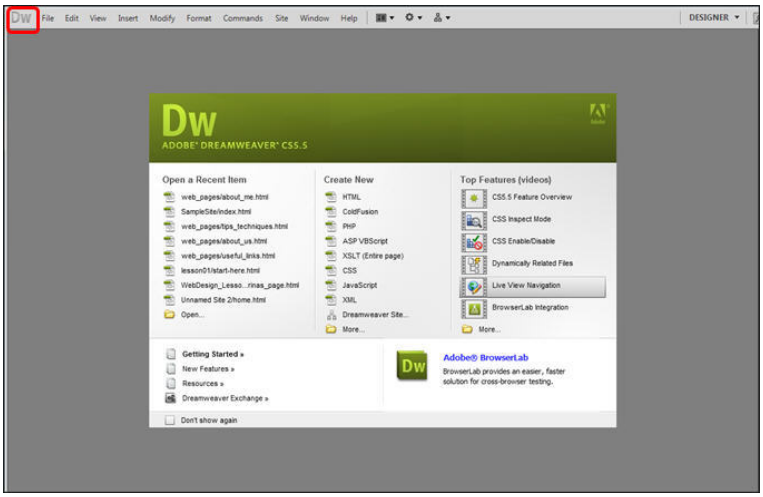
As you create new pages, save the web pages for your site in the web_pages folder, and the images in the images folder. When you create your home page (index.html) later in this lesson, you will save it in your SampleSite_Prototype folder.

Note: Web developers use underscores instead of spaces in file names, because web servers that run on Linux and Unix operating systems do not recognize file names with spaces in them. Also, capitalization in file names matters. “Dog.html” is a completely different file from “dog.html.” Some web servers may ignore the difference, but you may find that your site no longer works if you upload it to a server that is running Apache or other web server software based on the Linux OS.

Step 2: Touring Dreamweaver

1. Open Dreamweaver.

   In the upper left corner, in the light gray menu bar, find the DW icon. That’s short for Dreamweaver, and that’s how we will refer to Dreamweaver when we’re talking about what you see on the screen. Your DW workspace, where you create and edit web pages, should look something like the following screenshot.



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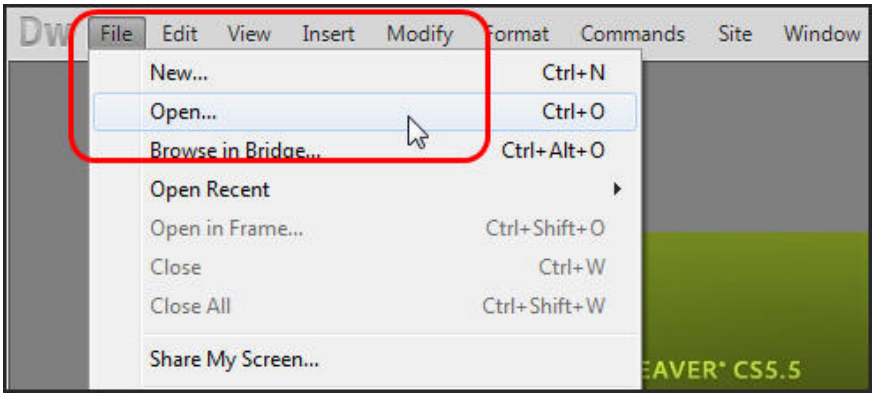
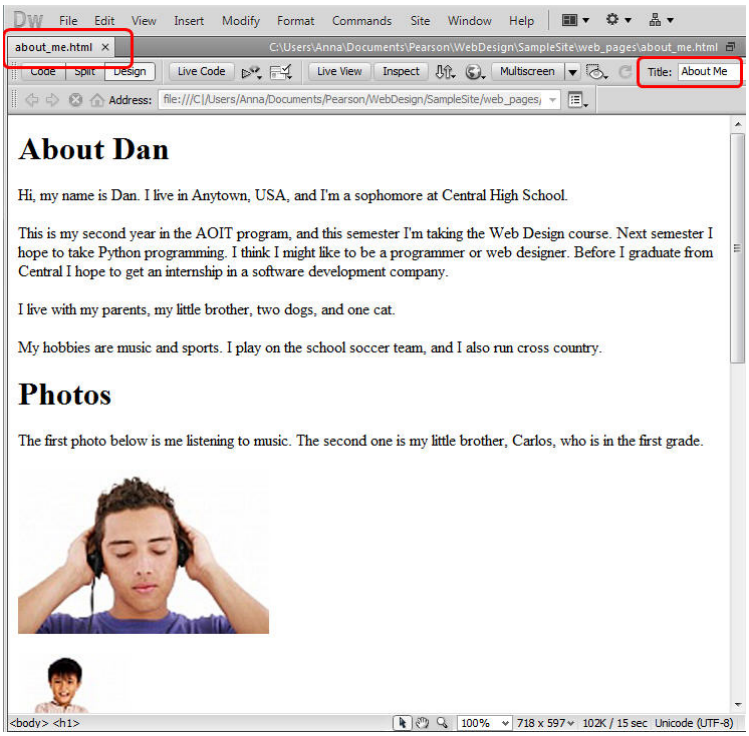
2. Using the File > Open command sequence, open the About Me page you created in Lesson 4.



Your DW workspace should now look something like the following. Notice that the file name (in this sample, about_me.html) and the page title (About Me) both appear in the workspace window.



3. Be sure the workspace layout has been set to *Designer*, as shown in the following screenshot.

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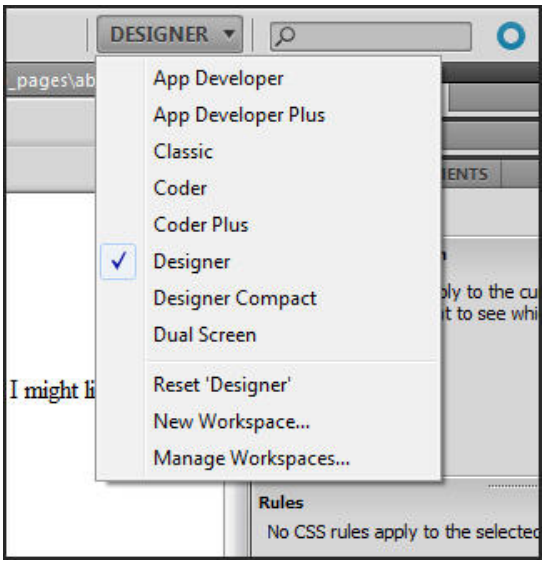
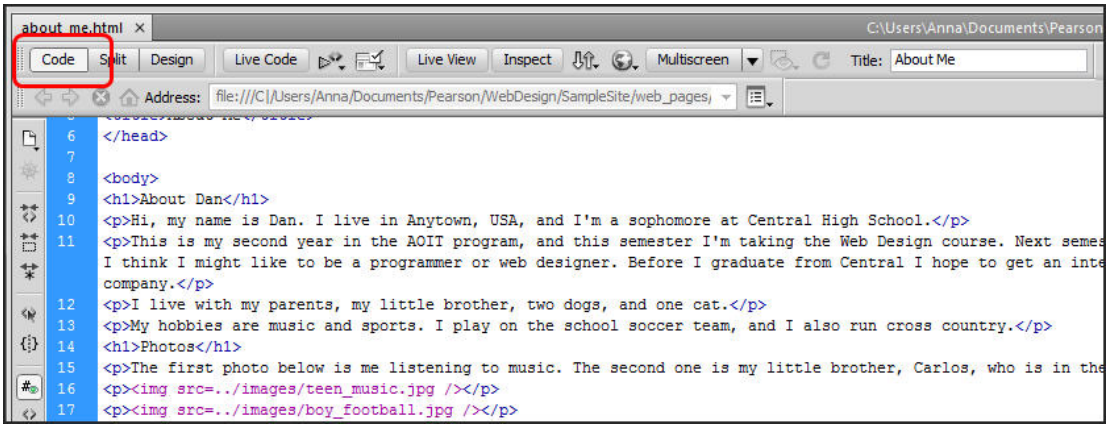
There are other possible workspace layouts, as shown in the following image. At some point, you will want to explore them, but for now, always be sure your workspace is set to Designer.



4. Tour the three possible "views" in Dreamweaver: *Design*, *Code*, and *Split*.

   The sample About Me web page on the previous page is shown in the Design view (not to be confused with the Designer workspace layout). In Design view, the web page looks a lot like it does in a web browser.

Most of your initial web creation and editing will be done in Code view. The following screenshot shows the sample About Me page in Code view.



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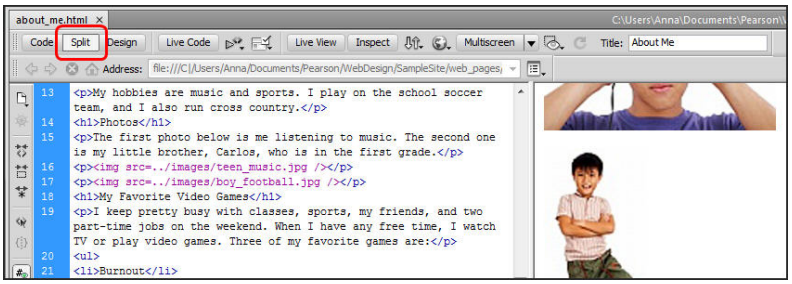
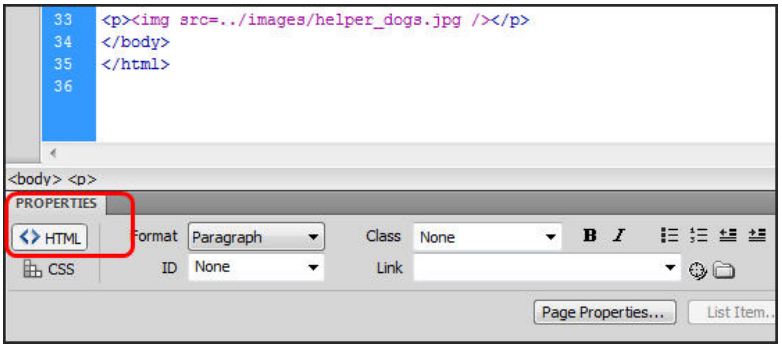
You can also split the screen to see both the code and the web page design at the same time. The following screenshot shows the sample About Me page in the Code view on the left and the Design view on the right. With the Split view, you can immediately see changes made in one view reflected in the other.



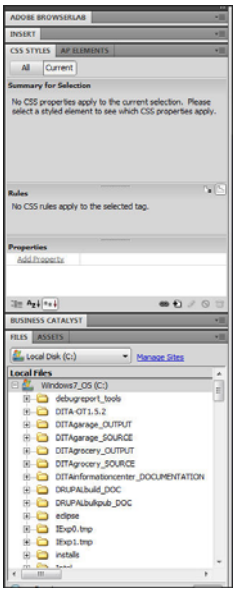
5. Try out each of these views with your About Me page.

6. For now, set the view to Code.

7. Check the bottom of the workspace to be sure the Properties window is set to *HTML*.



8. As you can see on the right side of the workspace window, there are a number of panels included in Dreamweaver. For now, don't change or move any of them.



9. In the Files panel, navigate to the directory structure you created in Step 1.

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Step 3: Create a New Web Page in Dreamweaver

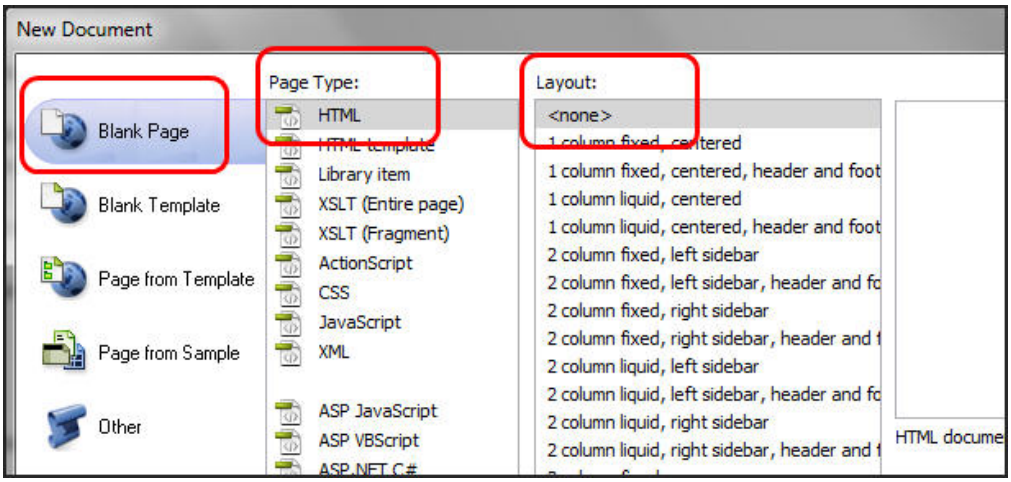
The About Me page you created in Lesson 4 provided a general introduction to the person you are, and included some information about your school activities, family, pets, personal taste, and activities.

In this part of the tutorial, you will create a new About Me page that is similar to the old one but focuses more on you as a student, hopeful intern, and future employee. You will call this new page about_me_professional.html.

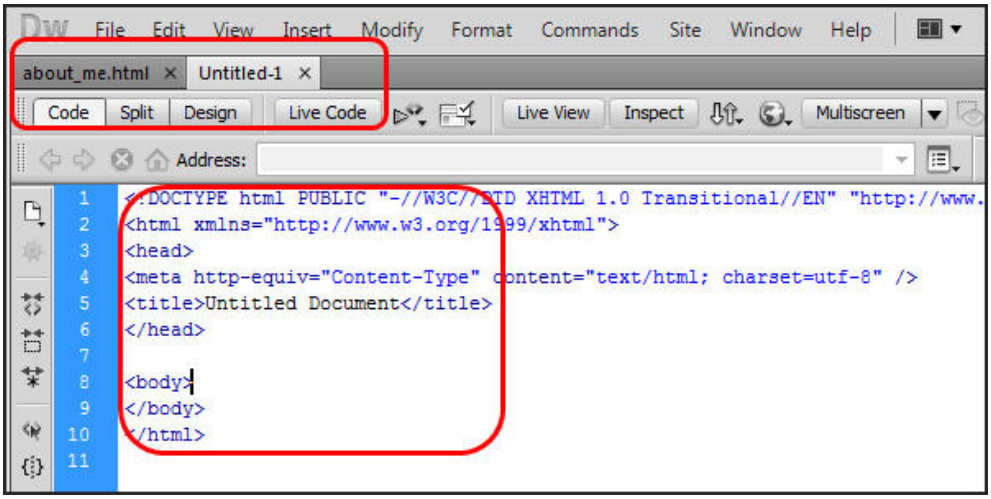
You created your first About Me page in a text editor. This time you will use Dreamweaver. Doing so will teach you the fundamentals of editing using DW and will also enable you to compare editing in a text editor with editing in Dreamweaver.

1. Be sure your original About Me page (about_me.html) is still open in Dreamweaver.

2. Use the command sequence File > New to create a new file. Be sure the selected file properties (which are the default properties in DW) are the same ones shown in the following screenshot.



3. Notice that both the About Me page and the new (untitled) page are accessible in the workspace. Also notice that some of the structural HTML code that you had to type in by hand in the text editor is already provided in the new DW file.



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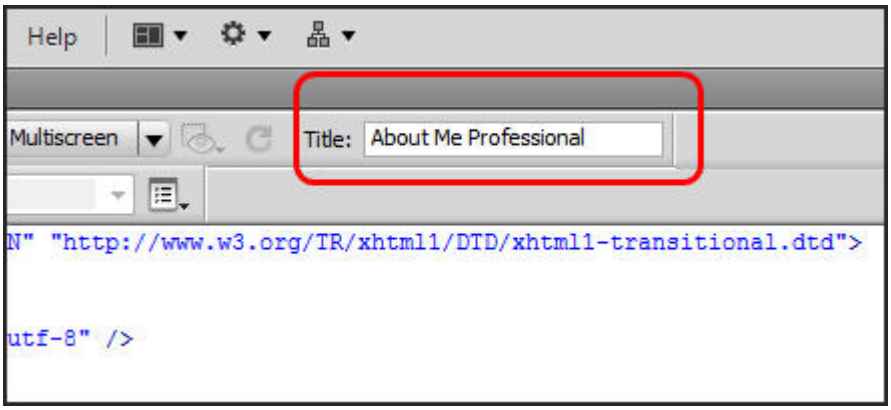
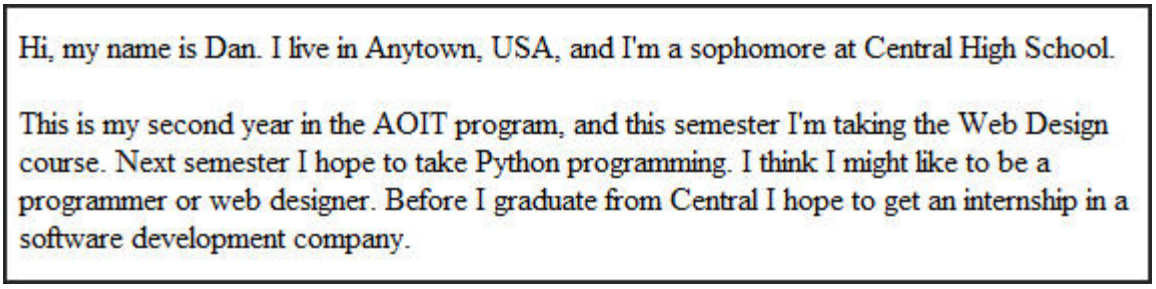
4. Title your new page About Me Professional. Notice that the title displayed in the code changes from “Untitled Document” to “About Me Professional.”



5. Look back at your original About Me page. (You might want to display it in Design view so that you can read the text more easily.) Decide which parts of your original page you might want to use in the new About Me Professional page.

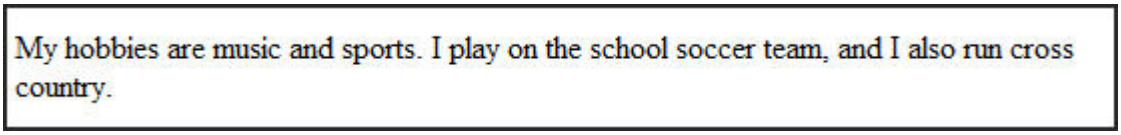
   Your “professional” information should include text that focuses on your skills and experience that would be of interest to a person considering you for an internship or a job. The images below show text selected from the sample About Me page that would make a suitable first draft for About Me Professional.



Hi, my name is Dan. I live in Anytown, USA, and I'm a sophomore at Central High School.

This is my second year in the AOIT program, and this semester I'm taking the Web Design course. Next semester I hope to take Python programming. I think I might like to be a programmer or web designer. Before I graduate from Central I hope to get an internship in a software development company.

   You might or might not want to include a list of your hobbies or interests. The more closely they are related to your professional ambitions, the more suitable they are for a professional About Me page.



My hobbies are music and sports. I play on the school soccer team, and I also run cross country.

6. Now check to be sure both your original About Me page and your new About Me Professional page are being displayed in Code view.

7. Select the text from About Me that you want to add to About Me Professional, one paragraph at a time. Copy each paragraph to the new file. Be sure you add the paragraphs in the `<body>` section of the new page.

8. *Do not* include any images in the new file.

9. In either Design or Code view (whichever is more comfortable for you), edit the text until you believe it serves its purpose as a professional introduction to you.

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If you want to present a casual image, keep the text in the first person (for example, “Next semester *I hope* to take Python programming.”). If you want to make your professional description more formal, use the third person (for example, “Next semester *Dan hopes* to take Python programming.”).

Whichever tone you decide to adopt, be sure you are consistent: use either the first person or the third person throughout the new page.

The text on your page should look something like this example:

This is Dan's second year in the AOIT program. Next semester he hopes to take Python programming. He thinks he might like to be a programmer or web designer. Before he graduates from Central he hopes to get an internship with a software development company.

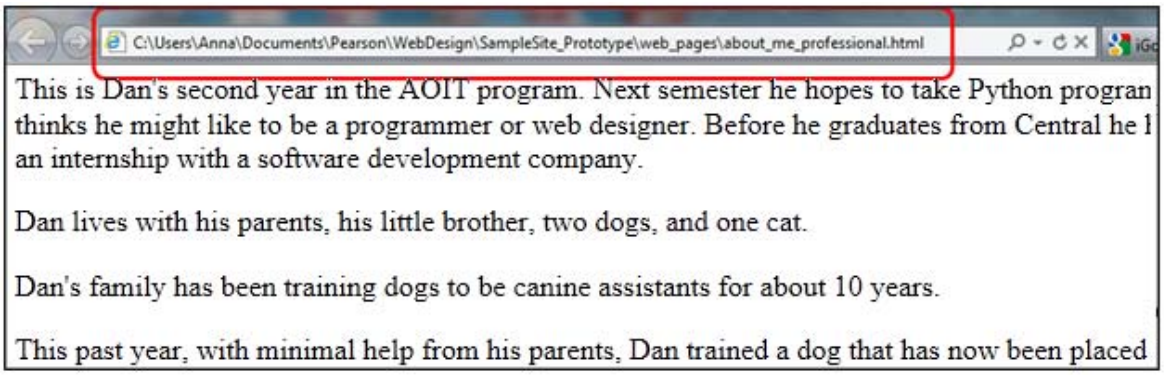
Dan lives with his parents, his little brother, two dogs, and one cat.

Dan's family has been training dogs to be canine assistants for about 10 years.

This past year, with minimal help from his parents, Dan trained a dog that has now been placed with a person needing help.

10. Save your new About Me Professional page in the web_pages directory as about_me_professional.html.

11. Open a browser and navigate to the page you have just created.



12. Check to be sure your page looks correct in the browser environment.

13. If you make any changes, save the file again. Notice that you have to save your file and refresh your browser to see the latest version of the file.

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Part 4: Create Another Web Page in Dreamweaver

In this activity, you will create a page where you can collect tips and techniques that are helpful to you when you are working with Dreamweaver.

1. Create a new file with the title Dreamweaver Tips and Techniques. Save the file in the web_pages directory as tips_ techniques.html.

2. Create two H1-level headings in your new file: “Helpful Hints” and “How To.”

3. Under the Helpful Hints heading, create an unordered list using the `<ul>` and `<li>` tags and include at least two things you have learned so far in this activity. (Example: “Dreamweaver automatically includes the structural tags you need for a new web page.”)

4. Under the How To heading, include the steps required to do a simple task in Dreamweaver, such as opening an existing page. Create a new H2-level heading (for example, “Open an Existing Web Page”). Then create an ordered list using the `<ol>` and `<li>` tags. Make each step in the task (such as “1. Go to File > Open”) a separate list item.

5. Resave your file.

6. Check your new web page in Design view and also in your browser.

7. If you make any additions or changes to your file, save it again. Always remember to save your files often!

Your Sample Site So Far

The web_pages directory in your Sample Site Prototype should now have the following files:

- about_me.html
- about_me_professional.html
- tips_techniques.html

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Student Resource 5.5

Tutorial Part 2: Creating and Modifying Web Pages

Directions: Follow the steps below to combine the information on your About Me Professional web page with information from a partner to create an About Us page. (You and your partner will each create your own About Us web page, but your pages will look very similar.) Then continue following the steps to modify your own Tips and Techniques page.

Step 1: Create an About Us Page

Your About Us page will have three H1-level sections. The first section will tell about both you and your partner, the next section will tell about you, and the third section will tell about your partner. Follow these instructions to create your page:

1. Open your about_me_professional.html page if it is not already open.

2. Create a new page with the title About Us, and save the new page as about_us.html.

3. In the body of your new page, create an H1-level section called About Our Team.

   Under this heading, add text that defines your team (that is, you and your partner) and that names your team members (for example, “Our Dreamweaver team consists of two people, Dan and Marina.”) Take time to discuss with your partner which voice is most appropriate for the About Us page—first person (“I”) or third person (“Dan”)—because the text about you and your partner must be consistent.

4. Create another H1-level section in the body of your new page, this one called About *Yourname*.

   Copy the paragraphs from your About Me Professional page and paste them under this heading on your new About Us page.

   Save your About Us file.

5. Create a final H1-level section of your new page and call it About *Yourpartnersname*.

   Copy the paragraphs from your partner’s About Me Professional page and paste them under this heading on your new About Us page.

   Working with your partner, look again at the draft text you copied over from your About Me Professional pages. Decide whether anything needs to be changed to make your About Us page more effective. Make whatever changes you and your partner decide on.

   Review your completed changes with your partner and make adjustments, if necessary.

6. With your partner, test your About Us page in Design view and in your browser. Make adjustments if necessary.

7. Resave your About Us file.

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Step 2: Modify Your Tips and Techniques Page

1. Open your Tips and Techniques page if it is not already open.
2. Think of at least one more helpful hint or how-to procedure you have learned so far in Dreamweaver, and add the new helpful hint or how-to to your Tips and Techniques page.
3. Save the Tips and Techniques page.
4. Test the page in Design view and your browser.
5. Resave the Tips and Techniques page.

Your Sample Site So Far

The web_pages directory in your Sample Site Prototype should now have the following web pages:

- about_me.html
- about_me_professional.html
- about_us.html
- tips_techniques.html

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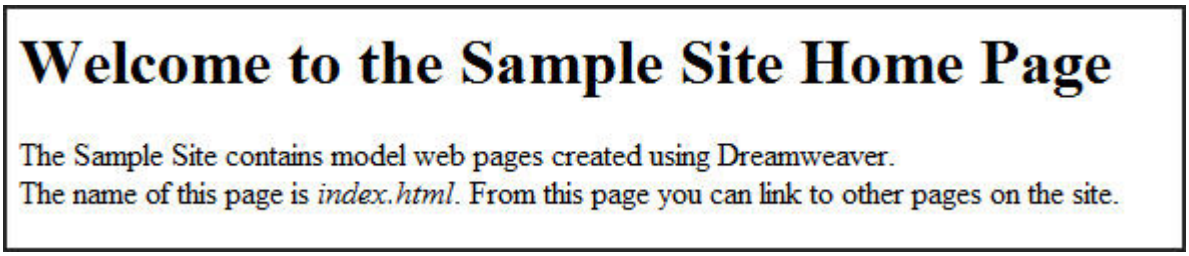
Student Resource 5.6

Tutorial Part 3: Creating a Website with a Home Page

Directions: In this tutorial, you will create a home page for your Sample Site and link your pages to it. You will also create a web page with helpful links on it and link that page to your home page.

Step 1: Create a Home Page for Your Sample Site

1. Open Dreamweaver and create a new page with the title Sample Site Home Page and with the H1-level heading and text shown in the following image.



2. Save the file as index.html in the SampleSite_Prototype directory.

   Be sure you save it in SampleSite_Prototype and *not* in the web_pages directory. SampleSite_Prototype is called the *root* directory, and it is traditional to put the home page there.

3. Check your new home page in Design view.

4. Open a browser and check the home page in the browser.

Step 2: Link Your New Home Page to Your Other Web Pages

1. Switch your new home page to Code view.

2. Create a new paragraph after the existing text on your home page, and inside the paragraph create a link to your About Me page.

   You have created links before. In the About Me page you created in Lesson 4, you put in links to your favorite web pages. Those links specify a complete URL (Uniform Resource Locator, or external website address) and are called *external links*. For example:

```
<a href="http://www.wikipedia.com >Wikipedia</a>
```

   This time you will be linking to a local file (such a link is called a *local link*), so you do not need the complete URL. Your link should look like this:

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```
<p><a href="web_pages/about_me.html">About Me</a></p>
```

Think about why the "web_pages" directory name is in the file path. Remember that the file in which you are including the link is in the root directory of your Sample Site, and the file being linked to is in the web_pages directory.

3. Create a second link, constructed the same way as the first, to your About Me Professional page.
4. Create a third link to your About Us page.
5. Create a fourth link to your Tips and Techniques page.

   The Code view of your home page should now look something like this (minus the "Useful Links" link, which you'll add in the next step):

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<title>Sample Site Home Page</title>
</head>

<body>
<h1>Welcome to the Sample Site Home Page</h1>
<p>The Sample Site contains model web pages created using Dreamweaver.
The name of this page is <em>index.html</em>.
From this page you can link to other pages on the site.</p>
<p><a href="web_pages/about_me.html">About Me</a></p>
<p><a href="web_pages/about_me_professional.html">About Me Professional</a></p>
<p><a href="web_pages/about_us.html">About Us</a></p>
<p><a href="web_pages/tips_techniques.html">Tips and Techniques</a></p>
<p><a href="web_pages/useful_links.html">Useful Links</a></p>
</body>
</html>
```

6. Look at your home page in Design view to be sure there are no obvious problems.
7. Open your home page in a browser and test all the links.

Step 3: Create a Useful Links Page

1. Create a new web page with the title Useful Links.

   You can use this page to add links to external web pages that might be useful to you in creating your own web pages and using Dreamweaver.

2. Save the Useful Links page as useful_links.html in the web_pages directory.
3. On the Useful Links page, add a link to the Adobe Dreamweaver help and support page.

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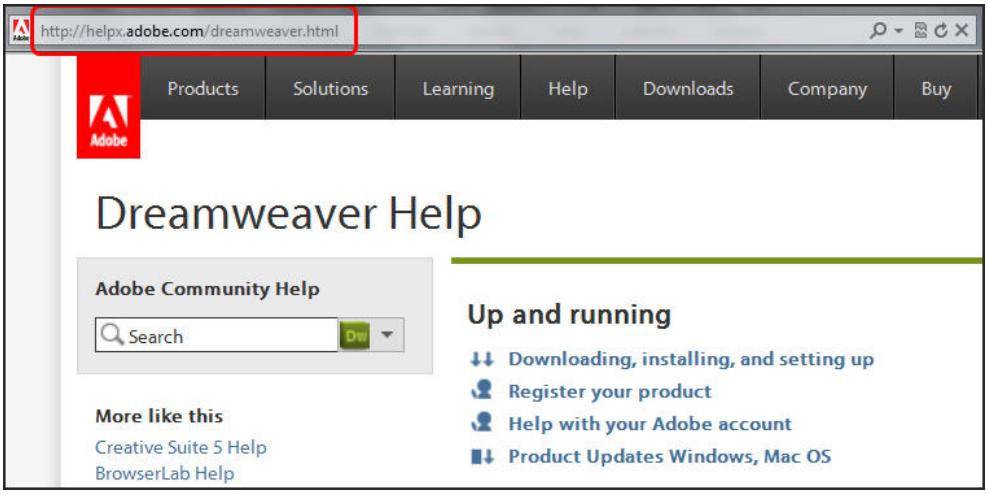
This will be an external link, so you need to use the full URL, including the *http*.



It is traditional when linking to an external website to cause a new tab or window to open, so that the user of your site doesn't navigate completely away from the original site when following the link. To do that, you need to add the `target` attribute to your link. Adding `target="_blank"` will cause the link to open on a new page.

```
<p><a href="http://helpx.adobe.com/dreamweaver.html" target="_blank">
Adobe Dreamweaver help and support page</a></p>
```

4. Add a second external link to the Adobe Dreamweaver product page:

5. Check your Useful Links page in Design view.
6. Save your Useful Links page.
7. Check your Useful Links page in a browser.
8. If you make any changes after checking your page in a browser, save your Useful Links page again.

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Step 4: Link the Useful Links Page to Your Home Page

1. In your Sample Site Home Page, add a link to your Useful Links page, just as you did with the other pages on your site.
2. Save your home page.
3. Test your entire website in a browser and fix any problems discovered during the testing process.

Step 5: Add to Your Useful Links Page, Save, and Test

1. Working with your partner, go back and look through your notebook for other links to add to your Useful Links page.
2. After you have added two or three more links, save and test your website again.
3. Close Dreamweaver.

Your Sample Site So Far

The web_pages directory in your Sample Site Prototype should now have the following web pages:

- about_me.html
- about_me_professional.html
- about_us.html
- tips_techniques.html
- useful_links.html

In addition, your root directory contains a home page (index.html) that links in all the other pages.

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AOIT Web Design

Lesson 6

Formulating a Website

Student Resources

Resource	Description
Student Resource 6.1	Reference: Website Development Cycle
Student Resource 6.2	Reading: Business Requirements
Student Resource 6.3	Worksheet: Identifying Business Requirements
Student Resource 6.4	Sample: Client Intake Form
Student Resource 6.5	Writing Assignment: Business Requirements
Student Resource 6.6	Review: Culminating Project Client Intake Form
Student Resource 6.7	Planning Sheet: The Client Meeting
Student Resource 6.8	Categorization: Productive Client-Designer Relationship Strategies
Student Resource 6.9	Tutorial: Creating a Web Page with a Table
Student Resource 6.10	Email Guidelines: Writing a Follow-Up Email

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Student Resource 6.1

Reference: Website Development Cycle

*Student Name:*_____ *Date:*_____

Directions: Compare the way you grouped tasks into the steps of the web development cycle to the way tasks are grouped in the left column of the table below. Underline any tasks that were not on your list. In the right column, note any tasks you have that are not on the list in the left column, as well as any questions you have about how the tasks are carried out or why they are placed where they are. As you work through this lesson, add to your notes, and add anything you learn that answers one of your questions.

Professional Website Development Cycle	Notes and Questions
Analysis • Why is the website needed? • How will the website improve the organization or business you are building it for? • Who is the target audience (who will be using the site)? • What are the user needs? Try to talk to someone who will be using the website. • Define the function of the website (for example: commerce, information, support, or communication). • Identify already-existing data that can be used (recycle).	
Design & Specifications • Create blueprint/site map to show site organization. • Use wireframes to show the global navigation scheme, general placement of text and media, and how people will use/interact with elements on the pages; get user or client feedback. • Create a content plan (a list of all the types of text components on a page; decisions on images—creating from scratch vs. licensing/buying stock images; navigation). • Establish the site's "look and feel" (decisions on basic layout, color, font, and navigational treatment). • Create a clickable mock-up/prototype and get input from client and/or focus groups. • Make adjustments in project plan, design plan, and prototype as needed.	

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Professional Website Development Cycle	Notes and Questions
Content Writing • Secure and/or create final graphic elements. • Create text content. • Develop media.	
Coding/Development • Build and format pages. • Create navigational system. • Make site interactive. • Add a site map. • Make URLs search-engine friendly. • Avoid the use of frames and use Flash and Ajax sparingly. If you must use Flash, place the main navigation along with text below. • Add the `alt` tag to all your images.	
Test • Perform "internal" testing (basic quality checks, debugging, test on different platforms and browsers). • Perform "external" or user testing. • Upload site to final server and do one final round of testing. • Check cross-browser compatibility by using www.browsershots.org. • Make final adjustments.	
Promotion • Make sure the website reaches the target audience by using search engine optimization. The title tag and page header are the two most important spots to put relevant keywords.	
Maintenance • Keep watch on site for potential problems. • Keep content "fresh" (up-to-date). • Since website development is an ongoing cycle, determine when the next analysis, update, or redesign needs to be done. • Keep an eye on your page rank, traffic, and trends with tools like Alexa, Google toolbar, and Google Analytics.	

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Student Resource 6.2

Reading: Business Requirements

Just as you would not travel across country without an idea of where you want to go and how you will get there, you would not want to undertake a costly and time-consuming project like designing a website without having a clear idea of what you are creating and how you will create it.

Web designers call the client's needs for its site the "business requirements." These requirements tell the designer which functions and qualities the website must have to be successful. When a web designer clearly understands a client's business requirements, that designer can determine how the website will do what the client needs it to. The more carefully a web designer understands the client's needs and satisfies the client's business requirements, the more successful the website will be in the client's eyes.

There are four categories of business requirements: business, content, functional, and technical.

Business Category

The **business** category defines the business functions that the website will support. These are the business processes and other standards and guidelines that need to be considered during the design phase. Aspects you need to consider when determining business requirements might include:

- The process used to create product information for the website
- The process used to sell products, from start to finish
- The process used to order products or materials from suppliers
- Company look and feel standards, such as a company style guide
- Usability guidelines
- Expected launch date of the website
- Any events, announcements, or press releases tied to the launch of the website
- Any online advertising plans tied to the site
- Legal and security guidelines/issues
- The roles of other contributors to or consultants for the website project

Content Category

The **content** category defines all the types of content that will be used on the site. You need to know the following types of things about content:

- What is the purpose of the content? Is it related to any other content?
- Does the content already exist as web copy or in some other format (e.g., Word, Excel, PDF, graphic)?
- Who owns the content?
- Who maintains and updates it?
- Is there a need for legal permission to use the content?
- Who is the audience for this content?
- Is there a privacy policy or other legal agreement necessary for the website?

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Functional Category

The **functional** category defines the functions that the website needs in order to meet the business requirements. Some functions you might need to develop requirements for include:

- Personalization: Registration and sign-in, enabling a user to sign up for newsletters, etc.
- Moderation: Ensuring that discussion boards and comments that appear on the website are moderated to exclude harmful messages
- Social networking tie-ins, such as icons with links to share on Twitter or Facebook
- Transactions: Shopping cart, reviewing and selecting products
- Security: Creating a secure registration page, ensuring passwords are secure, ensuring shopping cart payment information is secure

Technical Category

The **technical** category includes requirements that ensure that the website can support the number of users who visit it and that it functions properly. You need to know the following types of information in order to determine technical requirements:

- Who will host the website and what will the web hosting plan look like? The web host will drive many technical decisions on more complex sites and will also affect how well site traffic is handled. (A good host will easily absorb traffic spikes without great cost; a cheap host could make it irritating to visit the site.)
- Browser and device support requirements: Is the site supposed to be visible on Internet-enabled mobile phones? Which Macintosh and Windows browsers need to be supported?
- Are there any tools that will be used to measure the success of the website that need to be integrated into the website, such as Google Analytics?
- Security requirements: Is the site a secure site? What are the rules for passwords?

Defining Requirements Clearly

The more requirements you can define and document up front, the more likely you'll be to build the website properly. If you don't clearly define requirements and make sure the site meets them, the website may not provide the proper functionality and may fail to support the volume of users who visit it.

It is best to state business requirements in a list format, starting with what is most important to the client and listing all requirements in order of priority. Business requirements should be as specific as possible and written using simple, declarative "must" sentences.

Imagine a T-shirt designer who is working with a web designer to create a website to sell her designs. The T-shirt designer's top priorities are to show her designs and to sell her shirts. Consequently, the first business requirements on her list would involve showing and selling the designs and may look like this:

1. The website must clearly exhibit all 200 of my designs in full color, and the images must not look cluttered.

2. The website must allow customers to safely and securely purchase the T-shirts using credit cards, with three clicks or fewer.

While the T-shirt designer may also need to let people comment on her design ideas, that business requirement would be further down on the list of priorities since it is not the client's main goal for the site. Such a requirement may look like this:

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The website must give visitors the opportunity to comment on T-shirt designs by a clickable rating system.

Wherever they appear on the list of priorities, business requirements must be clear and succinct and tell the web designer exactly what the client is expecting. It is up to the web designer to read and understand the requirements before making plans for the site map and wireframes. Therefore, it is necessary for web designers to meet with their clients to discuss and clarify each business requirement. Establishing open lines of communication and trust with the client will ensure a good business relationship and the best possible website.

Negotiating the "Must Haves" Based on Budget

In the professional world, clients and web designers make decisions about the features that will be included in a site based on budget. Some features that are very nice to have are also very expensive. When clients decide what features are absolute "musts," they make decisions based on how much money they can spend on their website. Negotiating features and setting expectations is an important part of a web designer's business—perhaps the most important part. A client may have $1,000 to spend but have $10,000 worth of "must" statements, and it is the job of the web designer to determine the cost and negotiate the requirements accordingly. Some of the features listed in this reading, such as shopping carts and secure logins, can be quite expensive to implement even though they might seem simple from a client's point of view. The reality of time, budget, and expertise may conflict with what the client dreams of having.

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Student Resource 6.3

Worksheet: Identifying Business Requirements

*Student Names:*_____ *Date:*_____

Directions: With your partner, read through the list of business requirements in each column carefully. Then think of the name of a website you know that fits the list of requirements and write the website name at the top of the list. Be prepared to share your answers with the class.

Site Name: _____	**Site Name: _____**
The site must allow users to post their own video clips.	The site must allow users to create networks with other users.
The site must require posters to log in with a password, but users who visit the site do not need a password.	The site must allow users to visit members' pages without a password, but must require passwords for users who want to post something.
The site must allow video viewing without logging in.	The site must allow users to post profile pages.
The site must have the user grant it a license for uploaded material.	The site must enforce respect of intellectual property rights.
The site must prohibit nudity and content that encourages criminal behavior.	The site must prohibit adult and obscene content.
The site must allow users access to all postings except for adult content.	The site must limit viewing of detailed information about users to their networks or confirmed friends.
The site must require some users to be 18 years or older.	The site must require users to be 13 years or older.
The site must contain files with an MP3 audio stream.	The site must have applications that allow users to play games with each other.
The site must convert users' videos into Adobe Flash technology.	The site must allow developers to use Flash technology.
The site must provide user groups and accounts.	The site must help users invite friends to view their profiles.

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Student Resource 6.4

Sample: Client Intake Form

Client Name: David Lundholm

Business Name: Fair Teacher Feedback

URL (if known): www.fairteacherfeedback.com

Requirements

Business Requirements

- Product: Teacher grading website
- Look and feel ideas: Pages could look like a real report card; typewriter or chalkboard-style font with lined paper?
- Logos and slogans: Chalkboard with "Students Do the Grading" written on it
- Usability issues: Different categories of grading
- Legal/Security issues: Ability to censor unfair comments; only students enrolled in teachers' classes can comment; teachers can comment on their report cards

Content Requirements

- Purpose of the website: To give teachers honest and fair feedback from their students
- Is there existing content in other formats (PDF, Word, etc.)? FAQs to be provided in PDF
- Who owns the content? David Lundholm
- Audience: Students and teachers from local high schools, I hope to spread it throughout the state and eventually nationally

Functional Requirements

- Personalization (registration, sign-in, newsletters): Registration and sign-in required, newsletter to come later
- Transactions (shopping cart, product selection/review): None
- Security (registration page, password, shopping cart): Registration page, password protection

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Technical Requirements

- Expected user volume: 300–500 visitors/month, eventually 50,000+ users
- Expected peak use time: Afternoons and early evenings, end of grading periods when report cards come out, slowest in summers
- Content that will create high load (audio/video files): None
- Security requirements: Site should be secure; passwords should be at least six characters

Content Plan

Text

- Home: Explanation of how to register, password entry, sample report card with notes, logo and slogan, picture of teacher and student
- About: Why site was started, how it differs from other grading sites
- Services: Provide kids a way to grade their teachers
- Orders: None
- FAQ: Will be provided in PDF format
- Newsletter: To come later

Images

- Logo: To be provided (.jpg format)
- Captions: I will write them once we get the photos
- Stock or custom photos provided? Stock photos—teachers and students

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Student Resource 6.5

Writing Assignment: Business Requirements

*Student Names:*_____ *Date:*_____

Directions: Using what you've learned in the previous activities, devise eight business requirements that address what the client has listed on Student Resource 6.4, Sample: Client Intake Form. The reading in Student Resource 6.2 provides guidelines for writing the business requirements. Be sure to write at least one requirement from each of the four categories: business, content, functional, and technical. Review the assessment criteria before you begin work.

Your Business Requirements:

1.

2.

3.

4.

5.

6.

7.

8.

Make sure your business requirements meet or exceed these assessment criteria:

- The business requirements are appropriate to the site and audience.
- The business requirements are listed in order of importance.
- The business requirements address the four categories: business, content, functional, and technical.
- The business requirements use specific details.
- The business requirements are written as "must" statements.
- The business requirements are written clearly and succinctly.
- All text is neat, with proper spelling and grammar.

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Student Resource 6.6

Review: Culminating Project Client Intake Form

*Student Names:*_____ *Date:*_____

Directions: Meet in your culminating project group and follow the instructions on this resource to familiarize yourselves with your culminating project client. Note important information about your client's needs and requirements.

First Pass: IDEAS

Read through the client intake form to get a general idea of the client and the client's needs. What impressions do you have? What ideas immediately come to mind for the site? What seems easy to give the client? What seems hard to give the client?

Second Pass: UNDERSTANDING THE CONTENT

Take a closer look at the client intake form. What are the main business, content, functional, and technical requirements the client is asking for? Write the requirements by category, in "must" sentences.

Business Requirements

Content Requirements

Functional Requirements

Technical Requirements

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Third Pass: QUESTIONS

Now that you have really looked at the intake form, what else do you need to know? What is unclear? Write your questions down and be ready to ask them of your client.

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Student Resource 6.7

Planning Sheet: The Client Meeting

*Student Names:*_____ *Date:*_____

Directions: Work with your culminating project group to assign responsibilities to each group member before you meet with your client. On the planning sheet below, fill in the name of the person responsible for each task and plan out what you want to tell the client and what questions you want to ask. Much of the information you need was already prepared during your review of the culminating project client intake form (Student Resource 6.6). During the client interview, use this planning sheet to take notes on the information you gather from the client.

Introductions

Name of person in group responsible for this task:

- Thank the client for coming and tell the client, in your own words, that your group will work hard on his or her behalf.
- Introduce each member of the group to the client and explain each person's role during this interview.
- Ask for the client's business card (if applicable) and write down the following:
  - Client name (or contact person)
  - Best way to contact the client
  - Best times to contact the client

Ideas

Name of person in group responsible for this task:

- Ask the client to explain the main goals for the site:
- Ask the client about the audience of the site:

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- Tell the client what ideas your group has about the site and ask the client to tell you what he or she thinks of those ideas and why:

- Tell the client what you think your group will be able to accomplish easily and what will be more difficult. Ask the client for feedback:

Understanding the Content

Name of person in group responsible for this task:

- Read through the business requirements your group wrote. Get the client's feedback:

- Read through the content requirements your group wrote. Get the client's feedback:

- Read through the functional requirements your group wrote. Get the client's feedback:

- Read through the technical requirements your group wrote. Get the client's feedback:

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Questions

Name of person in group responsible for this task:

- Ask the questions your group came up with and write down the answers:

Collection of Content Materials and Follow-Up

Name of person in group responsible for this task:

- Collect all the content the client has: logos, photos, written materials, and so on. Write down a list of what you have been given:

- Thank the client for coming and tell the client you will contact him or her soon.

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Student Resource 6.8

Categorization: Productive Client-Designer Relationship Strategies

*Student Names:*_____ *Date:*_____

Directions: With your group members, choose the to-do's from the second section of this worksheet and write them under the correct category. Feel free to add your own ideas to the to-do's, and be ready to discuss your answers with your classmates. Keep this worksheet to remind you how to be the best web designer you can be for your clients!

Categories

Treat Client with Respect

Be Prepared

Be Honest

Keep in Touch

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Follow Through

Be Creative and Flexible

To-Do's

- Do your homework!
- Dress and act professionally (shake hands, make eye contact, refer to the client politely).
- Remember you are working for this person.
- Do what you say, when you say you will do it!
- Be ready to suggest alternatives.
- Keep clients updated on progress even if they don't ask. This is best to do via email.
- Give yourself extra time to complete tasks—finish your jobs on time or even early!
- Tell the client what you can and cannot do—don't make false promises.
- Respond to clients within 24 hours.
- Expect clients to change their minds—this is part of the process.
- Listen carefully to what the client says and take notes.
- Read through your notes before you work with the client.
- Inform clients when change requests are made how much additional time you expect it will take to complete the project.
- Use the phone when necessary; otherwise, email is fine. If the phone is used, it's always good to follow up with a review email to make sure everyone is on the same page.
- Do your best to give clients what they truly desire. Be objective; many times what the client wants is not at all what you want.
- Have all your materials on hand when you make contact.

Your ideas:

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Student Resource 6.9

Tutorial: Creating a Web Page with a Table

*Student Name:*_____ *Date:*_____

Directions: In this activity, you will learn how to create a web page that contains a table. For practice, you will format the business requirements that you agreed on with your client into a table on a web page. Later in this lesson, you will send the page to your client. Follow the instructions below to create this new web page. After you create the page, you will link it to your Sample Site Prototype home page. Then, as a final step, your group will place this page on a new website for your culminating project.

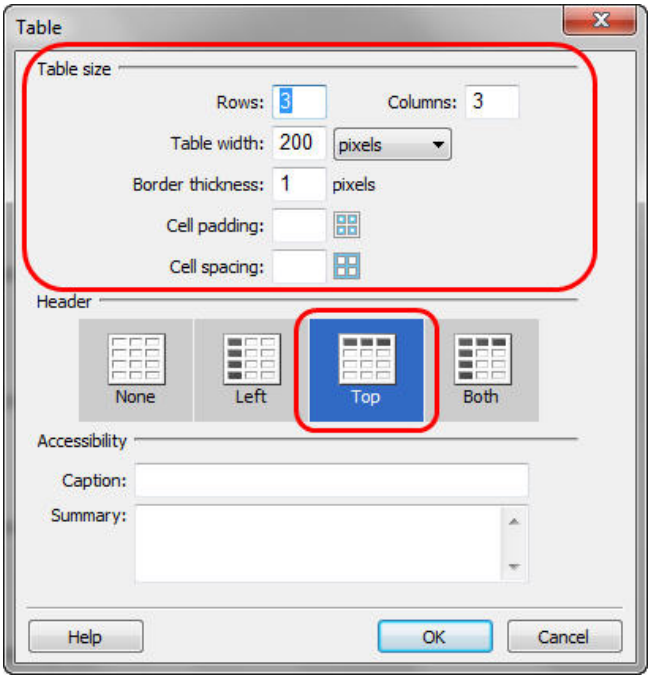
Step 1: Create a Table on a Web Page in Your Sample Site

1. Open Dreamweaver and create a new page with the title "Business Requirements." Display the page in Code view.

2. In the `<body>` section of the new page, create an `<h1>` heading called "Prioritized and Categorized Business Requirements."

3. Position the cursor after the heading, and go to Insert > Table.

4. In the Table definition window, make the number of rows equal to the number of business requirements you have plus one row for headings, and take the defaults for the other "Table size" items. Change the Header definition to Top. Then click OK to create the table template in your Business Requirements file.



5. Notice that the first tag in the table template is `<table>` and that it contains the definitions for the table's width and border. The units of measure are pixels, so you can see that the table is 200 pixels wide and the borders are 1 pixel each.

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6. The next few tags define a row (`<tr>`) and the text for the header rows (`<th>`). Type in the text indicated in the following diagram.

```
<table width="200" border="1">
  <tr>
    <th scope="col">Priority</th>
    <th scope="col">Requirement</th>
    <th scope="col">Category</th>
  </tr>
```

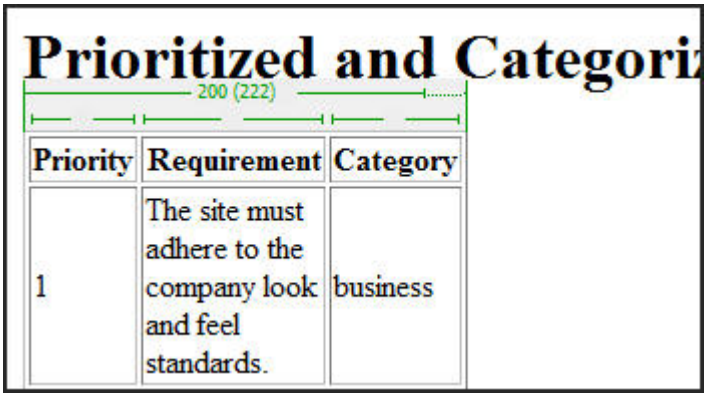
7. The next set of tags (`<td>`) defines the next row, and you need to type in the text for each column in the row. You should type in the first row of your business requirement table here. It should look something like the following:

```
<tr>
  <td>1</td>
  <td>The site must adhere to the company look and feel standards.</td>
  <td>business</td>
</tr>
```

8. Scroll down to the bottom of your file. Notice that Dreamweaver has inserted a table end tag for you. Even though Dreamweaver usually closes a tag sequence on your behalf, it's always wise to check that all your opening tags also have end tags.

```
</table>
</body>
</html>
```

9. Switch to Design mode to see how your table looks so far. As you can see, the table is much too narrow!



10. Switch back to Code view and scroll to the top of your table, where the table width is defined. A width of 200 pixels is too narrow for this three-column table. Change the width to something that seems more logical, given the amount of text you have in the middle column.

11. Check your table again in Design view.

12. Continue to experiment with the width until it looks right.

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13. Save your web page in your Sample Site web_pages directory as business_requirements.html.
14. Fill in all of the rows of the table with your other business requirements.
15. Check the appearance of the table in Design view, especially the table width.
16. Save your work.
17. Open your Sample Site Prototype home page and link in the Business Requirements page, just as you did the other web pages.

Step 2: Create a Project Site with Your Business Requirements Page

1. Choose one group member's business requirements page to place on your culminating project site.
2. Have one group member set up a Culminating Project Site directory for your culminating project site. This directory should have the same structure as your sample site, with subdirectories named web_pages and images.
3. While one group member is working on creating the directory, have other group members proofread the business requirements page you plan to place on your culminating project site, to be sure it is absolutely correct.
4. Save this business requirements web page in the web_pages directory of your culminating project site so that it will be accessible.

Your Sample Site So Far

The web_pages directory in your Sample Site Prototype should now have the following files:

- about_me.html
- about_me_professional.html
- about_us.html
- business_requirements.html
- tips_techniques.html
- useful_links.html

In addition, you have index.html in your root directory.

Your Culminating Project Site So Far

So far you should have a copy of your team's Business Requirements page in the web_pages directory of your culminating project site.

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Student Resource 6.10

Email Guidelines: Writing a Follow-Up Email

Directions: Use the guidelines below to help you create a concise, professional email to your client as a follow-up to your interview. Your email should include the items listed in the email message guidelines below and also express your interest in working with the client on the client's website. Start by writing a rough draft, and have every group member cover one or two of the points in your email. Then combine your work into a final email and refine it so that all the parts fit together. Make sure you remember to attach your HTML page with your business requirements to your email.

Many people think email is only a casual form of communication and therefore that the standard rules of grammar and etiquette do not apply. This may be true when composing quick, casual emails to friends or family, but emails written to a client or a potential employer should be as professional, clear, and concise as any business letter. A professional email will give your work credibility and indicate to clients that they should take you seriously.

Remember that an email can make or break your relationship with your client. If you need to email a client about a prickly subject that has upset you, it is wise to save your email as a draft and review it a few hours later. This can help you cool off and approach the subject in a constructive and courteous manner.

Email Guidelines

- *Get a proper email address.* Make sure you use an email address that gives you a professional identity. If you don't have one, ask your teacher for help getting one.
- *Add a clear subject line.* Make it obvious why you are writing so that the recipient is motivated to open and read your message.
- *Use proper spelling, punctuation, and grammar.* Leave a good impression of you and your skills.
- *Do not use "all caps."* All capital letters imply screaming and are more difficult to read.
- *Open with a professional, friendly greeting.* Begin the email as if you are writing a business letter.
- *Put a concise, clear message at the beginning of the email.* Get to the point quickly so that your email is not skipped or deleted.
- Keep content professional throughout the body of the email. Do not use informal terms, emoticons, or "text speak."
- *Be thorough.* Make sure your email includes the following:
  - A restatement of the main points of the meeting
  - The client's top priorities for the website
  - The additional features of the website the group will try to incorporate
  - Any concerns or questions you have or items that need more explanation
  - An attachment with the HTML page listing your business requirements
  - The next steps you will be taking
  - A thank you to the client for the opportunity to work with him or her
- *End with a courteous closing.* Leave your client with a good feeling about you and your work.
- *Read your entire message before sending*. Be sure your tone and message are as you intended.
- *Follow up*. If necessary, telephone to be sure your client received your email.

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AOIT Web Design

Lesson 7

Planning an Effective Website

Student Resources

Resource	Description
Student Resource 7.1	Research: Site Maps
Student Resource 7.2	Tutorial: Creating a Textual Site Map
Student Resource 7.3	Defining Format Chart: Wireframe Terms
Student Resource 7.4	Sketch: Wireframe with Content Placement
Student Resource 7.5	Assignment Sheet: Creating a Site Map for Your Client's Site
Student Resource 7.6	Tutorial: Selecting a Site Layout Based on a Wireframe Drawing
Student Resource 7.7	Assignment Sheet: Creating Wireframes for Your Client's Site

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Student Resource 7.1

Research: Site Maps

*Student Names:*_____ *Date:*_____

Directions: With your partner, open the first three links below and explore the websites by using the site map. Then respond to the questions and prompts in the chart below. After you have completed the chart, look at the fourth link to explore common types of site maps. Be prepared to share with the class which style of site map you prefer and why.

Adobe TV: http://tv.adobe.com/sitemap/

ESPN: http://espn.go.com/espn/sitemap

University of California: http://graduate.universityofcalifornia.edu/admissions/a-z-index/index.html

Types of Site Maps: http://webaim.org/techniques/sitetools/

Questions and Prompts	Adobe TV	ESPN	University of California
What style is the site map: alphabetical, structural, or graphical?			
Click the logo in the upper left corner. Then, without using the Back button, find the site map again. Describe where you found the link to the site map.			
Rate the site map on its ease of use: 1 = difficult to use, 5 = easy to use. Give at least one reason for your choice.			
Rate the site map on its visual appeal: 1 = not appealing, 5 = very appealing. Give at least one reason for your choice.			

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Student Resource 7.2

Tutorial: Creating a Textual Site Map

Directions: In this exercise, you will create a textual site map for your sample site that looks similar to the CNN site map below. Follow these instructions to create the site map and link it to your sample site's home page.

Step 1: Examine the CNN and Sample Site Textual Site Maps

Look again at the CNN site map in the diagram below. Notice that it is a three-level map (it has three levels of navigation), with CNN.com as the top level, and various second-level links (for example, "World news") below that. Each second-level link has one or more third-level links (for example, "Europe News Archive").

Next, look at what a textual site map for your sample site is likely to look like. Note that a third level of pages has been added under "Useful Links." In this tutorial, you will be creating these resource pages and then creating your site map.

Step 2: Create Two Third-Level Pages under "Useful Links"

1. Open Dreamweaver, and then open your sample site's index.html page, which contains links to all your other web pages. This will put you in the right directory. Then close your index.html page.

2. Create a new page in Dreamweaver, the same way you created your existing web pages. Be sure you select the defaults shown in the following screenshot.

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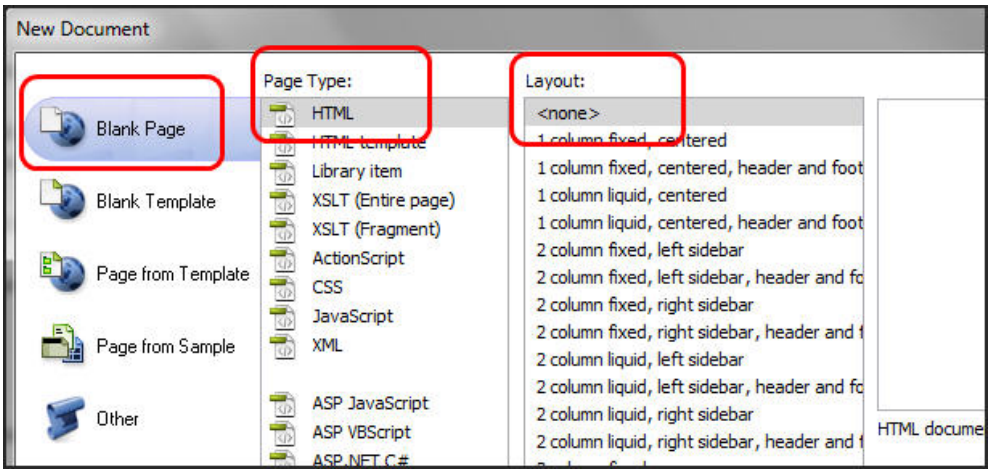


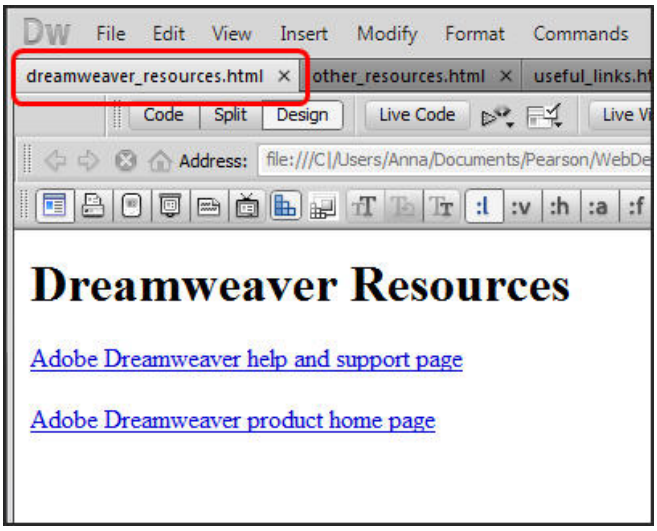
3. Give your new web page the title Dreamweaver Resources and save the file as dreamweaver_resources.html in the web_pages directory.

4. Create another new page with the title Other Resources and save it as other_resources.html in the web_pages directory.

5. Open your Useful Links page. You should now have three pages open in Dreamweaver: Dreamweaver Resources, Other Resources, and Useful Links.

6. The next step is to move the text on your Useful Links page to your Dreamweaver Resources page and your Other Resources page. Copy and paste the heading and links in the Dreamweaver Resources section of your Useful Links page to your new Dreamweaver Resources page.

   In Design view, your Dreamweaver Resources page should now look like the following screenshot.



7. Copy and paste whatever additional headings and links you currently have in your Useful Links page to your new Other Resources page.

   Your Other Resources page should now look something like the following screenshot.

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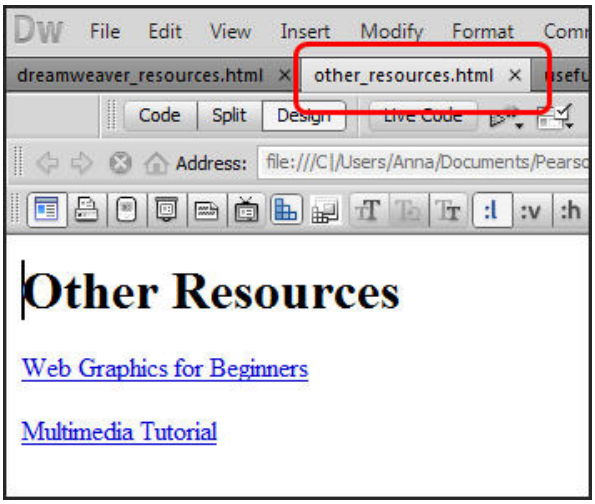
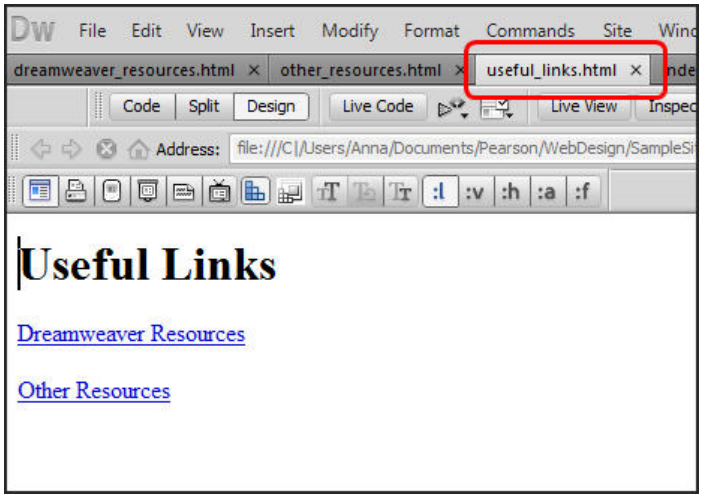


8. The next step is to change your Useful Links page into a page that links to your two resource pages. Delete the existing headings, text, and links from your Useful Links page, since you have already copied them to your resource pages.

9. Replace the text you deleted with links to the new Dreamweaver Resources and Other Resources pages. Be sure your links reflect the fact that all three web pages are in the same directory. (Even though you are adding a third level in the hierarchy of your website, you are not adding another level to your directory structure.)

   If you have trouble creating the links, look at the code for your home page.

   Your Useful Links page should now look like the following.



10. Close all pages that you currently have open.

Step 3: Create a Site Map Page for Your Sample Site

Follow the steps below to create a textual site map that looks like the CNN site map. Notice that the CNN site map is a set of page links constructed as a multilevel unordered list.

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1. Create a new page using the same basic Dreamweaver layout as before. Name it Site Map and save it in the web_pages directory as site_map.html. Be sure you are looking at the Site Map page in Code view.

2. Inside of paragraph tags, create a link to your home page (index.html). Remember that your link needs to take into account the fact that your home page is not in the same directory as your Site Map page.

```
<body>
<h1>Site Map</h1>
<p><a href="../index.html">Sample Site Home Page (index.html)</a></p>
```

3. While you are still on your Site Map page, add an unordered list of all the second-level pages in your hierarchy, and create a link to each page. Remember that all these pages are in the same directory as Site Map, and that you have six pages to link in.

4. Save your file and look at it in Design view.

5. Link in your third-level pages (Dreamweaver Resources and Other Resources) using an unordered list within your original unordered list. Remember that these new pages come after Useful Links and will appear below it in the list hierarchy.

   The diagram below shows how to do this tricky structure.

```
<li><a href="tips_techniques.html">Tips and Techniques</a></li>
<li><a href="useful_links.html">Useful Links</a>
<ul>
<li><a href="dreamweaver_resources.html">Dreamweaver Resources</a></li>
<li><a href="other_resources.html">Other Resources</a></li>
</ul> </li>
</ul>
</body>
```

6. Save your file again and check it in Design view. It should look like the following screenshot.

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7. Open your home page (index.html) in Dreamweaver and link in your new Site Map page below the existing links.

8. Check your home page in Design View.

9. Save your home page.

10. Check your home page in a browser. It should look like the following screenshot.

Your Sample Site So Far

The web_pages directory of your sample site should now have the following files:

- about_me.html
- about_me_professional.html
- about_us.html
- business_requirements.html
- dreamweaver_resources.html
- other_resources.html
- site_map.html
- tips_techniques.html
- useful_links.html

In addition, you should have an index.html page in your root directory.

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Student Resource 7.3

Defining Format Chart: Wireframe Terms

*Student Names:*_____ *Date:*_____

Directions: This guide will help you understand wireframe terms and why each component is important in the creation of a wireframe. In the chart below, first enter a category for each term. In the next column, list characteristics of the term as you would see in a dictionary definition.

Term	Category	Characteristics
A jump menu is a		
A multi-tier menu is a		
A navigation bar is a		
A page footer is a		
A page header is a		
Text-only navigation is a		
A tree-style menu is a		

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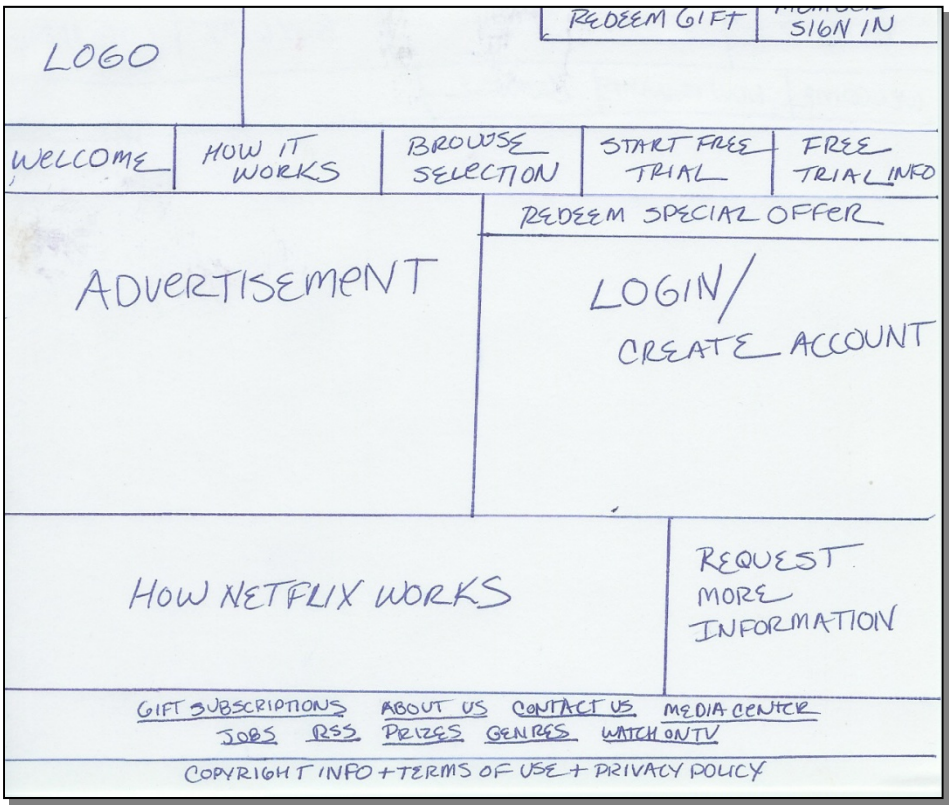
Student Resource 7.4

Sketch: Wireframe with Content Placement

Directions: Review the sample wireframe below for www.netflix.com. (Note: Netflix has updated the design of its site since this wireframe was drawn.) Then select a web page from the list below and, on a separate sheet of paper, create a wireframe of that page using only a pencil and a ruler. Include only text, lines, and simple shapes to depict the layout and main components of the page. Indicate the navigational structure, menu style, graphic/media areas, content placement, global links, and interactions. You do not need to sketch any subpages.



- http://www.nytimes.com/
- http://www.oracle.com/
- http://www.ebay.com/
- http://www.barnesandnoble.com/
- http://www.usa.gov/
- http://www.zazzle.com/

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Student Resource 7.5

Assignment Sheet: Creating a Site Map for Your Client's Site

Directions: As part of your culminating project, devise a site map for your client's website based on the knowledge you gained in the previous activities and from your client's intake form. Use this procedure to create your site map.

1. List **all** of the website's content.
2. Start the information design by categorizing the content into specific pages.
3. Create a box to represent each page.
4. Create a navigational scheme by categorizing the boxes and placing them in the proper hierarchy.
5. Draw lines connecting the boxes to represent the flow of the information.

Make sure your site map meets or exceeds the following assessment criteria:

- The site map contains all of the pages in the website (10 maximum for this project), with a title and brief description of each page.
- The site map begins at the home page and shows a correct navigational scheme to all subpages.
- The site map contains links to global pages such as contact information, About, news, search, and so forth.
- The site map accurately integrates the client's functional needs into the design.
- The site map is neat, clear, presentable, and professional.

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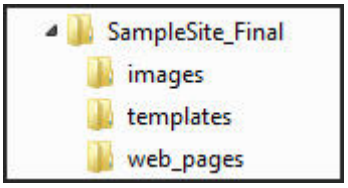
Student Resource 7.6

Tutorial: Selecting a Site Layout Based on a Wireframe Drawing

Directions: When you draw a wireframe for your website, you need to make sure you will be able to achieve the design when you start building the layout of your website. For your culminating project website, you will start with the predefined Dreamweaver layout that most closely meets the requirements specified in your wireframe. You can make modifications to the predefined layout you choose, but it will be helpful to have some idea of the layouts Dreamweaver proposes before you create your wireframe for your culminating project site. To get some practice with predefined layouts in Dreamweaver, follow the instructions in this tutorial to select a Dreamweaver layout that is most suitable for your sample site.

Step 1: Create a Directory Structure for Sample Site Final

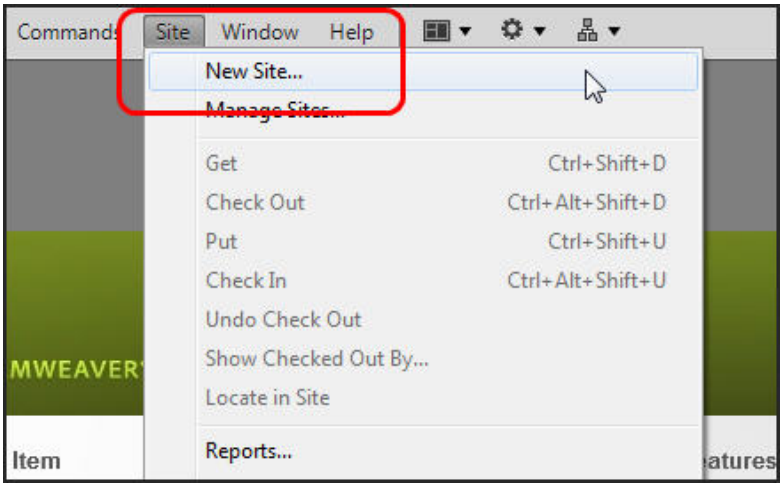
On your local network or flash drive, in the location specified by your teacher, set up a directory structure exactly as shown in the following diagram.



Notice that this directory structure has one more directory than the structure you created for Sample Site Prototype in Lesson 5. It has a "templates" directory. You will add a template file to that directory in a later lesson.

Step 2: Define the Site as a Dreamweaver Entity

1. Open Dreamweaver and select Site > New Site, as shown in the following screenshot.



2. In the Site Setup dialog, navigate to the location of your Sample Site Final project. Name your project SampleSite_Final and click Save.

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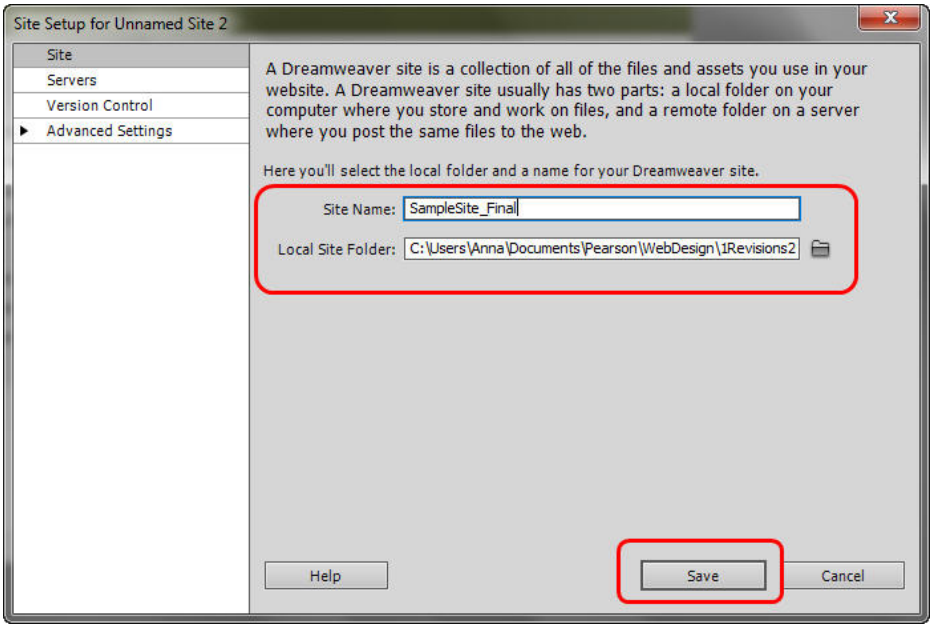
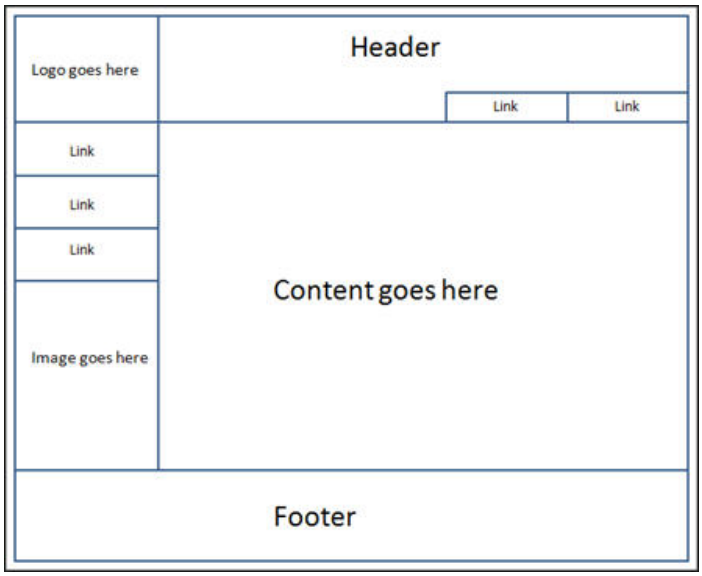


Step 3: Examine the Wireframe for Your Site

Assume that the following diagram is the wireframe that will be the basis for your new site's layout. All the pages on the site will use this same layout.

The wireframe below is a rather typical design that consists of two columns (the one on the left is mostly for navigation, and the one on the right is for page content), a header that can also accommodate additional navigation, and a footer.



Dreamweaver has many prebuilt layouts to choose from, and you need to think about the prebuilt layout you will choose in order to ensure that your wireframe represents a page you can actually construct with Dreamweaver.

Follow these steps to choose the layout that best matches the wireframe design you are working from:

1. Select File > New.

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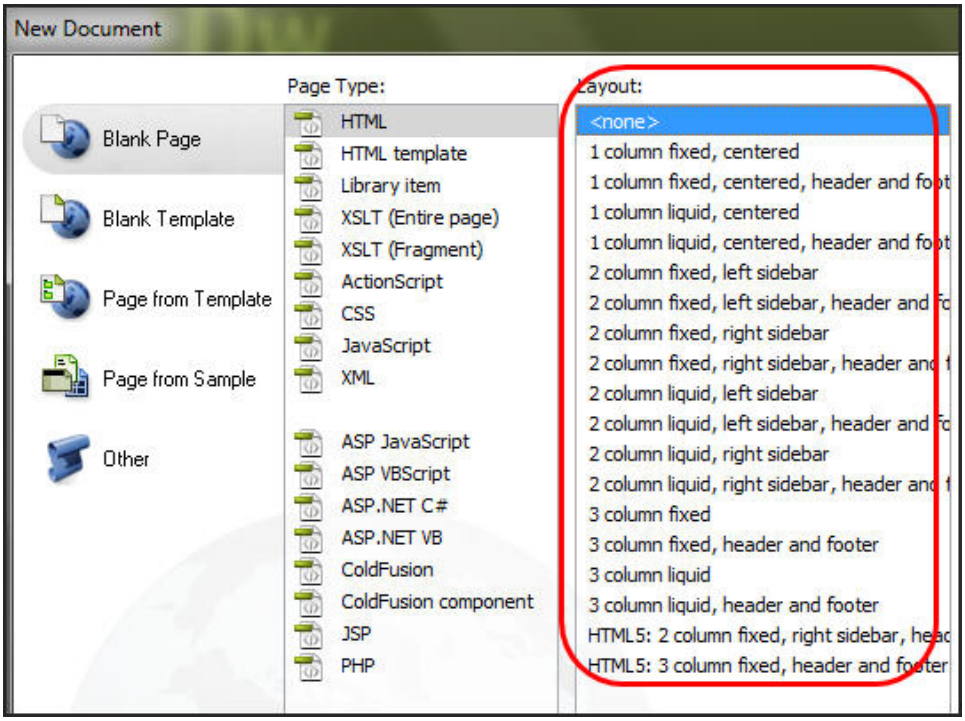
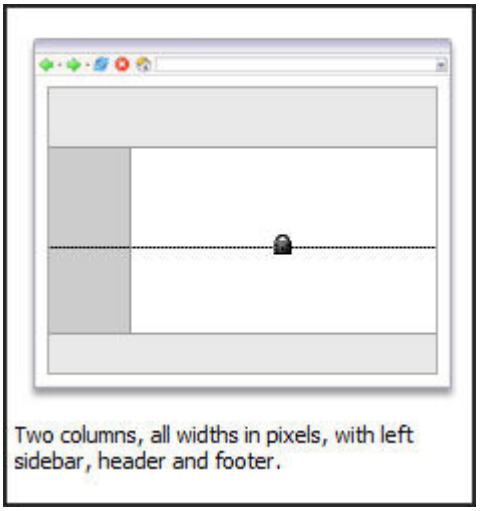
2. Before you choose the layout for your new file, spend a little time exploring the possibilities.

   As you can see in the following diagram, there are many prebuilt DW layouts to choose from. Click each one in turn, observe its preview to the right of the Layout panel, and look for the one that most closely matches the wireframe diagram on the previous page.



   The image below is what you might see in the preview pane. In this layout, you can see that the sidebar, which is mostly for navigation, is the narrower column on the left and the content area is the wider column on the right.



   Which of the DW layout possibilities most closely matches the sample wireframe?

   Your choices will most likely come down to “2 column fixed, left sidebar, header and footer” or “2 column liquid, left sidebar, header and footer.” A fixed design does not “squeeze in” when the browser window is made smaller, whereas a liquid design does. We are going to concern ourselves only with fixed designs for now, so your selection should be “2 column fixed, left sidebar, header and footer.”

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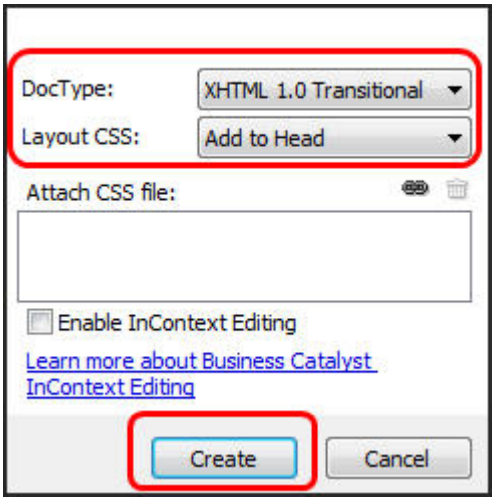
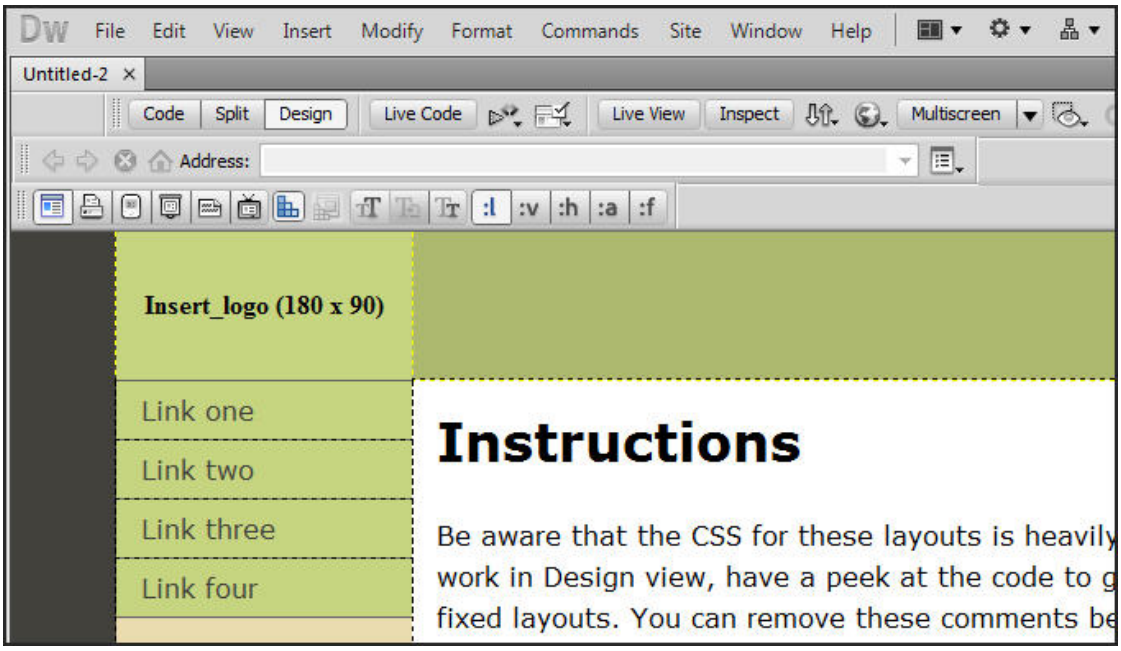
3. Select that choice, take the DocType and Layout CSS defaults, and click Create.



4. Be sure you are in Design view. Your DW workspace should look like the following screenshot.



5. Title your new page My Layout.

6. Save the file in your Sample Site Final root directory as mylayout.html.

In the next lesson, you will work on the look and feel of this layout. For right now, you just need to know how to choose a layout that will work with your wireframe.

Your Sample Site Final So Far

So far, your Sample Site Final should have a file called mylayout.html in the root directory.

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Student Resource 7.7

Assignment Sheet: Creating Wireframes for Your Client's Site

Directions: Create wireframes for your client's website based on the knowledge you gained in the previous activities and from your client's intake form. Use this procedure to create your wireframe.

1. Sketch simple shapes and lines to designate the main components of each page (navigation, content areas, graphic/media areas, logo).

2. Using Dreamweaver, find the layout that most closely resembles your sketch, and note the name of this layout so that you can use it when you create your site. Note that you can adjust the layout to match what you need for your client, but you want to create a layout that is reasonably close to a predefined Dreamweaver layout.

3. Illustrate the content hierarchy with sample headers, titles, body text, and so on.

4. Divide and label the navigation area to illustrate the specific links and requirements for menus. (It's best to wait until you're farther along in the design process to decide on a specific menu style.)

5. Add other elements such as global pages, login areas, search boxes, site map, and so on.

6. On subpages indicate any other navigation tools such as a breadcrumb trail or button changes.

7. Add labels and side notes to provide further description for each area (e.g., label the logo with a number and add a side note indicating that the logo always links to the home page).

8. Include an inventory of important items such as logos, company title, and important graphics, even though you may want to determine the best placement for these items later in the design process.

Make sure your wireframes meet or exceed the following assessment criteria:

- The wireframes are text and simple line diagrams only, and depict the general page layout for at least one page of each level (home, secondary, tertiary, etc.).
- The wireframes indicate the general placement and quantity of interactive elements, media/graphics, content areas, and links.
- The wireframes indicate requirements for menus.
- The wireframes indicate how to navigate home, how to determine the current location, and how to access the site map.
- The wireframes contain links to global pages such as contact information, About, news, search, and so forth.
- The wireframes accurately integrate the client's functional needs into the design.
- Wireframe inventory items include the company's title, logo, and important graphic images.
- The wireframes are neat, clear, presentable, and professional.

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AOIT Web Design

Lesson 8

Principles of Design

Student Resources

Resource	Description
Student Resource 8.1	Reading: Principles of Design
Student Resource 8.2	Web Hunt Chart: Design Principles
Student Resource 8.3	Tutorial: Modifying the Layout of a Web Page
Student Resource 8.4	Tutorial: Adding a Navigation Bar and Logo to a Website Layout
Student Resource 8.5	Tutorial: Moving CSS Rules to an External Style Sheet
Student Resource 8.6	Proposal: Client Website Look and Feel
Student Resource 8.7	Example: Look and Feel Proposal

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Student Resource 8.1

Reading: Principles of Design

AOIT
Web Design

Unit 3, Lesson 8

Principles of Design

This presentation will provide you with a more in-depth understanding of the principles of good website design. It will also help you think about how to make your own client sites more user-friendly and successful.

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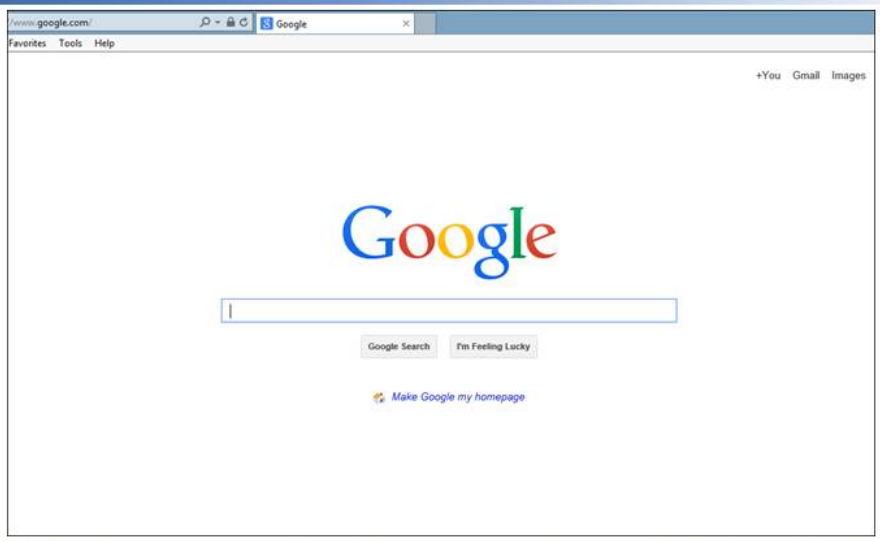
A website's design creates a first impression



- What is your first impression of this site?
- Do you immediately know what the site does?
- Do you know who the site belongs to?

The design of a website gives a strong first impression; it provides the identity, character, and purpose of the site; and it helps the user understand how the site works.

Why do you think Google keeps such a simple design for its home page?

Google has an incredibly simple design, color scheme, and message. The user should immediately know what they can do on the site and where they should go to do it.

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There are five elements of effective web design

- Content
- Functionality
- Navigation
- Visual design
- Media (graphics, video, animation, and audio)

Can you give a specific example of how one of the photo book websites you looked at in the beginning of this lesson was successful with each of these elements?

Creating an effective website requires careful work in each of these areas:

Content drives the site. What content is important and what is less important? How can I emphasize that?

Functionality makes the content accessible, and makes it easy to find additional content on the site.

Navigation is a special subset of functionality that ensures users can find what they need on your site from where they are right now.

Visual design ties content, functionality, and navigation, along with the client's brand, into a coherent whole.

Media enhances the visual design and content, but should always serve a purpose. For example, animation is cool, but animation that doesn't do anything important is going to be a distraction and not an enhancement.

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Content is logical, accurate, web-friendly

- Logical, labeled categories
- Up-to-date, accurate, non-offensive
- Clear, concise bullet points
- Contact info included
- Clear instructions where needed
- Obvious links/visited links
- Text: high contrast, consistent, correct size, no movement

Does the web page on this slide meet these criteria?

Content should be broken up into clearly defined areas.

- Groupings should help users find what they need quickly.
- Out-of-date or inaccurate content can turn off site visitors.
- People typically do not read long paragraphs of text on general information pages—short, concise headlines or bullet points are better for the web. Links can lead to more in-depth information for people who are interested.
- There should not be too many fonts. For beginners, the best practice is to start with two fonts: one for headlines and one for body copy. Chosen fonts should be dissimilar enough to make it clear they're not the same font.
- Avoid text that is animated and moving! Consider using font size as a way of visually layering information to make it easy to scan the site quickly. (For example, if headings are bigger than body text, you can quickly scan the headings.)
- Clickable elements should be obvious.

Think about your actions on the web. When do you read long paragraphs of text, and when do you skim information?

The *New York Times* online pages use headlines with only a short bit of content—best for skimming. Categories are in logical, clear sections. Fonts are clear, consistent, and sized appropriately and represent the hierarchy of information.

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Functionality makes sites easy to use

- All links work
- Works on all of the major browsers
- Pages load quickly
- No registration needed to view basic information
- Back button not disabled
- Site map and/or site search engine available
- Short, memorable URL

Describe an error you have experienced while surfing the Internet.

A site should definitely not have any errors when viewed with recent versions of common browsers and platforms. Ideally, it will have no errors no matter what platform or browser it is viewed on. (Sometimes budget may not allow for making the site function properly in a really old browser.)

- Broken links, error messages, or excessive wait times create a poor user experience, even if the content of the site is fantastic.
- Users should always be able to find and get to where they want to go—no dead ends!
- Ideally a site URL will be short and memorable to users. A short URL also increases a site's search engine ranking.

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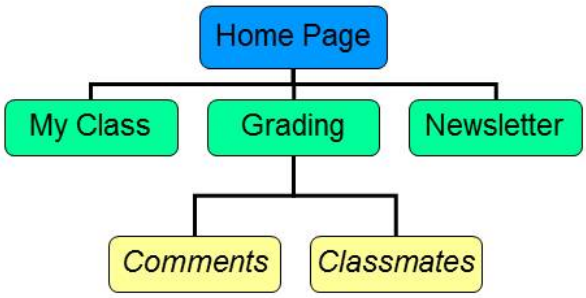
Navigation is clear, logical, persistent

- Clear, logical site navigation persists throughout the entire site.
- Additional shortcuts or navigation methods are used as needed.
- Logo in the top left corner always leads to the home page.



Have you ever found something really cool on the web that you then weren't able to find again?

Site navigation should be clear, logical, and consistent throughout the entire site. At any place in the site, users should be able to tell where they are, find where they need to go, and know how to return home.

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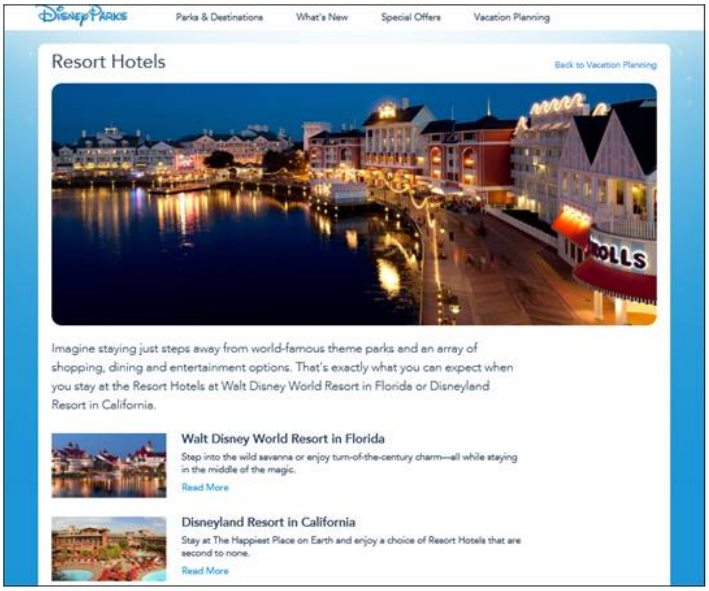
Visual design is professional and pleasing

- The site clearly represents the purpose.
- All pages have a consistent look.
- A coherent, elegant color scheme represents the company or products.
- The background color or design is simple and does not interfere with the body of the page.



Visual design affects both the practical *and* the emotional perception of a site. It provides the first impression of a site and affects the user's experience and desire to return to the site.

Think about the overall visual design of this site:

- Is your initial perception of the site pleasing?
- Can you immediately understand its purpose?
- Is there good (or any) use of white space?
- Is the color scheme appropriate and pleasing?
- What about the background?
- Does the layout and navigation help you know where to go and what to do?

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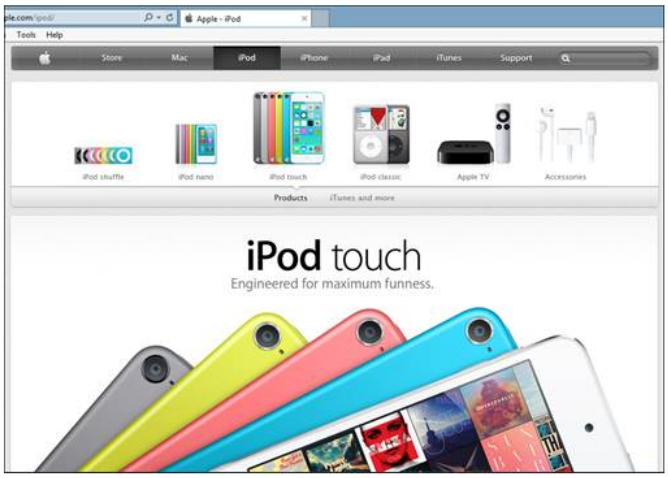
Media enhances a site

- Meaningful graphics, video, animation, audio, and links to social media
- Not too many bells and whistles
- Highest quality media, optimized for the web
- Appropriate, consistent, and relevant buttons and icons
- Not done "because you can" or "because everyone is doing it"



Apple.com has a lot of graphics. Why is the site still appealing and logical?

Graphics and media can greatly enhance a site, but too many bells and whistles can detract from the site.

- Slow-loading media or poor-resolution graphics create a negative user experience.
- Irrelevant or inconsistent icons, buttons, and such can confuse the user.

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Review: The five areas of good web design

Element	What to Aim For
Content	Simple, audience-appropriate, and organized, and only necessary elements are included
Functionality	Works on every browser and platform, with no errors
Navigation	Consistent on each page, and the path is always clear
Visual design	Intuitive, easy to read, consistent, clearly illustrates message/purpose
Media	Use of media is relevant, meaningful

These five elements are the foundation of a successful website. Be sure to pay careful attention to them.

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Student Resource 8.2

Web Hunt Chart: Design Principles

*Student Names:*_____ *Date:*_____

Directions: Your group will be conducting a web hunt in order to find examples of both good and bad web design. Your teacher will provide you with the URLs of a number of different websites. When it is time to begin, your team will review these websites with a critical eye. Look for at least one site that meets the following web design criteria and one site that does not. You have only 15 minutes to list the name and URL of at least one site for as many principles as possible. When time is called, you must stop your web search, and your teacher will lead a discussion on your class's findings.

Content Criteria	Website That Follows This Principle	Website That Does Not Follow This Principle
The content is mapped into logical categories with appropriate labels, so it is easy to find.		
All content is up-to-date, accurate, not offensive to the intended audience, and uses a consistent tone.		
Text is written for the web: clear and concise, with short bullet points, hierarchies, or other organizational tools.		
Appropriate methods of contact are provided (phone number, address, email, feedback form).		
The site has a privacy and/or legal statement page if it collects user information.		
The site provides clear instructions when actions are required by the user.		
Links and visited links are made obvious through color and are a relevant part of the readable text ("click here" is not used).		
High-contrast, appropriate fonts are used consistently, at the correct size, without movement or much variation, and they represent the content hierarchy.		
Site is appropriate to target audience.		
Pages have meaningful title tags.		

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Explain your conclusions:

Functionality Criteria	Website That Follows This Principle	Website That Does Not Follow This Principle
The site does not generate any errors, and all links are working.		
The site works on all browser platforms and versions.		
The site loads quickly.		
Registration is not needed to see basic information.		
The Back button is not disabled.		
A site map and/or site search engine is available.		
The site has a short, memorable URL.		
Explain your conclusions:		

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Navigation Criteria	Website That Follows This Principle	Website That Does Not Follow This Principle
Site navigation is clear and logical and persists throughout the entire site. (Users can always tell where they are, find where they need to go, and figure out how to return home.)		
When appropriate, additional shortcuts/navigation methods are used (breadcrumb trails, menus, etc.).		
The logo is in a highly visible spot and always leads to the home page.		
Explain your conclusions:		

Overall Visual Design Criteria	Website That Follows This Principle	Website That Does Not Follow This Principle
The overall design is visually appealing and professional and clearly represents the organization or website's purpose.		
The site has a consistent look on each page.		
The color scheme is simple and elegant and represents the company or products.		
The background color or design is simple and does not interfere with the body of the page.		
Infographics are used effectively to draw in the visitor or to communicate complex information.		
Explain your conclusions:		

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Media Criteria (Graphics, Video, Animation, and Audio)	Website That Follows This Principle	Website That Does Not Follow This Principle
All media conveys meaning and enhances the site. There are not too many bells and whistles.		
All media is of the highest quality, is optimized for the web, and contains alt text.		
Symbols, buttons, and icons are appropriate, consistent, and relevant.		
Explain your conclusions:		

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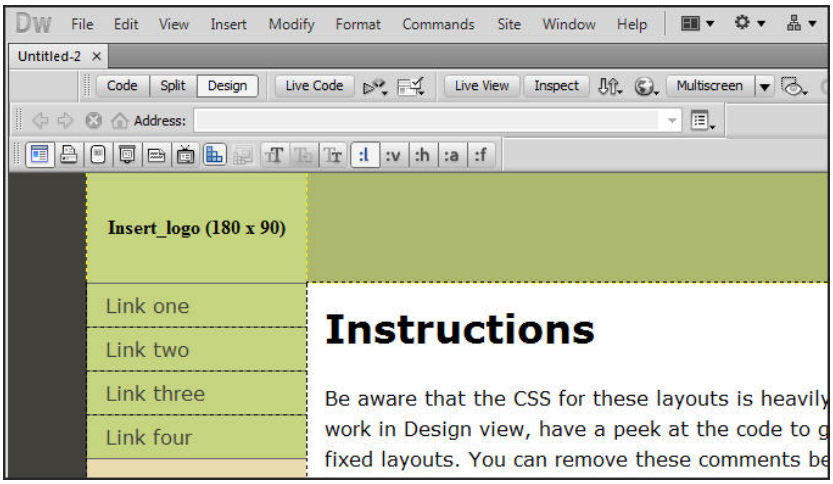
Student Resource 8.3

Tutorial: Modifying the Layout of a Web Page

Directions: In this tutorial, you will learn how to modify the layout of the mylayout.html page you created in Lesson 7. Follow your teacher's instructions for working through the tutorial.

Step 1: Examining the Style Information for a Web Page

1. Open the mylayout.html file in your Sample Site Final root directory. Be sure you are in Design view. Your DW workspace should look like the following screenshot:



2. Look at all the elements on the layout page and read through the instructions in the content area of the page.

3. Switch to Code view. Notice that most of what you see on the page pertains to the layout or style of the page, rather than textual content. Look for the opening `<style>` tag, which is near the top of the page. Everything between the opening and closing `<style>` tags is CSS (Cascading Style Sheets) coding.

   As you can see, the styling information for "body" includes fonts, colors, and spacing.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http:/
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<title>Sample Layout</title>
<style type="text/css">
<!
body {
    font: 100%/1.4 Verdana, Arial, Helvetica, sans-serif;
    background: #42413C;
    margin: 0;
    padding: 0;
    color: #000;
}
```

4. Page down until you see the closing `<style>` tag (at approximately line 129, above the opening `<body>` tag).

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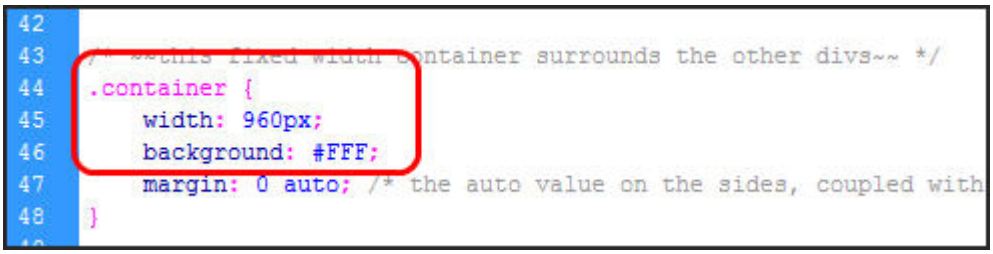
5. Notice the "divisions," or sections, of the page body, which are delineated by `<div>` tags. In this sample layout file, there are five "divs": container, header, sidebar1, content, and footer.

   Page through the file again looking for items you think you might be able to modify yourself. At this stage of your web design career, you may not yet be ready to do complicated CSS coding, but you should be able to figure out how to do some "safe" modifications.

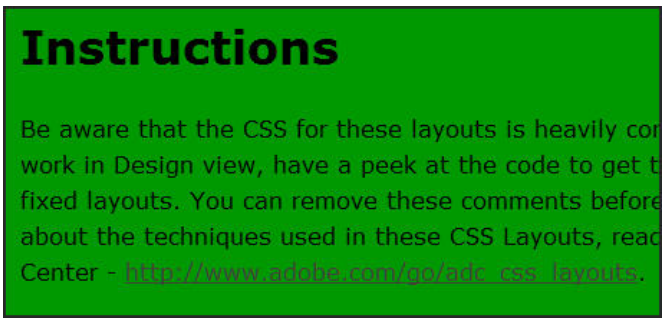
   How can you tell what's safe and what's not? Take a look at approximately line 43, which defines some aspects of the container division.



   The fixed width is 960 pixels, and the container "surrounds" the other divisions such as header and content. If you changed this width, it would very likely negatively affect all other elements of the design, so this would not be a good modification to try. On the other hand, changing a color is usually okay, as long as you remember what the original color was so that you can undo your modification if necessary.

6. Go ahead and modify the background color in the container section from #FFF to #090 (green).

7. Switch to Design view to see what happens. (The white background color for the content area is now green.)



8. Since green is not a good background for text, switch it back to white (#FFF).

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Step 2: Add a Live Link and Modify the Page Content

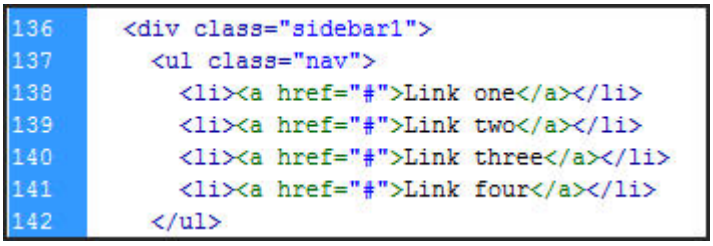
Now that you are familiar with the code on your layout page, you're ready to start creating links to real pages in the menu bar and adding text to the content section.

Place a File in Your Sample Site Final Directory

1. All of the pages that your site links to should be placed in the web_pages directory of Sample Site Final. For now, open Windows Explorer and copy the Tips and Techniques page (tips_techniques.html) from the web_pages directory of Sample Site to the web_pages directory of Sample Site Final.

Put a Live Link in the Left Navigation Area

2. Go back to the My Layout page in Dreamweaver and switch from Design view to Code view. In the body of the page, find the sidebar1 division (at about line 136, but the line number may vary):



3. The links in the left navigation sidebar have been defined as placeholders, using the "pound" or "hash" (#) symbol. Make the top link (line 138 in the image above) live by replacing the hash symbol with a real link to your Tips and Techniques page.

   Remember that you need to go down one directory level (through the web_pages directory) to reach the Tips and Techniques page.

4. Replace the placeholder text (*Link one*) with **Tips and Techniques**. Switch to Design view to be sure the name of the link has changed.

5. Save your My Layout page.

Edit the Content of My Layout Page

6. Be sure you are in Code view in the My Layout page.

7. In the body, find the top of the content `<div>`.

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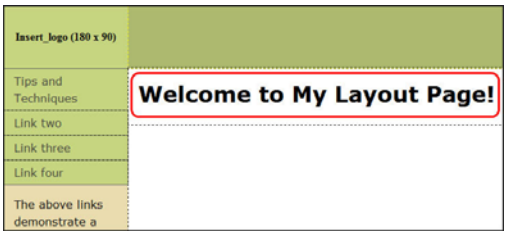
```
145     <!-- end .sidebar1 --></div>
146   <div class="content">
147     <h1>Instructions</h1>
148     <p>Be aware that the CSS for these layouts is heavily commente
tips on working with the CSS for the fixed layouts. You can remove
 used in these CSS Layouts, read this article at Adobe's Developer
http://www.adobe.com/go/adc_css_layouts</a>.</p>
149     <h2>Clearing Method</h2>
150     <p>Because all the columns are floated, this layout uses a cle
.container to understand where the columns end in order to show ar
requires you to remove the .footer from the .container, you'll nee
 class=&quot;clearfloat&quot; /&gt; or &lt;div  class=&quot;clearf
.container closes). This will have the same clearing effect.</p>
```

8. Delete all the text in the content section except the text in the `<h1>` tag.
9. Replace the `<h1>` text (“Instructions”) with “Welcome to My Layout Page!”
10. Switch to Design view and check the page. Save your My Layout page.

    Your My Layout page should look something like the following screenshot.



Step 3: Examine Your Page in a Browser

1. Open your My Layout page in a browser. It should look like the following screenshot.

2. Hold the mouse cursor over the “Tips and Techniques” link. It should look like the following screenshot.

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3. Click the link to display the Tips and Techniques page.

   The Tips and Techniques page is still the plain, black-and-white page you originally created. It has none of the attractive colors, layout, or styling of your My Layout page. Dreamweaver pages don't automatically inherit the styling of other pages in a website project.

   Later in this lesson, you will learn how to make your entire Sample Site Final reflect the new, more attractive styling of the My Layout page, but for now, just leave the Tips and Techniques as it is.

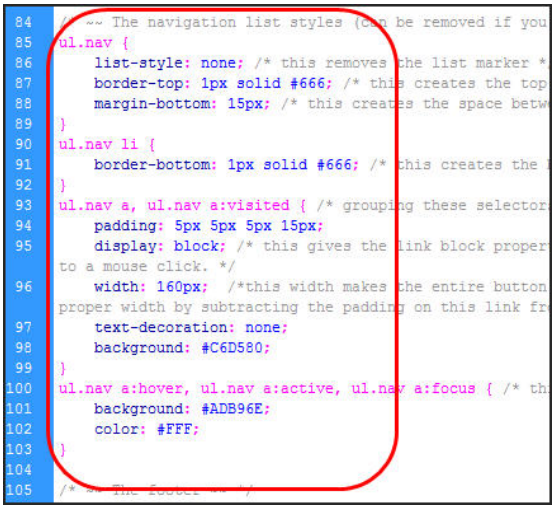
4. Return to the My Layout page by using your browser's Back button.

   Notice that the styling of the Tips and Techniques link is the same as it was when you were hovering over the link, even though your cursor is no longer positioned over the link.

5. Go back to Dreamweaver, and be sure you are in Code view.

6. Go to approximately line 84.

   The CSS code between lines 84 and 103 controls the behavior and styling of the links in the left navigation bar. As you can see, the code has a number of comments explaining how it works.



7. Read through the code and the comments. If you need to remind yourself of the link behavior, go back to the browser and try it out.

8. Save the My Layout page.

Your Sample Site Final So Far

The web_pages directory in your Sample Site Final project should have the following file:

- tips_techniques.html

In addition, your root directory should contain mylayout.html.

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Student Resource 8.4

Tutorial: Adding a Navigation Bar and Logo to a Website Layout

Directions: In this activity, you will add new features to your mylayout.html page. Follow your teacher's instructions for working through this tutorial.

Step 1: Add a Top Navigation Bar

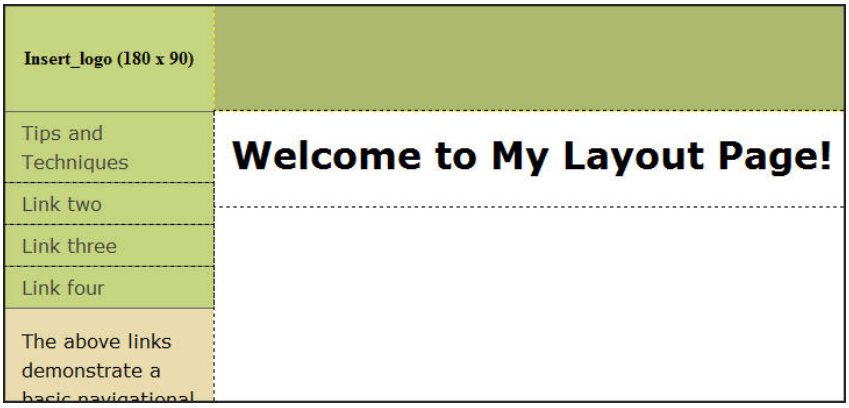
In this section, you will refine your layout by adding a top navigation bar in the right area of the page header.

1. Use Windows Explorer to copy your index.html and about_me.html files from your Sample Site project to your Sample Site Final project. Be sure to put them in the appropriate location: index.html should be in your root directory, and about_me.html should be in your web_pages directory. Be sure also to copy all of the images in the images folder over to the images folder in your Sample Site Final directory—you'll need them for your About Me page.

   In your Sample Site Final directory, take a moment to clean up index.html by deleting the following links, since you won't be copying over the files associated with them: "About Me Professional," "About Us," "Useful Links," "Business Requirements," and "Site Map."

   You are now going to link to the Index and About Me pages from your mylayout.html page.

2. If your My Layout page (mylayout.html) is not already open, open it in Dreamweaver and view it in Design view. It should look like the following screenshot.



   So far you have only a left navigation area. In this exercise, you will add a top navigation area in the page header.

3. Switch to Code view and add a `<div>` for the top navigation area to the `<body>` part of your layout page in the location indicated in the following screenshot. Be sure to put in placeholder text for the links indicated ("Home" and "About Me").

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```
131  <body>
132
133  <div class="container">
134    <div class="header"><a href="#"><img src="" alt="Ins
     background: #C6D580; display:block;" /></a>
135    <!-- end .header --></div>
136    <div id="h-navbar">Home | About Me</div>
137    <div class="sidebar1">
138      <ul class="nav">
139        <li><a href="web_pages/tips_techniques.html">Tip
140        <li><a href="#">Link two</a></li>
```

4. Switch to Design view. Your layout page should now look like the following.

5. Notice that the navigation bar is on the left, not the right (you want it on the right), and that the navigation bar is not styled.

6. Switch back to Code view.

7. First, you will make the links live. Link “Home” to your index.html page, as shown in the following image.

```
background: #C6D580; display:block;" /></a>
  <!-- end .header --></div>
  <div id="h-navbar"><a href="index.html">Home</a> | About Me</div>
  <div class="sidebar1">
    <ul class="nav">
```

8. Look at the link in Design view.

9. Save the file, and then check the link in a browser. If the link doesn’t work correctly, check your code and make corrections.

10. Follow the same procedure to link “About Me” to about_me.html.

```
me</a> | <a href="web_pages/about_me.html">About Me</a></div>
```

11. Save the file and then check the link in a browser.

12. Next, you will style the top navigation bar. Make sure you are in Code view, and in the location indicated in the following image, type in the styling rules. Be sure to do it exactly as indicated!

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```
128  #h-navbar {
129      font-size: 90%;
130      color: #ffc;
131      background-color: #090;
132      text-align: right;
133      padding-top: 5px;
134      padding-right: 20px;
135      padding-bottom: 5px;
136      border-bottom-width: 2px;
137      border-bottom-style: solid;
138      border-bottom-color: #060;
139  }
140  #h-navbar a, #h-navbar a:visited {
141      color: #ffc;
142      text-decoration: none;
143      padding: 5px;
144  }
145  #h-navbar a:hover {
146      background-color: #0c0;
147  }
148  -->
149  </style></head>
```

13. Switch to Design view. Your top navigation bar should now be on the right (`text-align: right;`). The background color is now green (#090). The border bottom is dark green (#060).

14. Save the file and check the appearance, behavior, and links in a browser.

Step 2: Add a Logo

In this section, you will add a logo to the top left of your page and make it a live link to your home page.

For this exercise, you will need an image sized to 180 pixels wide by 90 pixels to use as a logo. Be sure to put your logo in the images directory of your Sample Site Final.

1. Look at your My Layout page in Code view and find the `<div>` with class “header,” as shown in the following screenshot.

```
151  <body>
152
153  <div class="container">
154    <div class="header"><a href="#"><img src="" alt="Insert Logo Here" name="Insert_logo" width="180" heigh
     background: #C6D580; display:block;" /></a>
155      <!-- end .header --></div>
156    <div id="h-navbar"><a href="index.html">Home</a> | <a href="web_pages/about_me.html">About Me</a> | <a
```

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2. Notice that there is a placeholder link for the logo (#) and that the alt text is "Insert Logo Here." Currently the alt text is displayed because the logo is not there yet. Notice that the size of the logo is already specified as 180 by 90 pixels. You could change this, but the logo might not fit in the header. Leave the dimensions the way they are.

3. Inside the `<img>` tag, in the `src` attribute, insert a link to your logo in the images directory. Update the `name` and `id` attributes as well (give the logo a name and an ID based on the file name, as shown in the following screenshot).

4. Replace the alt text (in the `alt` attribute) with "[*name of site*] -- return to home page." (Alt tags should be descriptive like this to be most useful to people with disabilities. If an image is linked, the alt tag should describe the link action.)

```
<img src="images/logo_dan.jpg" alt="Sample Site - return to home page" name="logo_dan"
```

5. Switch to Design view to be sure your link is correct and that the logo shows up in the header, and then switch back to Code view.

6. Insert a link to make the logo into a "hot spot" that links to your home page.

```
<div class="container">
  <div class="header"><a href="index.html"><img src="images/logo_dan.jpg"
"background: #C6D580; display:block;" /></a>
    <!-- end .header --></div>
```

7. Save the file, check the appearance in Design view, and check the link in a browser.

Step 3: Document Your Layout

In this section, you will add a few notes to the content area of your layout to remind you of the features you have added to the original Dreamweaver layout.

1. Look at your My Layout page in Code view and put your notes in the content area of your file, below the "Welcome" heading. Write your notes either as sentences in paragraphs or as bulleted items.

   Here are two suggestions to get you started: "I created this layout page from a prebuilt DW page called…" and "I added a top navigation bar…"

   Include information that you think would be useful to you or to one of your fellow students who was using your layout as a model.

2. Save your file and switch to Design view to look at the finished product. Your layout page should look something like the following screenshot.

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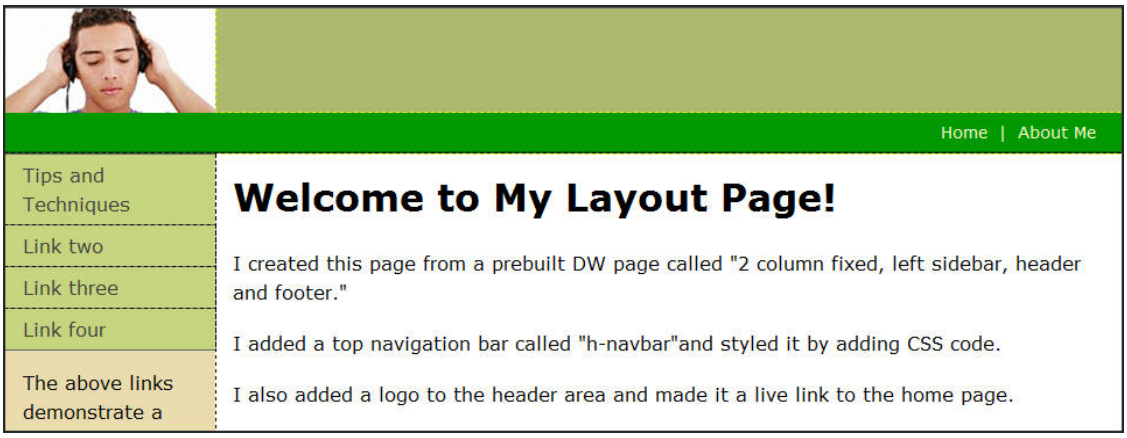

Your Sample Site Final So Far

You did not create any new web pages in this activity, but the following pre-existing pages have now been linked in to mylayout.html, either in the left or top navigation area:

- index.html (root directory)
- about_me.html (web_pages directory)
- tips_techniques.html (web_pages directory)

You added a logo to the images directory, which should also now contain the image files associated with your About Me page.

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Student Resource 8.5

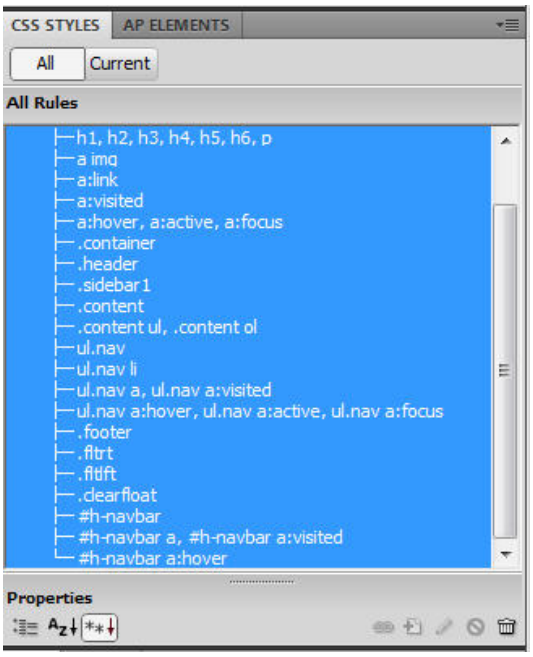
Tutorial: Moving CSS Rules to an External Style Sheet

Directions: When you are still in the prototype stage of your web page design, it is easier to have your CSS embedded in your layout page, as you have with your My Layout page. However, embedded CSS styles can apply only to the one web page they are embedded in. When you create your client site, it will contain multiple pages, all of which need to rely on the same CSS rules. Follow the steps in this tutorial to practice moving CSS rules from the <head> section of your My Layout page to a file of their own.

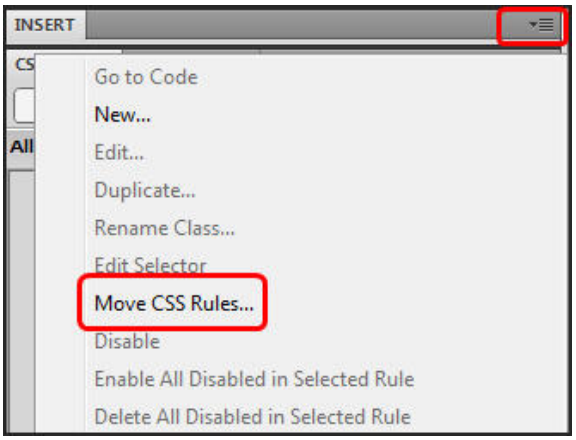
1. Open your MyLayout.html file in Dreamweaver in Code view.

2. In the CSS Styles panel on the right, click the All tab.

3. Select the first defined style, `body`. Hold the Shift key and select the last style, `#h-navbar a:hover`.



4. In the CSS Styles panel, in the Options menu in the upper-right corner of the panel, choose Move CSS Rules.



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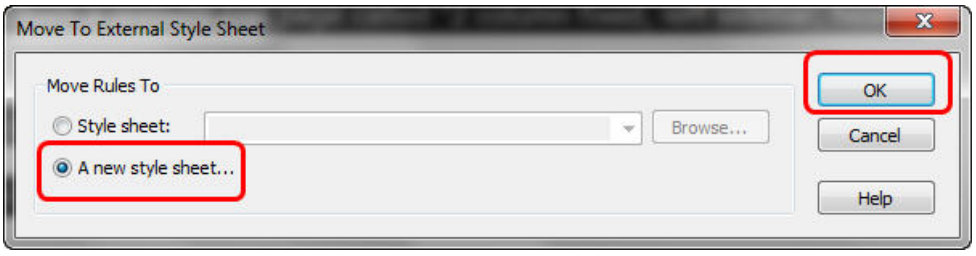
5. When the Move to External Style Sheet dialog box appears, choose “A new style sheet” in the “Move Rules To” options. Click OK.



The Save Style Sheet File As dialog box appears.

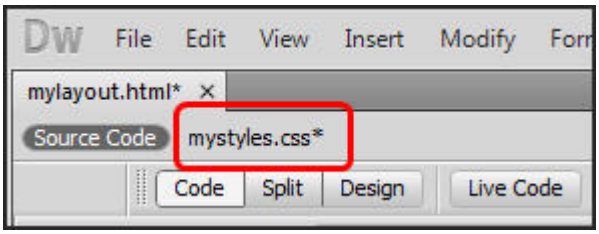
6. Navigate to your root folder, if necessary. Save your new CSS file as mystyles.css.

Dreamweaver adds the .css extension automatically, moves the styles you selected from the <head> area to the new style sheet, and links your mylayout.html file to the new style sheet.

7. Be sure your mylayout.html file is in Code view. Go to the top of the file and delete the remnants of the `<style>` tag (`<style>`, `</style>`, and both lines in between).

8. Be sure the link to the new external style sheet appears where it should.

9. Notice at the top of the document window that the name of your new external style sheet is displayed in the Related Files interface.



10. Choose File > Save All to save both mylayout.html and mystyles.css.

In the future, remember to use the Save All command whenever you are working on HTML files and their related CSS file.

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Your Sample Site Final So Far

The web_pages directory in your Sample Site Final project should have the following files:

- about_me.html
- tips_techniques.html

Your images directory should contain the images for your About Me page and your logo.

Your root directory should contain:

- index.html
- mylayout.html
- mystyles.css

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Student Resource 8.6

Proposal: Client Website Look and Feel

Directions: As part of your culminating project, create a "look and feel" proposal for your client's website, based on the purpose statement you created earlier in this lesson. Your group should replicate the structure of the look and feel proposal in Student Resource 8.7, but customize the content for your particular client. The checklist below contains the criteria upon which your proposal will be assessed.

Proposal Contents

Summary of Client Requirements

The first page should contain the client identifying information (name, company, URL), as well as a brief summary of each of the four client requirements below. This will indicate to your client that you have read and understood his or her intake form and have integrated the client's thoughts and needs into your design proposal.

Business Requirements: Summarize how your look and feel proposal addresses the client's business functions, processes, and standards.

Content Requirements: Summarize how your proposal addresses the content that will be used on the site.

Functional Requirements: Summarize how your proposal defines the functions that the website needs to support to meet the business requirements and user expectations.

Technical Requirements: Summarize how your proposal addresses the requirements that ensure the website functions properly and supports the number of users who visit it.

Mock-Ups

The next few pages should contain sketches or computer representations of the look and feel for your client's website home page. Each design should contain the basic color scheme, graphic elements, navigation, and text area, per the web design principles you learned in previous activities. At least two different options must be proposed, but you may do more if you prefer. (No more than four options should be proposed.) Remember, these are not final designs, but rather design directions for your client to review before providing you with preferences and changes.

As you sketch out your proposed designs, make sure you are confident you can implement them in Dreamweaver using the basic techniques you used in creating and modifying the layout for your sample site. The design for your client's site does not have to be exactly like the design for your sample site, but it should not be so complex that it would be impossible for you to do given your current level of expertise.

Resources

You may want to consult some of the following websites to get ideas for your proposal:

Color scheme:

- http://www.colorschemer.com/schemes/
- http://paletton.com/
- http://www.degraeve.com/color-palette/
- https://color.adobe.com/create/color-wheel/

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Font selection:

- https://www.google.com/fonts
- http://www.w3schools.com/cssref/css_websafe_fonts.asp (This site has a good overview of the only "safe" web fonts to use without a third-party JavaScript.)

User experience (if you need to keep mobile users in mind):

- http://mobilewebbestpractices.com/resources

Image use:

You can find many images for use under Creative Commons licensing by using Flickr's advanced search and selecting "Only search within Creative Commons-licensed content": http://www.flickr.com/search/advanced/?q=g

If your client is not a nonprofit organization, make sure to search for Creative Commons images that are licensed for commercial use (check the box "Find content to use commercially").

Make sure your proposal meets or exceeds the following assessment criteria:

- The proposal contains a brief summary of the client's business requirements and clearly explains how the proposal addresses these requirements.
- The design mock-ups for the client's home page are consistent with the look and feel that the client requires.
- The overall visual design in the proposal fits the topic/theme, and the purpose, of the client's website.
- The information design and site navigation described in the proposal will be clear and relevant to the users.
- The proposed look and feel uses text and graphics that will appeal to the target audience.
- The proposal accurately integrates the client's functional and technical requirements into the design.
- The proposed design prominently represents the client's name, logo, important graphic images, and color scheme.
- The proposal is neat, with correct spelling and grammar.

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Student Resource 8.7

Example: Look and Feel Proposal

Client Name: David Lundholm
Business Name: Fair Teacher Feedback
URL (if known): www.fairteacherfeedback.com

Business Requirements

The proposed look and feel for Fair Teacher Feedback resembles a real student report card. The site contains photos of teachers and students as well as text that indicates how to use the site ("Students do the grading!" "Rate your teacher!"). Teachers and students will quickly understand that the purpose of the site is to provide teachers with honest and fair feedback from their students.

Content Requirements

The proposed look and feel for Fair Teacher Feedback uses bold, contrasting colors that represent the company's current logo colors and that appeal to local and national high school students and teachers. The navigation has a school theme and is simple to understand and use to find the content or area the user may be looking for. Content will be provided by the client, and most content will be on the web pages (such as the registration instructions, sample teacher report cards, company history, and difference from similar sites). Some will be available as downloadable PDF files (such as a newsletter and FAQs).

Functional Requirements

The proposed look and feel for Fair Teacher Feedback indicates that students or teachers will need to register via a secure login area and will be granted different levels of access depending on their role (student, teacher, or administrator). The site will be highly secure, and after logging in, the user will see only his or her personal classroom and then be able to provide or read feedback. The site will use a star rating system and input fields similar to other social networking sites that the students are already familiar with.

Technical Requirements

The proposed look and feel for Fair Teacher Feedback will accommodate 300–500 visitors per month to start and then eventually 50,000+ users. Most users will be online in the afternoons and early evenings, especially at the end of grading periods after report cards come out. Site usage will be slowest during the summer. There will be little to no animation, video, or audio requirements. Site security will need to be high, with passwords that are at least six characters long and case sensitive. Basic registration functionality will be needed for new teachers to register and create an account.

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Sample: Look and Feel Proposal—Design 1

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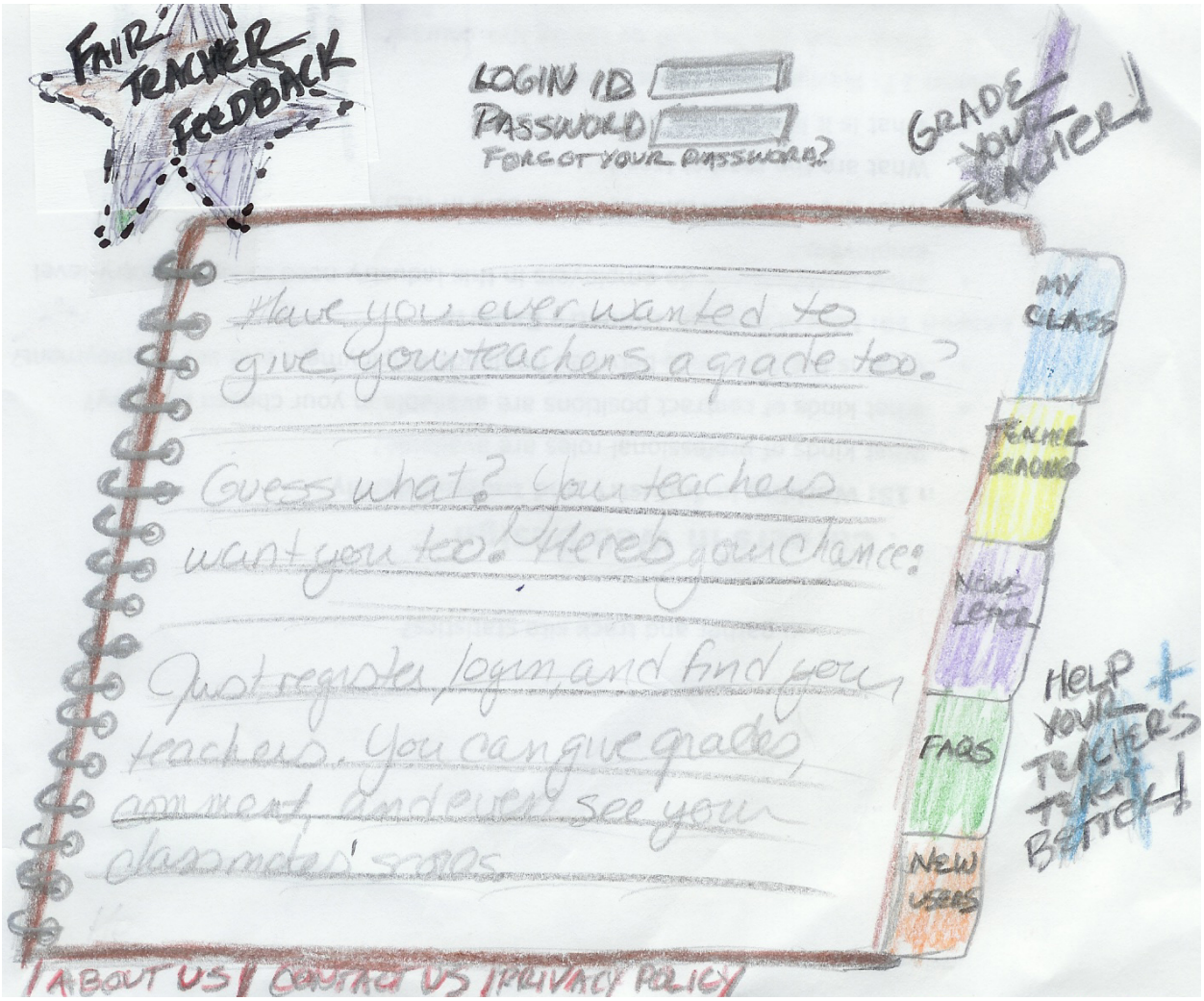
Sample: Look and Feel Proposal—Design 2



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AOIT Web Design

Lesson 9

Using Development Tools and Techniques

Student Resources

Resource	Description
Student Resource 9.1	Guide: Template-Designed Web Pages
Student Resource 9.2	Tutorial: Preparing a Layout for a Template
Student Resource 9.3	Tutorial: Creating a Template
Student Resource 9.4	Tutorial: Creating Child Pages
Student Resource 9.5	Tutorial: Updating a Template
Student Resource 9.6	Tutorial: Creating Library Items
Student Resource 9.7	File Management Structure: Organizing Your Website's Files
Student Resource 9.8	Assignment Sheet: Culminating Project Infrastructure

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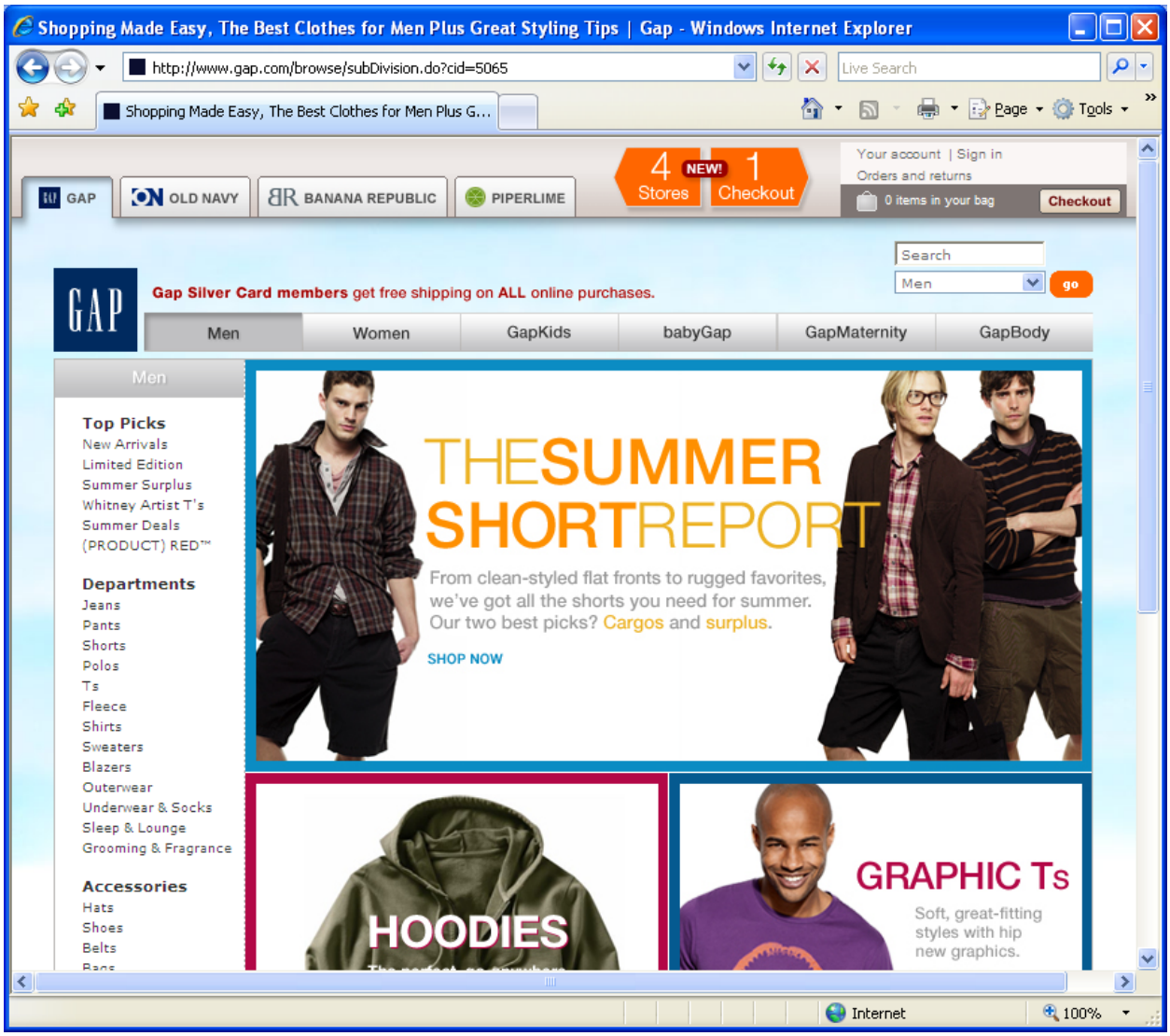
Student Resource 9.1

Guide: Template-Designed Web Pages

Directions: Look at the three template-designed web pages in this resource with your partner and think about which regions or sections of the pages appear on all pages and which are unique to only one of the pages.



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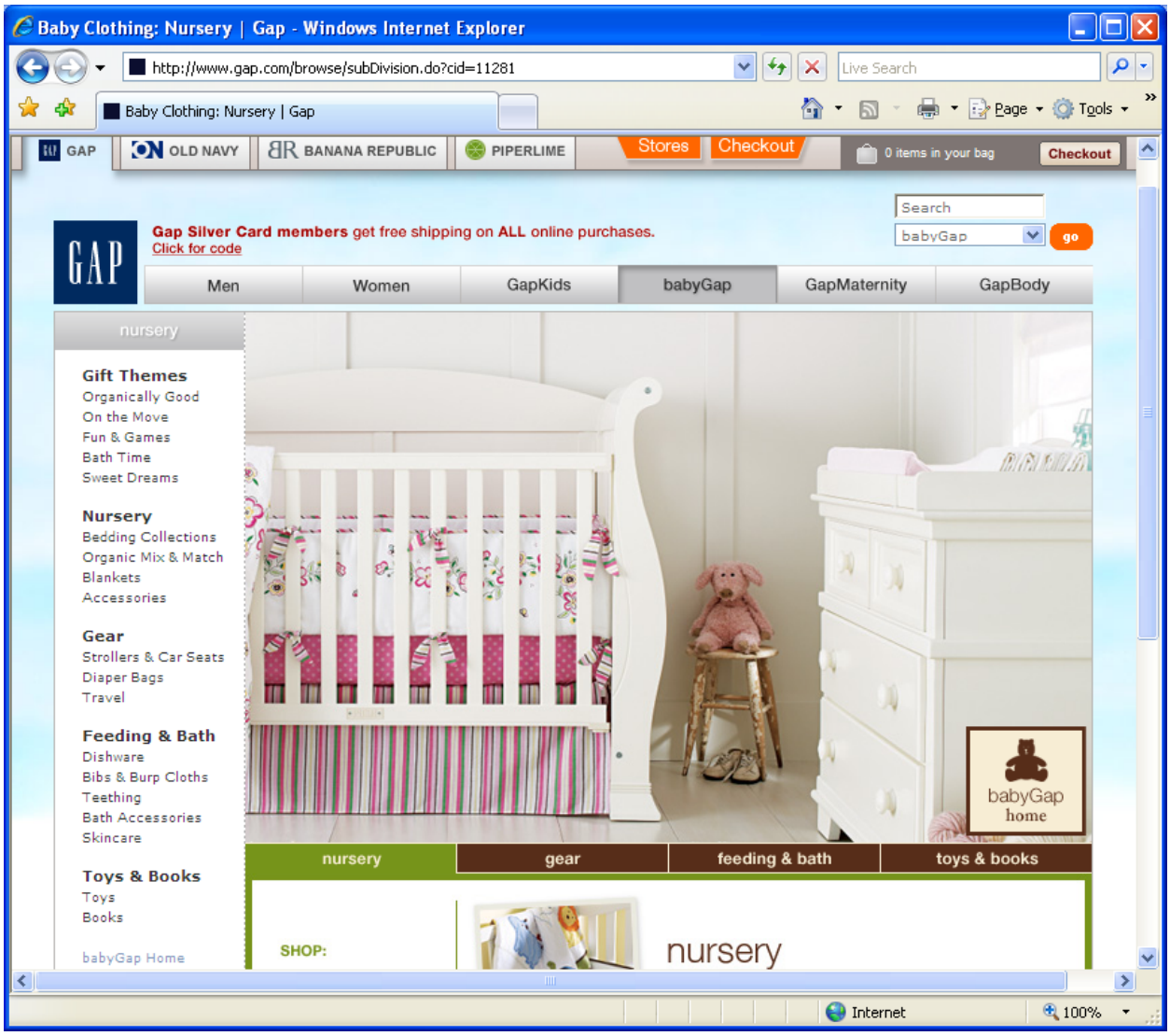

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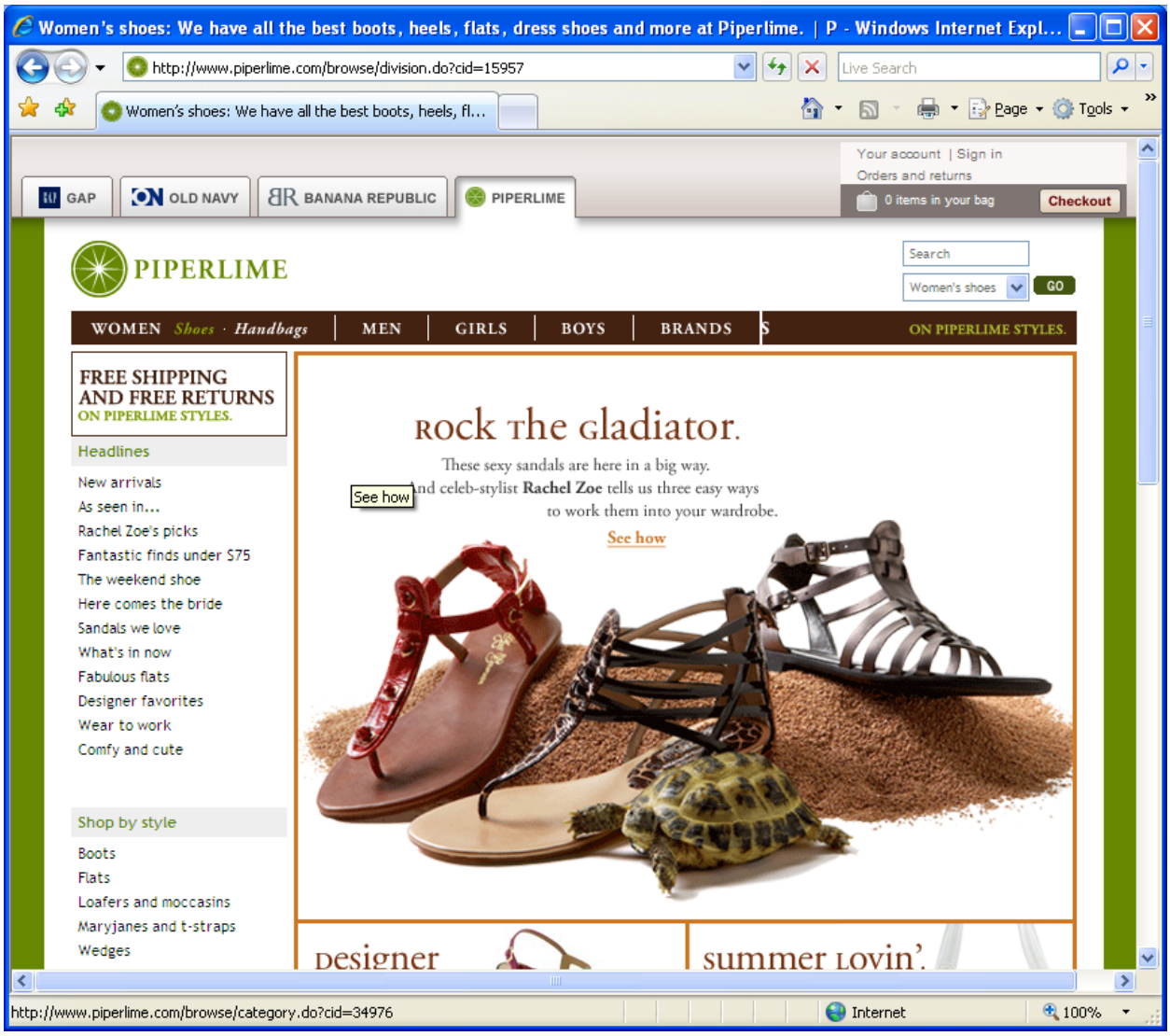

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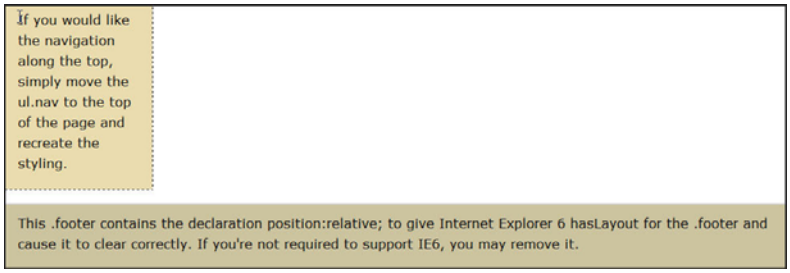
Student Resource 9.2

Tutorial: Preparing a Layout for a Template

Directions: Follow the instructions in this tutorial to make final changes to the layout of your Sample Site Final so that you can convert it to a template for your sample site.

When you last worked on your layout in Lesson 8, the top of the page and the footer area looked like this:



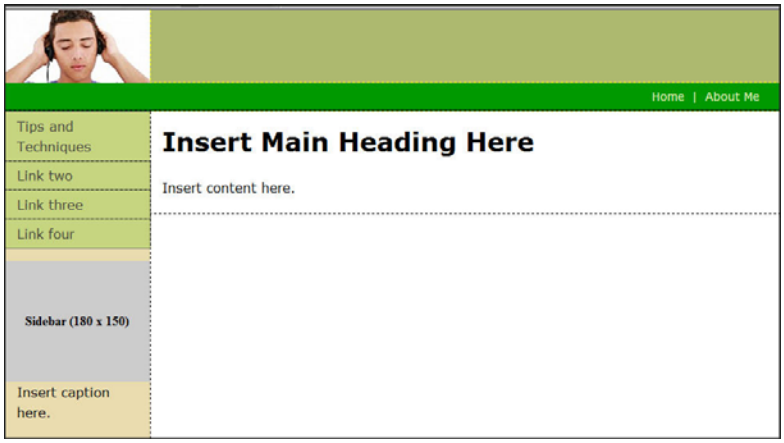
To make this layout page more suitable for a template, you will make three changes:

1. Replace the text in the content area with something more appropriate for a template, such as “Insert content here.”

2. Replace the footer text with a copyright statement.

3. Set up the sidebar area below the navigation menu so that you can place an image and a caption there.

When you finish making these changes, your layout will look something like these screenshots:



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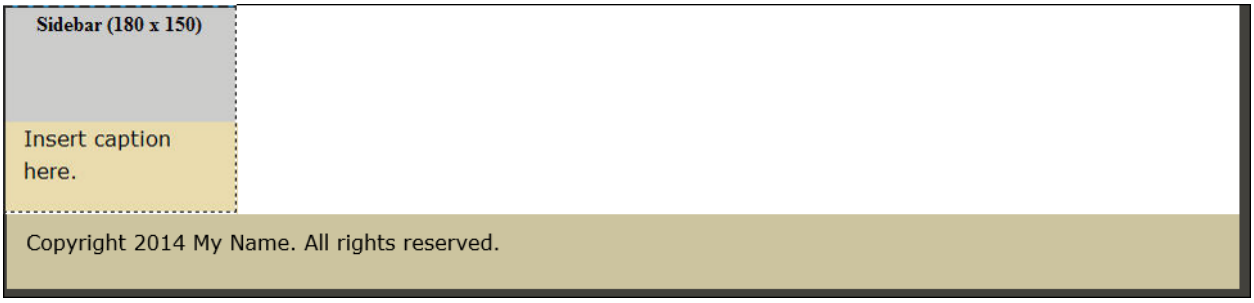

Step 1: Insert Appropriate Placeholder Text in Content Area

1. Make a backup copy of mylayout.html. Name it mylayout_backup.html, in case you need to start over again or you need it to create another template.
2. Open Dreamweaver and open mylayout.html in Design view. You may also try using Split view to see the code changes that correlate with the changes you make.
3. Triple-click to select the heading “Welcome to My Layout Page!”
4. Type **Insert Main Heading Here** to replace the text.
5. Select the remaining text in the content area. Type **Insert content here** to replace the text.
6. Save the file.

Step 2: Modify the Footer

1. Be sure your mylayout.html file is still open in Design view.
2. Select the placeholder text in the footer. Replace it with **Copyright [*year*] [*Your Name*]. All rights reserved.**
3. Save the file.

Step 3: Insert an Image Placeholder in the Sidebar

1. With your mylayout.html file still open, switch to Code view.
2. In the Sidebar `<div>`, find the two paragraphs of text that are located directly below the navigation menu.
3. Delete the first paragraph (the longer one).
4. Replace the second paragraph (that is, the text inside the opening and closing `<p>` tags) with **Insert caption here**.
5. Place the cursor to the left of the opening paragraph tag.
6. Select Insert > Image Objects > Image Placeholder.

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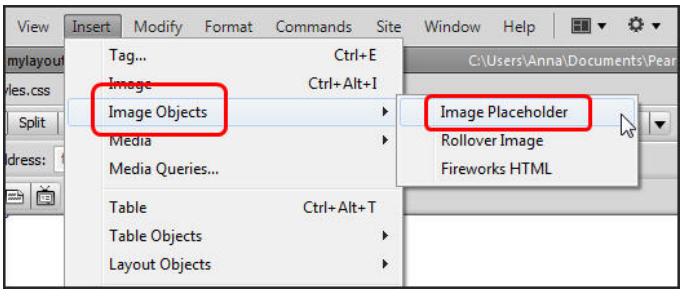
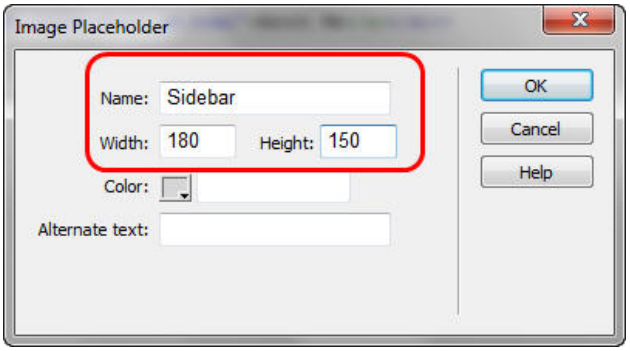


The Image Placeholder dialog box appears.

7. In the Image Placeholder dialog box, type **Sidebar** in the "Name" field.

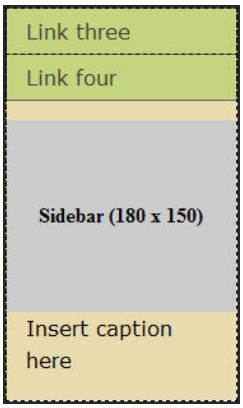
8. Type **180** in the "Width" field and **150** in the "Height" field.

9. Leave the "Color" and "Alternate text" fields blank.



10. Click OK.

11. Switch to Design view. You should see an image placeholder in the sidebar area below the navigation menu, and your "Insert caption here" instruction below the image placeholder.



12. Save the file.

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Student Resource 9.3

Tutorial: Creating a Template

Directions: This tutorial guides you through the process of creating a template for your sample site, based on the layout you completed in the previous tutorial. Follow the specific instructions below.

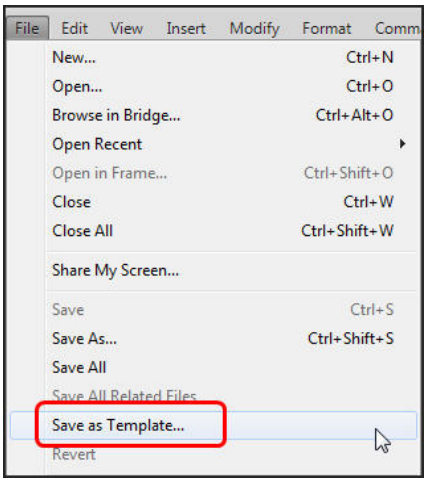
Step 1: Create a Template from an Existing Layout

A template is a master page from which child pages are created. Most WYSIWYG editors, including Dreamweaver, provide the features you need to create a template.

1. You will create your template from the My Layout page you modified in the previous tutorial. Be sure your mylayout.html file is stored in your Sample Site Final main (root) directory and that it is available for editing in Dreamweaver.

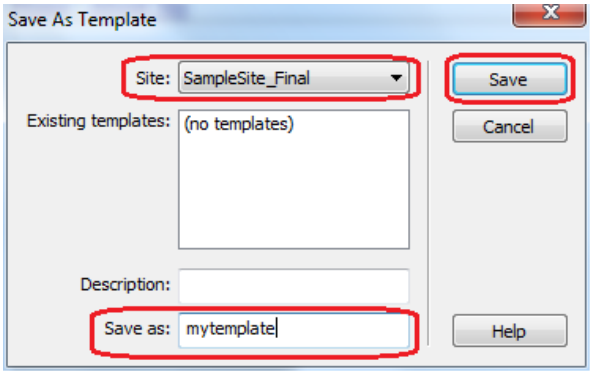
2. Open Dreamweaver, and open your most recent version of mylayout.html.

3. Select File > Save as Template.



   Dreamweaver always saves templates in a special directory called “templates.” When you created your Sample Site Final project, you created a directory by that name, so Dreamweaver will save the file there. Otherwise, Dreamweaver would create its own templates directory.

4. When the Save As Template dialog box appears, be sure your sample site name is correct. Leave the Description field empty. Save the file as mytemplate. (DW will add the file extension *.dwt*.)



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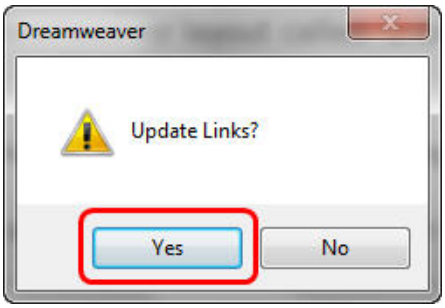
A dialog box appears asking if you want to update the links.

Since the template is saved in a subfolder, updating the links in the code is necessary both now and when you create child pages later.

The most important link currently in your new template is the one to your CSS file. If DW doesn't update that link, your template will have no CSS styling.



5. Click Yes to update the links.

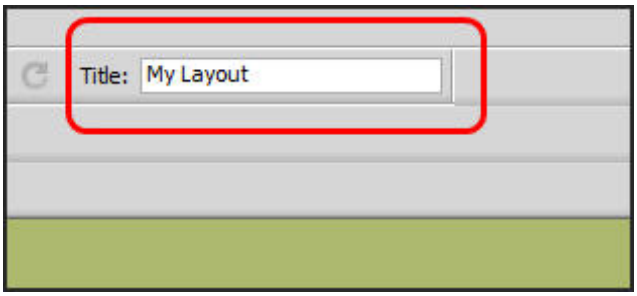
   Dreamweaver saves your file in the templates directory as mytemplate.dwt.

6. Open Windows Explorer (File Explorer) and check to be sure that your new template file is where it is supposed to be in the directory structure of your sample site.

Step 2: Change the Title Text of the Template

Dreamweaver treats almost all regions of a new template as part of the master design (and therefore currently locked and uneditable). The only region of a template-based page that is not locked by default is the title, since all pages in a site should have unique names. The first step is to change the title of the template file so that this text tells the person using the template what to do.

1. Look at the current title of the new template page.



2. Change the title to **Insert Title Here**.

3. Save the template file. You will get a warning message that says: "This template doesn't have any editable regions. Are you sure you want to continue?" Go ahead and click OK. (You will be creating editable regions in the next step.)

Step 3: Designate Editable Regions in the Template File

For regions of your template-based child pages that need to be unique (for example, the text in the content area), you need to designate them as editable. In this step, you will designate editable regions for two of the regions in your new template.

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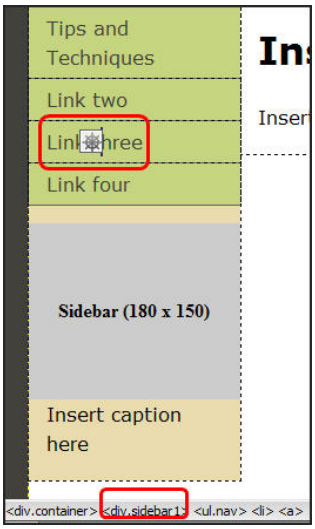
You will make the sidebar and content regions of your sample site editable, because both need to be unique for each page on the website.

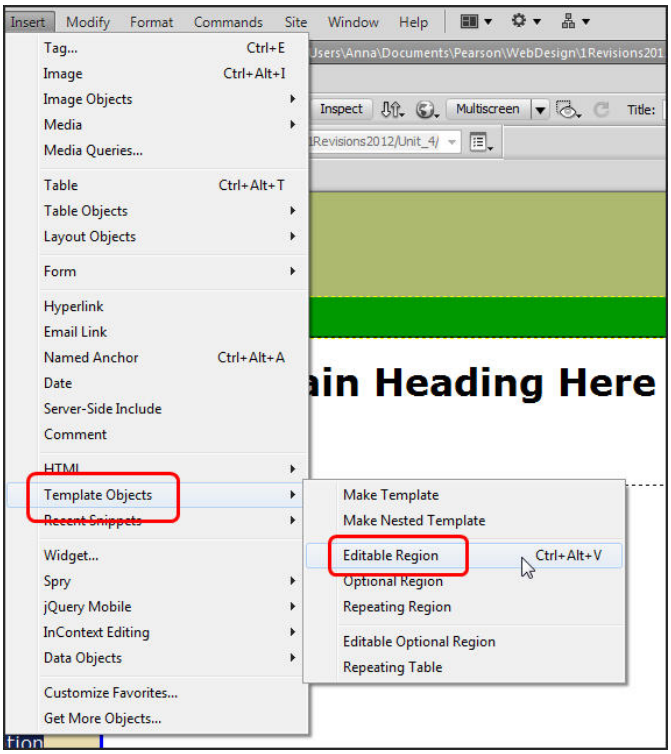
1. Click anywhere in the sidebar.

2. In the tag selector area at the bottom of the workspace (see screenshot below), click `<div.sidebar1>`.



Everything in the sidebar is selected.

3. Choose Insert > Template Objects > Editable Region.



4. Name the editable region **SideContent**.

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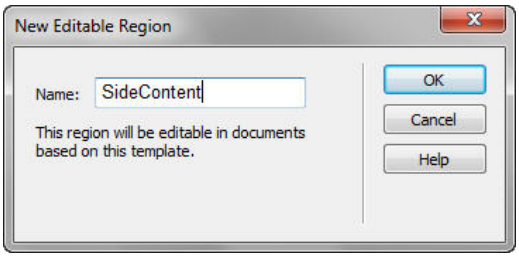
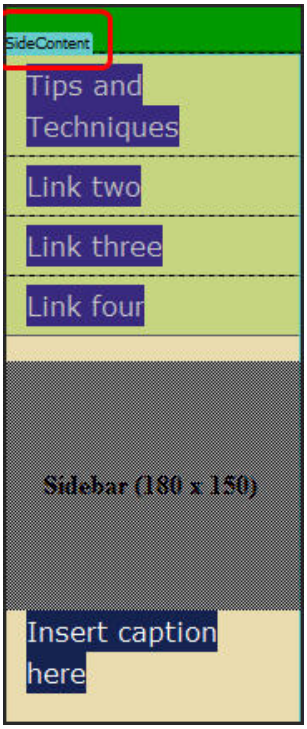


5. Click OK.

   A blue tab appears at the top left of the sidebar with the label “SideContent.”



6. Click anywhere in the content area, and then click `<div.content>` in the tag selector area to select the entire content division.

7. Choose Insert > Template Objects > Editable Region.

8. In the New Editable Region dialog box, type **MainContent** in the “Name” field.

9. Click OK.

   The name appears in a blue tab above the area, identifying it as an editable region.

   You now have three editable regions: the title, which is editable by default, the sidebar `<div>`, and the content `<div>`. All other regions (for example, the header and footer) are locked, so those regions will all be identical to the ones in the template when you create child pages.

   The template is linked to your external CSS file, just as your layout page was. When you create child pages they will also be linked to your CSS file, so the styling for your entire site will be the same.

10. Save your template and close it.

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Student Resource 9.4

Tutorial: Creating Child Pages

Directions: In this tutorial, you will create sample child pages based on the template you created for your sample site. Follow the specific instructions below.

When you create a child page from a template, only the content in the editable regions can be updated. Child pages inherit all the content and styling from the locked regions of their template page.

In this tutorial, you will create the following child pages:

- index.html
- about_me.html
- tips_techniques.html

You already have pages with the same names in your sample site, but you can't use them with your template, because they were created using plain HTML with no CSS styling, and they are not child pages of the template page you just created. You may have thought you could simply attach them to the new template after the fact, but that is difficult to do in Dreamweaver. Instead, you need to create three new child pages with the same names as the originals, and then copy and paste the content from the originals to the new child pages.

Step 1: Rename Your Original Pages

You should already have an index.html page in your Sample Site Final root directory. You should also have an about_me.html page and a tips_techniques.html page in your Sample Site Final web_pages directory. Rename your existing pages to indexOLD.html, about_meOLD.html, and tips_techniquesOLD.html.

Step 2: Create a New Home Page

1. Open Dreamweaver, and then open indexOLD.html.
2. With indexOLD.html still open in Dreamweaver, select File > New.
3. In the New Document dialog box, select the "Page from Template" option.

   Be sure the Site list is pointing to your Sample Site Final directory.

   Be sure the Template list is pointing to mytemplate, the DWT file you created.

   Be sure the "Update page when template changes" checkbox is checked. (If you make changes to the template later on, you want to be sure your existing pages will reflect those changes.)

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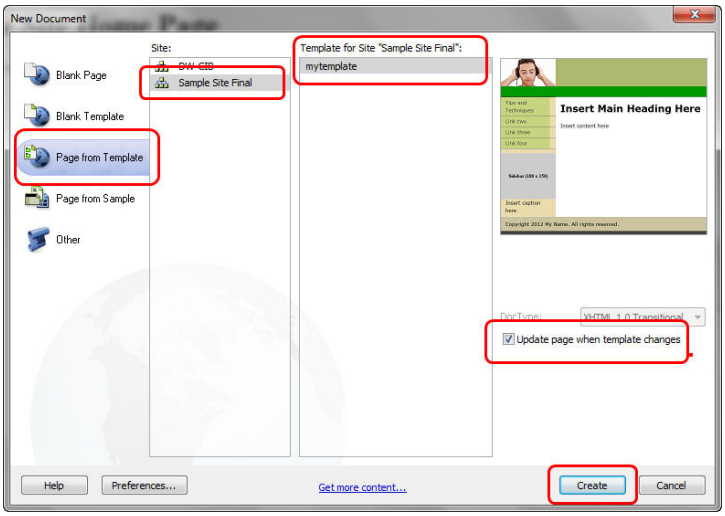
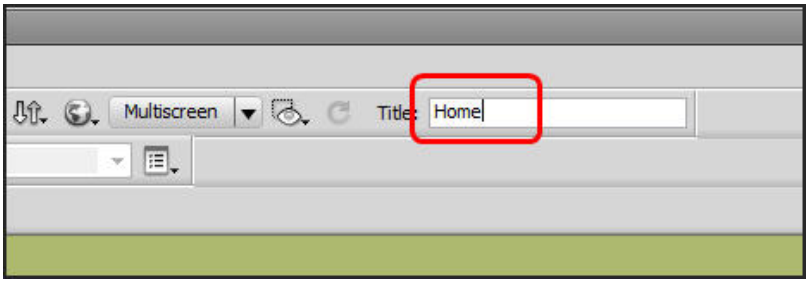


4. Click Create.

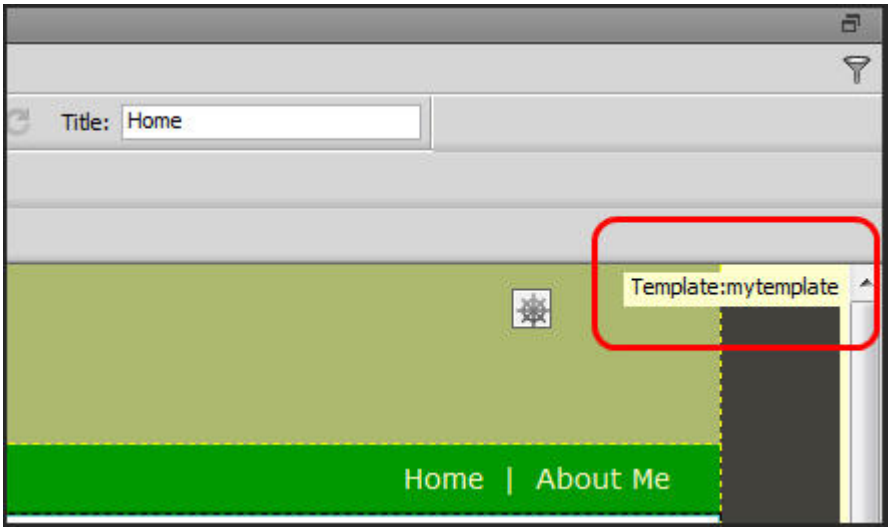
   Dreamweaver creates a new page called Untitled-1 that looks exactly like your template at this point.

5. Change the title by typing **Home** in the Title field.



6. Save the file in your root directory as index.html.

7. Look in the upper-right corner of the workspace area, and notice that your new child page identifies the template it is based on in a yellow label that reads “Template:mytemplate.”



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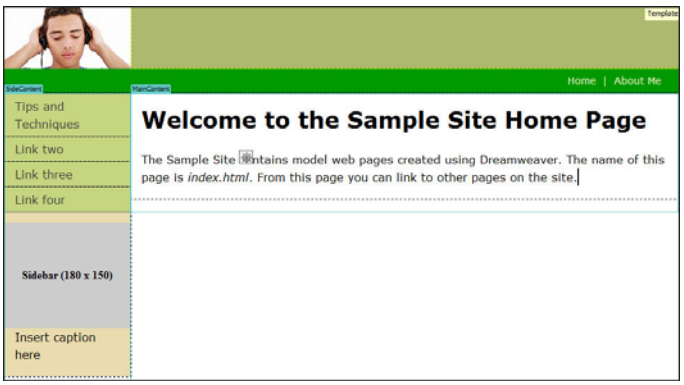
8. Move your cursor around the screen. Notice that the locked cursor symbol appears when the cursor is hovering over a locked region.

9. Keeping your new page open, move to your indexOLD.html page.

10. Select the heading and the paragraph, and copy them.

11. Move back to your new child page and paste the heading and text in place of the placeholder heading and text in the content area.

    Your new home page should now look like the following screenshot.



    Although the sidebar is editable, we aren't going to make any changes to it now.

12. Close indexOLD.html.

13. Save the changes to index.html.

Step 3: Create a New About Me Page

1. Open about_meOLD.html in Dreamweaver.

2. With about_meOLD.html still open, select File > New.

3. Create a new child page using the same options you did when you created index.html.

4. Title your new page About Me.

5. Copy the content (text and images) from about_meOLD.html to about_me.html.

   If you have images but you haven't yet moved them over to your Sample Site Final directory structure, do that now. Be sure to put them in the images directory.

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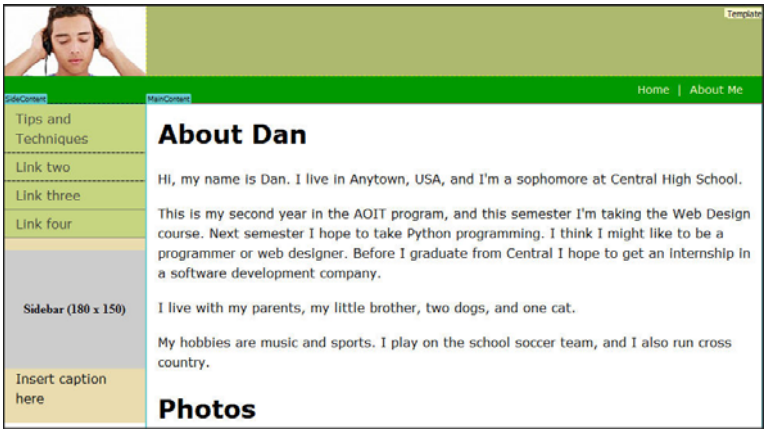
If you are in Design view, the Image Description (Alt Text) dialog box appears and instructs you to enter a description for each of the images. Enter alt text for each image, in the Description column.

6. Close about_meOLD.html.

7. Save the new file in the web_pages directory as about_me.html.

   Your new About Me page should look something like the following screenshot.



Step 4: Create a New Tips and Techniques Page

1. Open tips_techniquesOLD.html in Dreamweaver.

2. With tips_techniquesOLD.html still open, select File > New.

3. Create a new child page using the same options you did when you created index.html and about_me.html.

4. Name your new file Tips and Techniques.

5. Copy the text from tips_techniquesOLD.html to tips_techniques.html.

6. Close tips_techniquesOLD.html.

7. Save the new file in the web_pages directory as tips_techniques.html.

   Your new Tips and Techniques page should look something like the following screenshot.

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Student Resource 9.5

Tutorial: Updating a Template

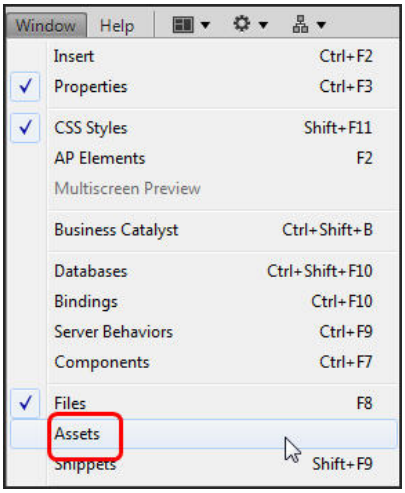
Directions: Follow the specific instructions below.

When a Dreamweaver template is modified, the locked regions of child pages made from the template will reflect the changes made to the template.

In this tutorial, you will modify the vertical menu on the left of your current template (mytemplate.dwt) and then see how the changes made to your template affect the child pages you created.

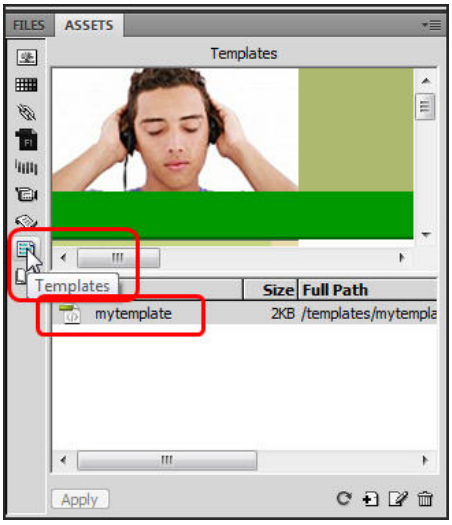
Step 1: Open the Template for Editing

1. Open Dreamweaver and select Window > Assets.



   The Assets panel appears. It is usually grouped with the Files panel on the right side of the screen.

2. In the Assets panel, click the Template icon. Your My Template file should appear in the list. If it does not, click the refresh button in the bottom-right corner of the panel.



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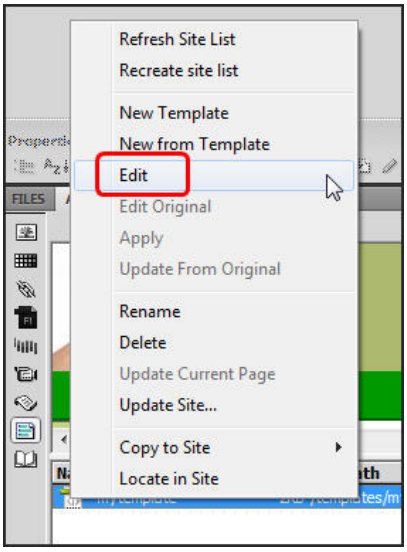
3. Right-click mytemplate and select Edit from the context menu.



The template opens.

Step 2: Change the Template

1. Select the text *Home* in the horizontal menu in the header. Change it to **My Home Page**.

   Because this area is a locked part of the template, all the child pages should reflect this change when they are updated.

2. Select the text *Tips and Techniques* in the vertical menu in the sidebar. Change it to **Important Information**.

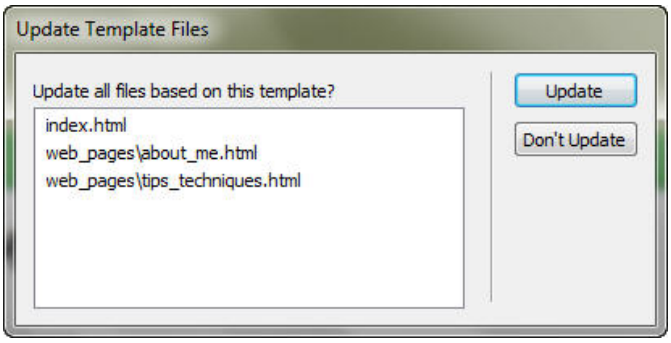
   Because the sidebar is in an editable region, the child pages should *not* reflect this change when they are updated.

3. Change every instance of the word *insert* to *add*. (There are four instances, including the page title.)

   Do you expect these template changes to be reflected in the child pages, or not? Think about your answer as you observe the update behavior in Dreamweaver, next.

4. Save the template file.

   The Update Template Files dialog box appears.



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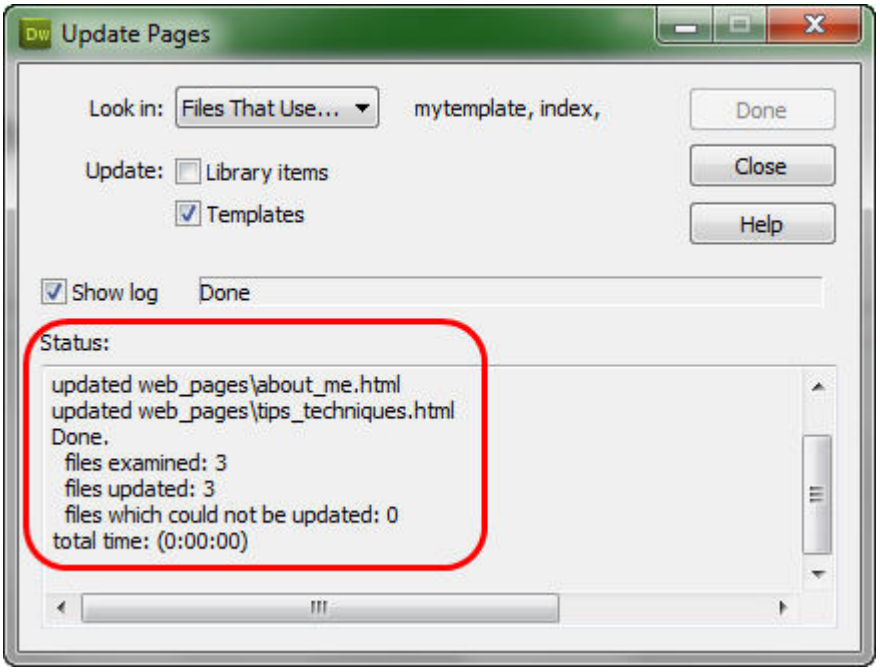
5. Click the Update button.

   The Update Pages dialog box appears. The log window at the bottom of the dialog box (Check "Show log" if you cannot see it) tells you which files were successfully updated and which were not. Your pages should have all updated.



6. Close the Update Pages dialog box.

Step 3: See How Template Changes Affect the Child Pages

1. Leave the My Template file open and open Tips and Techniques.

   As you can see, the name in the horizontal menu has changed to My Home Page (because it is in a locked region), but the name in the vertical menu has not (because it is in an editable region).

2. Check the state of the other two pages: Home and About Me. Their changes should be the same as the changes to Tips and Techniques.

3. Close all open files, and also close Dreamweaver.

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Student Resource 9.6

Tutorial: Creating Library items

Directions: In this tutorial, you will learn how to create a library item, which is a chunk of HTML code that you plan to use often on your site. Follow the instructions below to create a library item for Sample Site Final.

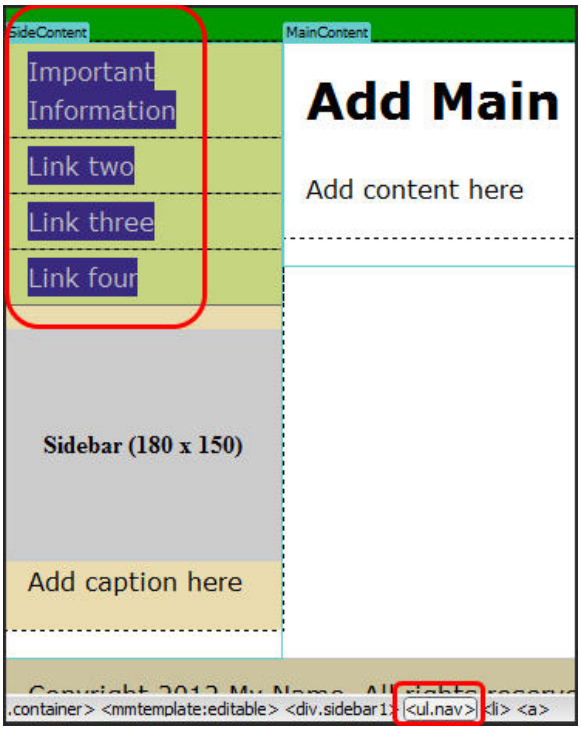
The mytemplate.dwt file for your sample site still has one potential problem: the vertical (sidebar) menu is in an editable region. If you want that menu, with identical links, to appear on several pages of the site, it should not be in an editable region.

To fix the problem, we will replace the vertical menu with a dynamic content element called a library item. Library items are reusable chunks of HTML that you use frequently within a website. They behave similarly to a template. When you make changes to a library item, Dreamweaver automatically updates every page that uses that library item.

Step 1: Create a Library Item

1. Open Dreamweaver and, just as you did in the tutorial where you updated your template, open mytemplate.dwt from the Assets panel.

2. Insert the cursor in the vertical menu. Click the `<ul.nav>` tag selector.



3. Go to the Assets panel (choose Window > Assets to display the panel, if necessary).

4. Click the Library category icon (the open book icon). No library item should be visible yet.

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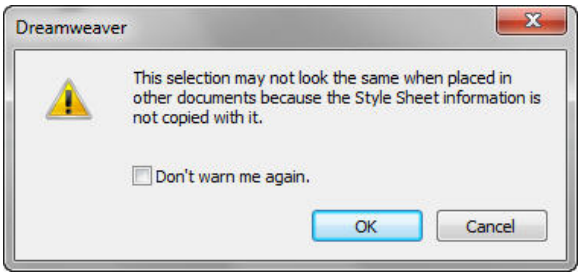
5. Click the New Library Item icon at the bottom of the panel. A dialog box appears with a warning message.



6. Click OK.

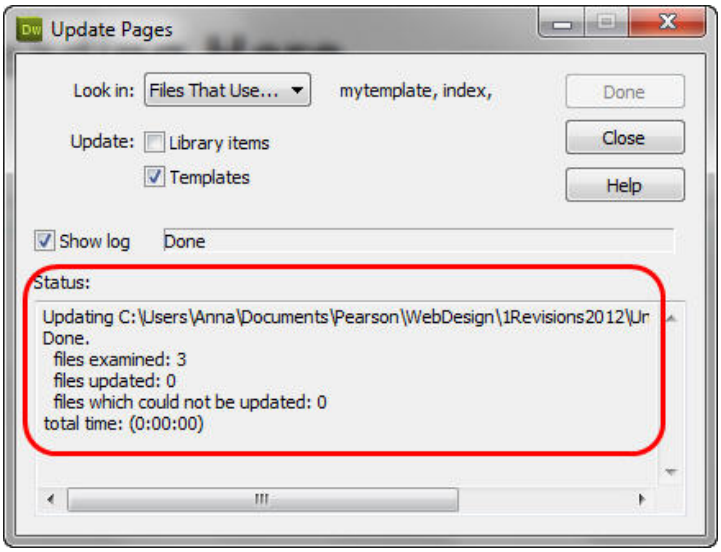
7. Type **vertical-nav** in the library item name field, and then press Enter.

   Dreamweaver creates a library item from the selected menu code and replaces the existing menu with the library item code. Dreamweaver also creates a Library folder in your site's root directory and inserts the library item.

8. Save the template and update linked files.

9. Look at the Update Pages report.

   If your report indicates that your child pages were not updated (as does the following report), you will need to update the child pages by hand.



10. Open all three child pages (index.html, about_me.html, and tips_techniques.html).

11. Starting with index.html, click in the left navigation area, and then click the `<ul.nav>` tag selector.

12. In the Assets panel, select the `vertical-nav` item in the Library category. Click the Insert button.

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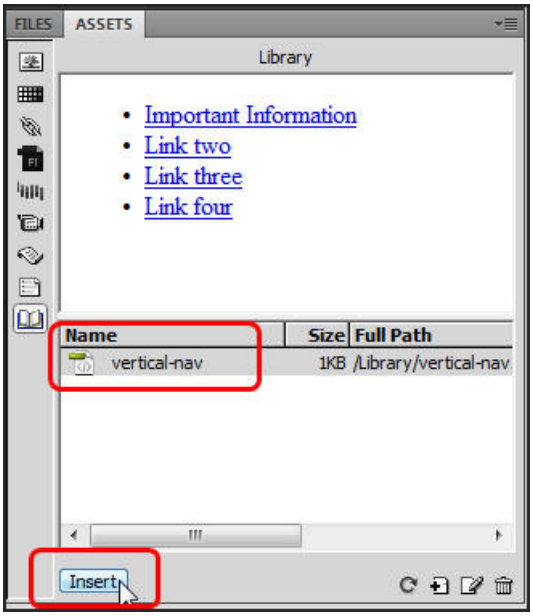


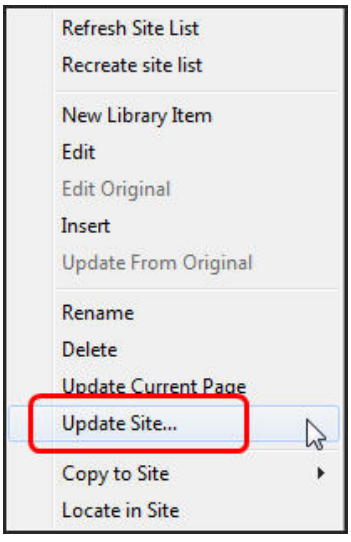
13. The `<ul.nav>` in the index.html file is replaced by `<mm.libitem>`.

14. Position the cursor over the vertical menu in the sidebar. Notice that the locked icon appears, indicating that the navigation bar is not editable.

15. Switch to Code view and find the code for the new library item. Notice that it is highlighted with a different color than the surrounding area and that it contains special markup code.

    Be aware that although library items are locked in Design view, they can be edited in Code view.

16. Right-click `vertical-nav` in the Library list and select Update Site from the context menu.



    The Update Pages dialog box appears.

17. Click Start. The status report shows which pages were examined and updated.

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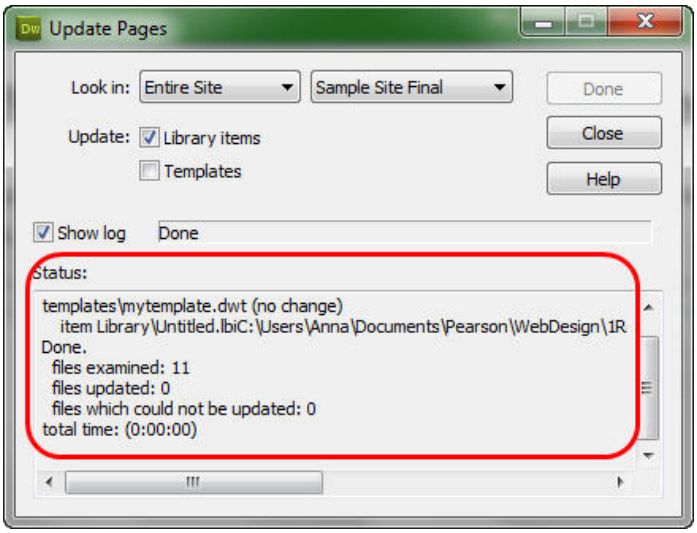

18. Click Close to exit the dialog box.

    Dreamweaver updates and resaves all unopened files. You need to manually save any files you have open, which in this case is index.html.

19. Save index.html.

Step 2: Update a Library Item

1. In the Library category list in the Assets panel, double-click the `vertical-nav` item.
2. Switch to Code view.
3. Change the “Important Information” link back to “Tips and Techniques.”
4. Save the library item file.

   Your three child pages and your template should update.

5. Open the four pages and check to be sure they all contain the updated library item, with the top menu item showing link text of “Tips and Techniques.”
6. Close all files, and close Dreamweaver.

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Student Resource 9.7

File Management Structure: Organizing Your Website's Files

*Student Name:*_____ *Date:*_____

Directions: Organizing the pages and files within your website is critical to the functionality of your site. Use this worksheet to sketch out the structure of your website in the sidebar at right. Your sketch should show all of the folders that you plan to use for your website, and it should list all web pages you will have under the appropriate folder.

1. Begin your sketch with a main site folder for your site. Make sure to give the folder an appropriate name. This folder will contain your index.html file (your home page) and subfolders for the web pages and graphics that you will place on your site.

2. Using your site map as a guide, organize and create a subfolder structure. You need a subfolder to contain your web pages and another subfolder to contain graphics. If your site has multimedia, you will need a multimedia folder also.

3. Decide on naming conventions to use for your web pages and graphics, based on the best practices listed in this resource.

4. Under your folder for web pages, write down the file name for each page in your site map. You will create the pages after you have created your template; right now you need to write down the file name of each page you will create. Remember to follow your naming conventions.

5. Write down the names of any graphics that you already have, such as your logo, in the graphics folder. Remember to follow your naming conventions.

6. When you have completed your sketch, open Windows Explorer (File Explorer) and create your folder structure. Add any graphics or multimedia files that you have to the appropriate folders. Do not create your web pages here. You will create the web pages in Dreamweaver using your template.

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Naming Conventions

Use the following guidelines for naming your files and folders. Professional web designers consider these guidelines to be best practice.

- All file and folder names should be lowercase and without spaces.
- Ideally, folder names should be the shortest English word that communicates the content, or two English words smashed together to do the same. For example, “about” is a better folder name than “aboutus.” Note that you can still title your web page whatever you want.
- It is good practice to name images relatively obscurely so that they don’t interfere with desired URL names for pages.

Make sure your file management structure meets the following assessment criteria:

- The main site folder (the root folder) contains all other folders and files.
- The hierarchy of pages, graphics, and files is appropriate and organized.
- All folders and files follow a consistent, proper naming convention.
- All pages in the site map are represented.
- The home page sits at the top level of the file structure and is in the root folder.

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Student Resource 9.8

Assignment Sheet: Culminating Project Infrastructure

Directions: Follow the steps below to create a layout, a template, child pages, and at least one library item for your culminating project website. Be sure to read the entire assignment sheet before you begin work. Also, study the rubric your teacher gives you, and make sure you know how your work will be assessed.

Step 1: Create the Layout for Your Culminating Project Site

Use Dreamweaver to create a layout page of your culminating project site, based on the wireframe and the look and feel proposal you created for your client. The layout page you create for your culminating project site will be similar to the mylayout.html page you created for your sample site. When you complete your layout page, you will convert your layout page to a template. Follow the instructions below to create your layout page.

1. Open your mylayout.html page from your sample site in Dreamweaver so that you can use it as a model page as you create your client's layout page.
2. Use the same DW layout as your mylayout.html page, or choose another that you think is more suitable.
3. Name your page Client Proposal Home.
4. Save it in the root directory of your project website directory.
5. Remove the placeholder text in the content area of your new DW layout page, and type in appropriate text.
6. Remove the placeholder text in the footer of your DW layout page, and type in an appropriate copyright statement.
7. Insert your client's logo in the logo block, just as you did in mylayout.html.
8. Remove the placeholder text in the sidebar of your DW layout page, and replace it with any text or graphics you want to include in your proposal page.
9. Move the CSS style information from your layout page to a separate CSS file.

Tips:

- Make sure each region of your layout page is a separate `<div>`.
- Think about which regions will be locked and which regions will be editable. Add the correct content (such as logo and menu items) to the regions that will be locked. These will form the basis of your template.

Step 2: Create Your Template

Use Dreamweaver to create a template (DWT file) from your layout page. Use the same procedure you used to create a template for your sample site.

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After you create your template, check to make sure that each `<div>` that should be locked is locked and each `<div>` that should be editable is editable. Also make sure that your template is linked to your CSS file.

When you save your template, don't forget to adhere to the file structure that you created for your site.

Step 3: Create Child Pages

When you are satisfied that your template is correct, create child pages for your website, following the same procedure you used to create child pages for your sample site. Look at your site map to see what child pages you will need.

1. Create a child page for each page on your site map. Make sure that each child page is created from the template and that each has the correct editable and locked regions on it.

2. You will fill in the editable content for these pages in future lessons. Right now you can leave all of the editable regions blank.

3. Save the child pages in the correct directory for your site.

4. If you find anything in the template that needs to be revised to make your child pages work correctly, update your template. Then check the child pages to make sure they work correctly.

Step 4: Add at Least One Library Item

Take a close look at all of your child pages and figure out how at least one library item would enhance the way your website works. Create the library item following the same procedure you used to create a library item for your sample site, and use the library item in the appropriate region of your pages.

Step 5: Test Your Work

Have all members of your group test your pages against the following checklist to make sure they work correctly, and then make any necessary revisions:

- There is an index.html page for the home page of your site.
- The template is linked to a CSS file.
- There is a child page for every page indicated in the site map.
- All child pages are connected to the template.
- All pages are named correctly and in the correct folder in the site directory.
- All pages open correctly and display the correct information on the correct part of the page.
- All menus work correctly.
- All library items work correctly.
- All spelling and grammar is correct.

Make sure that your site infrastructure meets all criteria on the rubric before you submit it for assessment.

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AOIT Web Design

Lesson 10

Gathering and Preparing Web Content

Student Resources

Resource	Description
Student Resource 10.1	Web Writing: Adapting Content for the Web
Student Resource 10.2	Examples: Effective Writing for the Web
Student Resource 10.3	Note Taking: Preparing Images for the Web
Student Resource 10.4	Checklist: Preparing Your Client's Website

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Student Resource 10.1

Web Writing: Adapting Content for the Web

Directions: Westside Pizza knows a lot about pizza, but it doesn't know much about writing web content. Working with a partner, take the paragraphs below about Westside Pizza and adapt them for the home page of the company's website. Use a page in your notebook or a blank sheet of paper to sketch out the content of the home page. Remember, on a website, people need to be able to find what they're looking for quickly, and what they see needs to appeal to them. You don't have to include all of this information on the home page (you probably want to just add links to some of it). Also, Westside may have forgotten some important content that it needs on its home page. If you decide to use images or infographics for some content, just make a very quick sketch, or just say what the picture will show.

Westside Pizza is your best shot for great Italian food. We serve lunch, dinner, and takeout. We have starters, salads, pastas, pizzas, calzones, sandwiches, strombolis, and desserts. All meals for kids are under $5 and include dessert.

Everything is fresh. Pasta comes with garlic bread. Salads have only the finest fresh ingredients, and they come with garlic bread too. Sandwiches come with a choice of fries or salad. There are tons of choices of meats and cheeses, hot or cold. Calzones are our specialty. The dough is filled with meat, vegetables, mozzarella, and parmesan cheese. Do you know what a stromboli is? It's named after a volcano in Italy because it erupts with flavor. It's pizza dough wrapped up like a volcano with incredible fillings. We've been known for our pizzas for over 25 years. You can get most any kind you want. And don't forget that our desserts are big enough to share.

Come visit us: 510 38th Street, Falling Oaks, Virginia (just across from the library).

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Student Resource 10.2

Examples: Effective Writing for the Web

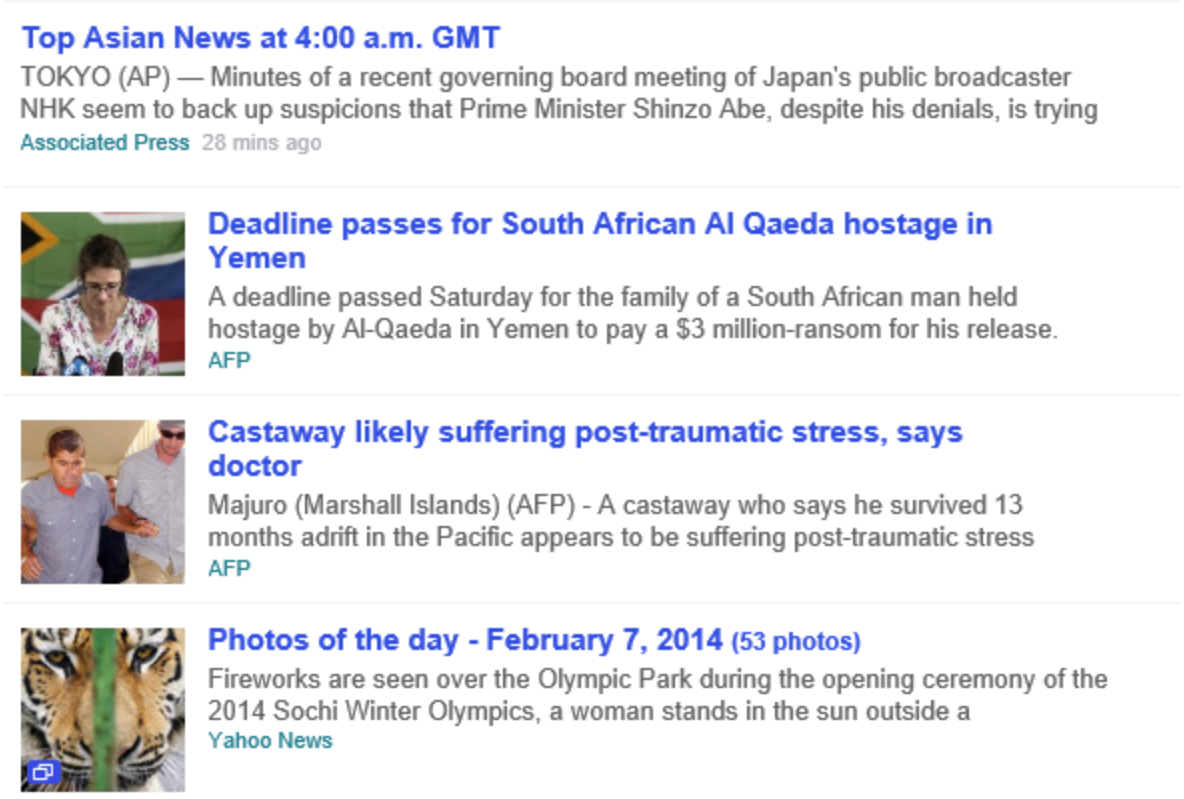
*Student Name:*_____ *Date:*_____

Directions: The examples in this resource illustrate the rules of good writing for the web. Study each rule and the example that illustrates it, and then answer the questions about each example.

Writing for the web is quite different from writing for print media such as a magazine, a brochure, or a book. Your job as a web designer is to make it easy for your website's users to understand the goal of the website and find information. When people have a pleasant experience and quickly understand what a website can provide them, they will feel comfortable and return to the site. Organized content and effective writing is essential to that positive user experience.

Make Sure Your Content Is Accurate

All content must be up-to-date, accurate, and not offensive. Write text in a consistent tone, with no grammatical or spelling errors.



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How can you tell these articles on Yahoo! News are up-to-date?

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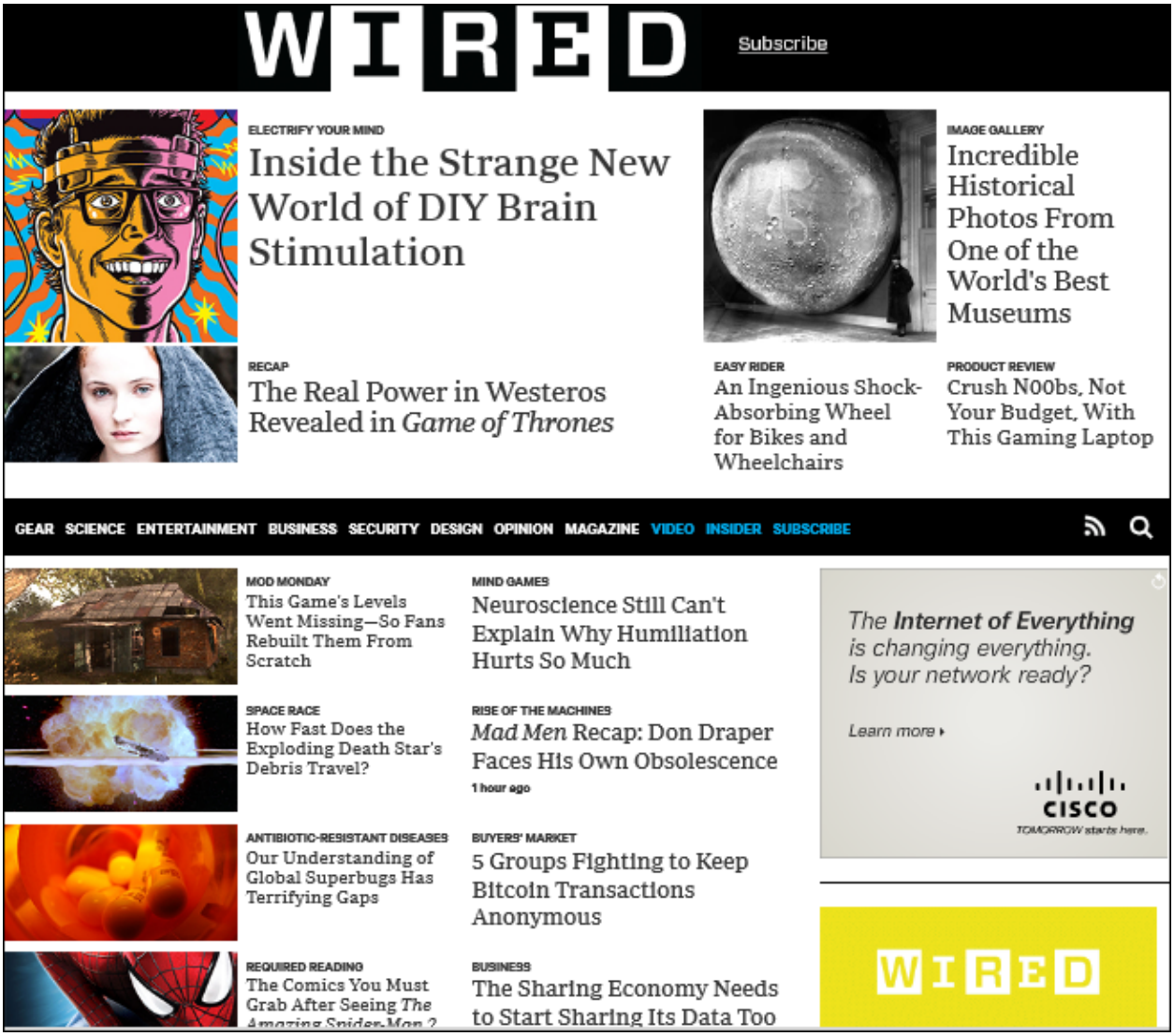
Use Large Headlines with Smaller Subheads

Content should be placed in a clear hierarchy with the most important information being the most prominent. Headings can then link to more information or a complete article. If something catches a user's eye, he or she can click deeper to learn more.



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Notice how the top news stories of the day are presented in larger text, with supporting articles listed under them in slightly smaller text? Choosing text sizes in this way helps readers figure out right away (1) what is making news right then, and (2) what else, while also interesting and important, is not as "big" a story.

What seems to be the "biggest" news story on the page above?

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Design Content for Scanning

Text should be easily readable and "scannable"—short sentences, short paragraphs, and bulleted lists wherever possible. People are in a hurry; they want to find exactly what they are looking for quickly. They want to be able to scan the first reasonable option to see if a site has what matches their interests, and if not, try the next immediately.

Ellis suffered light hamstring strain

By **Tim MacMahon** | ESPNDallas.com **Updated:** February 8, 2014, 6:10 PM ET

Dallas Mavericks guard Monta Ellis suffered only a light strain of his right hamstring and hopes to play on the team's three-game road trip, a league source said.

The Mavs will update Ellis' status after their Sunday morning shootaround in Boston.

Ellis is pushing to play Sunday against the Celtics, the source said, but is likely to rest at least one game.

Ellis suffered the injury late in the fourth quarter of the team's 103-81 home win Friday night against the Utah Jazz. He underwent an MRI on Saturday morning to determine the severity of the strain and traveled with the team to Boston in the afternoon.

Ellis has emerged as an explosive scoring sidekick for Dirk Nowitzki after signing a three-year, $25 million deal with Dallas this summer. He ranks 22nd in the league in scoring with 19.5 points per game while shooting 46.2 percent from the floor and averaging a team-high 5.8 assists.

Ellis is one of two Mavs who have played in all 51 games this season. He leads the team in minutes at 36.5 per game.

The rest of the road trip consists of a Tuesday game against the Charlotte Bobcats and a Wednesday game against the Indiana Pacers before the All-Star break. If Ellis sits out the entire road trip, he will have a total period of 10 days to rest before the Mavs' Feb. 18 home game against the Miami Heat.

If Ellis does not play, Devin Harris likely will take his spot in the starting lineup.

"You can't replace what he does," said Harris, who missed the first half of the season while recovering from toe surgery. "We'll have to do it by committee. He's been playing great for us."

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Notice how this article uses many short paragraphs, and each paragraph tells a reader a complete thought. Readers can easily get the basic facts of the story and move on, if they choose, without having to read the entire article to learn what has happened to Monta Ellis.

Can you think of a more effective way to deliver the most important information in the sentences below about Michael Jordan?

Michael Jordan, a basketball player from North Carolina and father of four, loves basketball. He played for the Chicago Bulls and received 14 MVP awards, which is a record.

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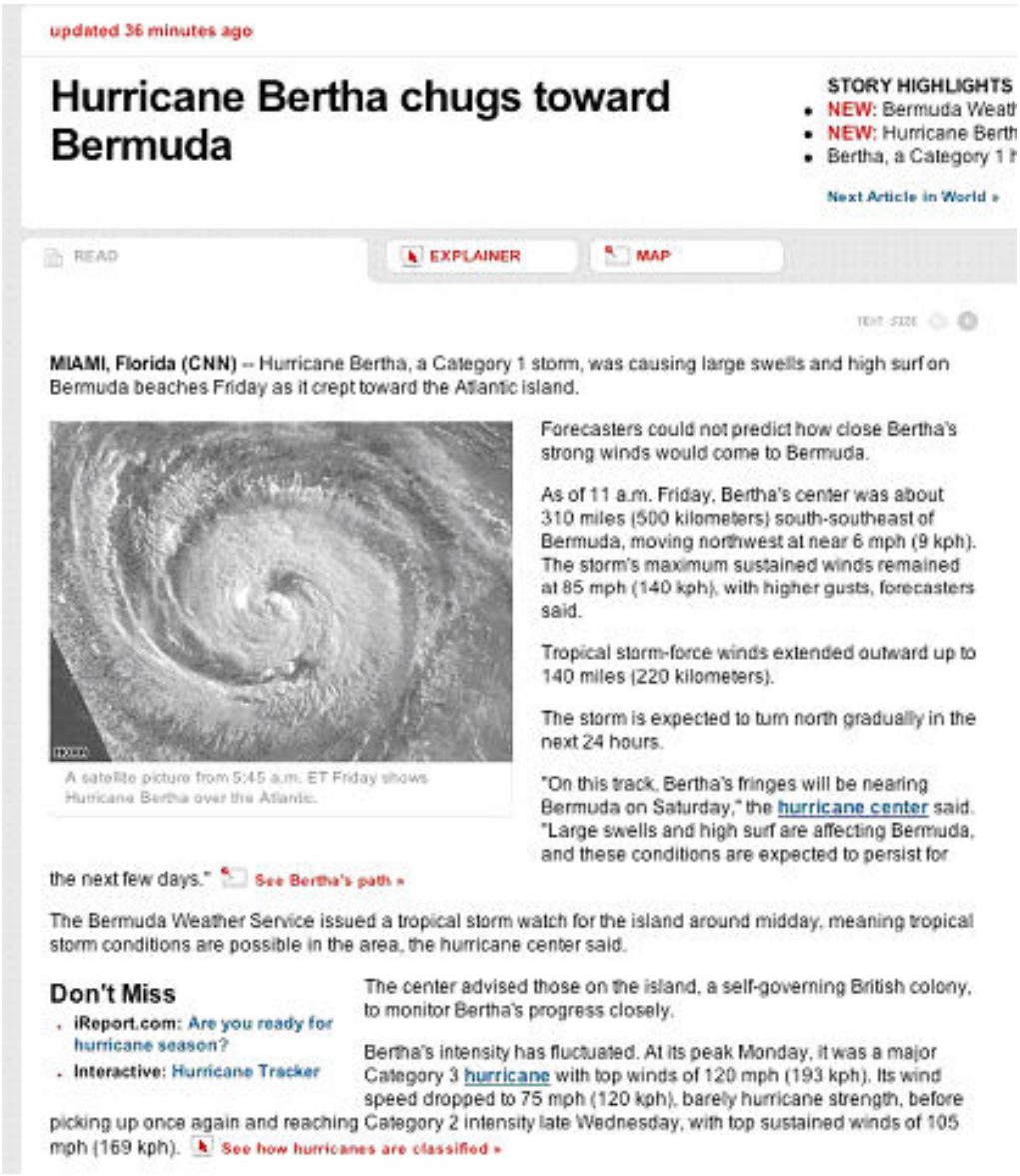
Use Descriptive Titles and Keywords

Keep the content searchable: use important keywords in the title tag and repeat them throughout the copy, without sounding unnatural. Search engines pick up keywords and display titles, so these should be written to encourage people to go to your site.



updated 36 minutes ago

Hurricane Bertha chugs toward Bermuda

STORY HIGHLIGHTS
- NEW: Bermuda Weath
- NEW: Hurricane Berth
- Bertha, a Category 1 h

Next Article in World »

READ | EXPLAINER | MAP

MIAMI, Florida (CNN) -- Hurricane Bertha, a Category 1 storm, was causing large swells and high surf on Bermuda beaches Friday as it crept toward the Atlantic island.

A satellite picture from 5:45 a.m. ET Friday shows Hurricane Bertha over the Atlantic.

Forecasters could not predict how close Bertha's strong winds would come to Bermuda.

As of 11 a.m. Friday, Bertha's center was about 310 miles (500 kilometers) south-southeast of Bermuda, moving northwest at near 6 mph (9 kph). The storm's maximum sustained winds remained at 85 mph (140 kph), with higher gusts, forecasters said.

Tropical storm-force winds extended outward up to 140 miles (220 kilometers).

The storm is expected to turn north gradually in the next 24 hours.

"On this track, Bertha's fringes will be nearing Bermuda on Saturday," the hurricane center said. "Large swells and high surf are affecting Bermuda, and these conditions are expected to persist for the next few days." See Bertha's path »

The Bermuda Weather Service issued a tropical storm watch for the island around midday, meaning tropical storm conditions are possible in the area, the hurricane center said.

Don't Miss
- iReport.com: Are you ready for hurricane season?
- Interactive: Hurricane Tracker

The center advised those on the island, a self-governing British colony, to monitor Bertha's progress closely.

Bertha's intensity has fluctuated. At its peak Monday, it was a major Category 3 hurricane with top winds of 120 mph (193 kph). Its wind speed dropped to 75 mph (120 kph), barely hurricane strength, before picking up once again and reaching Category 2 intensity late Wednesday, with top sustained winds of 105 mph (169 kph). See how hurricanes are classified »

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In this story, writers have repeated the words *Bermuda* and *Bertha* many times. This will help a search engine to find the article and "understand" that the article gives information about Hurricane Bertha, which is off the coast of Bermuda.

Circle each time Bermuda is mentioned, and underline each time Bertha is mentioned.

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Make Your Writing Concise

Users do not have time to read on the web, so they prefer when writing gets right to the point. Cut out flowery, descriptive language, omit words wherever possible, keep instructions short, and do not repeat yourself. Read the text out loud to listen for awkward phrasing, repeated thoughts, and ways sentences can be pruned.

How Animal Camouflage Works

by Tom Harris

Concealing Colors

Most animal species in the world have developed some sort of natural camouflage that helps them find food and avoid attack. The specific nature of this camouflage varies considerably from species to species.

Photo courtesy Carl Roessler

A tartan hawkfish, photographed off the coast of Papua New Guinea - The fish's striking coloration allows it to blend in with these bright gorgonian fans.

There are several factors that determine what sort of camouflage a species develops:

- Camouflage develops differently depending on the physiology and behavior of an animal. For example, an animal with fur will develop a different sort of camouflage than an animal with scales, and an animal that swims in large schools underwater will develop different camouflage than one that swings alone through the trees.
- An animal's environment is often the most important factor in what the camouflage looks like. The simplest camouflage technique is for an animal to match the "background" of its surroundings. In this case, the various elements of the natural habitat may be referred to as the **model** for the camouflage.
- Since the ultimate goal of camouflage is to hide from other animals, the physiology and behavior of an animal's predators or prey is highly significant. An animal will not develop any camouflage that does not help it survive, so not all animals blend in with their environment the same way. For example, there's no point in an animal replicating the color of its surroundings if its main predator is color-blind.

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This article, which tells how animal camouflage works, does a great job of putting the information into short, concise sentences.

Underline two or three sentences in the article that you think are particularly good web writing.

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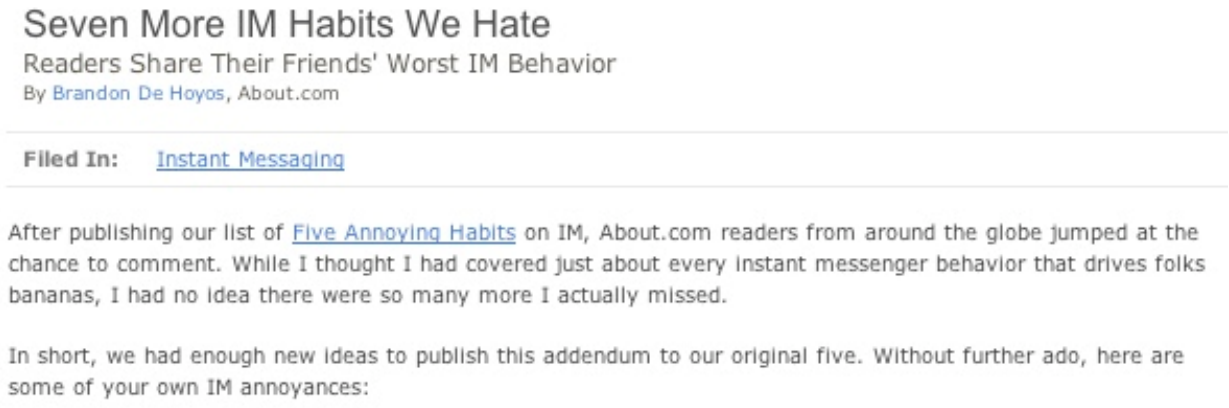
Give Summaries First

Start your copy with a short summary, then elaborate, and then summarize again. Readers who are scanning the text should be able to get the gist of your message in the first paragraph. If you put the most important part at the end, they may not read all the way through to get to it.



Seven More IM Habits We Hate

Readers Share Their Friends' Worst IM Behavior

By Brandon De Hoyos, About.com

Filed In: Instant Messaging

After publishing our list of Five Annoying Habits on IM, About.com readers from around the globe jumped at the chance to comment. While I thought I had covered just about every instant messenger behavior that drives folks bananas, I had no idea there were so many more I actually missed.

In short, we had enough new ideas to publish this addendum to our original five. Without further ado, here are some of your own IM annoyances:

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Though the article above goes into great detail, it starts with a good summary of what the article is about, why it is being written, and why a reader would want to keep reading.

From these four short sentences, tell exactly what you expect to find in this article.

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Know Your Audience

Content should reflect what target users of the site will find valuable and be written in a way to hold their attention. Answer the questions below to examine how message targeting affects writing.

From American Girl:

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Who is this page designed for?

Give at least five clues that tell you who the intended audience is.

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Use Obvious Buttons and Links

Make it easy for users to get to their desired destination by making new and visited links obvious through color. Make button descriptions short but clear.

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Look at the color used for links on this page. List the names of the links the user has clicked on:

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Chunked Content

Organize your content into logical categories or “chunks.” Standalone blocks of two to three sentences are more easily scanned and require less scrolling. Long paragraphs are hard to read on a computer monitor.

Division of Traffic Operations - Road Information - California Highway Information

Check Current Highway Conditions

Enter Highway Number(s) Search

You can also call 1-800.427.7623 for current highway conditions.

For statewide highway traffic conditions, try our toll-free voice activated phone service, 800.427.7623. This service is available free, 24 hours a day, 365 days a year. You'll get up-to-the-minute road conditions for any California State highway. The information covers incidents that cause significant traffic delays, but not limited to, weather restrictions; highway closures; 1-way traffic controls; lane closures; construction and maintenance project advisories and emergencies. The service does NOT include normal commute traffic, ramp closures and traffic flow conditions.

The information in each report is the latest information reported to the Highway Information Center. The center is staffed 24 hours per day, 7 days per week, 365 days per year.

Here is the latest Chain Chart, presented as a printable .pdf document.

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What “chunks” of content can you see here?

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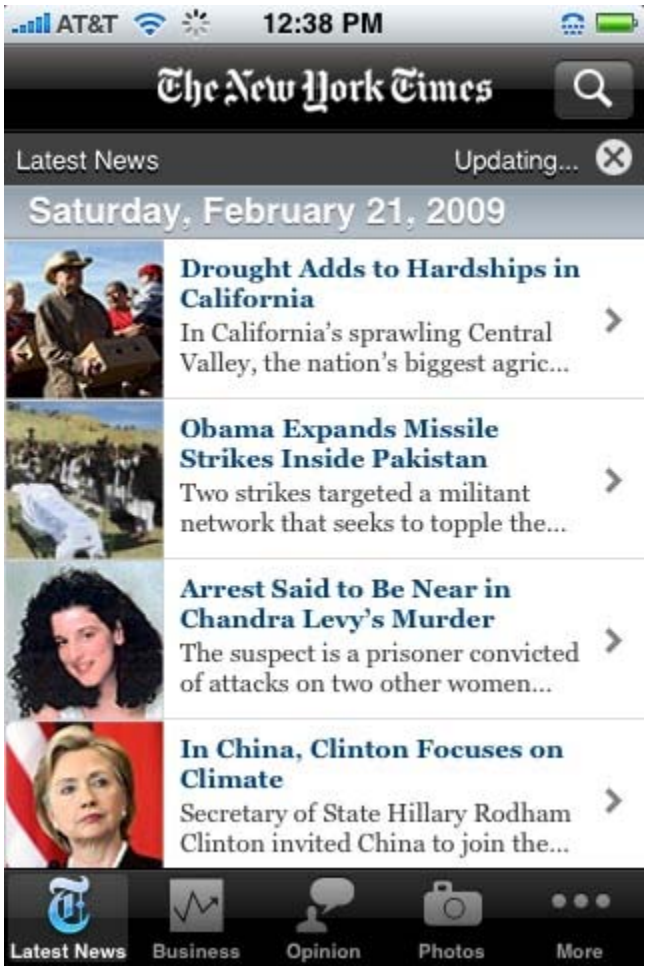
Adapting Content for a Mobile Website

At some point, you may need to adapt a website for viewing on a mobile phone. On a mobile website, all of the content must be useful. In general, mobile content should be more actionable and focused on user needs. It should be fast, highly readable, and easy to navigate. As an overall rule, give a summary paragraph with bulleted key points and a link to the full text. To favor search engine optimization (SEO), focus on descriptive titles rather than clever ones. Remember that mobile users are dependent on search.



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What makes this web page look different from a web page that is not adapted for mobile?

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Student Resource 10.3

Note Taking: Preparing Images for the Web

*Student Name:*_____ *Date:*_____

Directions: Answer the following questions as your teacher demonstrates how to prepare images for the web.

1. Which type of image will we use in our client's website: raster-based or vector-based?

2. Where can we obtain photos or clip art for our site?

3. What are some ways we can use our own artwork or photos for our website?

4. What are some guidelines for adhering to image copyright laws?

5. Where on our client site will we use inline images? Will we use web graphics in any other way?

6. Are any of our graphics photos? Which format should we use: JPEG, GIF, or PNG?

7. Do any of our graphics require transparency? Which format can we use—JPEG, GIF, or PNG—and how do we create transparency?

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8. Describe the difference between the file size and the physical size of an image. What is the recommended file size maximum for web graphics? What is the recommended overall file size for a web page, including all of the images and the web page file itself?

9. What is the standard resolution (pixels per inch) for our web graphics?

10. Should our web graphics be in CMYK or RGB color model?

11. Why is using height and width attributes to resize an image in HTML not a good idea? How will we resize our images?

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Student Resource 10.4

Checklist: Preparing Your Client's Website

You have mapped out the scope of the content for your website in your site map. You know where each type of content will reside on the pages per your wireframes, and you have sample pages created from your template. Now you need to fill in the blanks by creating and placing content onto your web pages. Your client may already have content for you to use—a brochure, a marketing packet, or a newsletter, for instance—but you will still need to turn that material into content for the web.

As you create your web content, first write all the text in each section of the page using Dreamweaver in Design view. Then assign the content to headers and apply boldface, italics, colors, and list formatting. Remember to read your text out loud, and then make any final modifications.

Make sure your materials meet or exceed the following assessment criteria:

Written Content Criteria:

- All content is complete, accurate, up-to-date, and grammatically correct; has no spelling errors; and is written in a tone appropriate for the audience.
- Content is written and categorized logically and has appropriate hierarchies and headlines/subheads.
- Text is written for scanning, with short paragraphs, bulleted lists, concise text, and up-front summaries.
- Links and visited links are made obvious through color.
- Descriptive titles and keywords are used throughout the text.

Graphical Content Criteria:

- All graphics are raster-based RGB images at 72 ppi, and all contain useful `<alt>` attributes. All images combined for the web page are no larger than 144K, unless there is an exceptional reason the combined images are larger, such as an image gallery page.
- All graphics are obtained legally and are used tastefully and consistently within the site's visual design and color scheme.
- Photos are in JPEG format, and logos, banners, and other simple graphics are in PNG or GIF format.
- Transparent images are created without a halo.
- Images are fully optimized, no height and width tags are used to resize images, and images that link to other pages or documents are coded correctly.
- All image files follow the site's naming convention and are placed properly within the directory structure.

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AOIT Web Design

Lesson 11

Preparing a Website for Launch

Student Resources

Resource	Description
Student Resource 11.1	Characteristics Chart: Usability and Accessibility
Student Resource 11.2	Test Log: Usability and Accessibility
Student Resource 11.3	Reading: User Testing
Student Resource 11.4	Guide: User Testing Plan

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Student Resource 11.1

Characteristics Chart: Usability and Accessibility

*Student Name:*_____ *Date:*_____

Directions: Follow your teacher's instructions to categorize the features that make a website easy to use as "usability" or "accessibility." A couple of samples for each are provided to get you started.

Usability	Accessibility
All buttons and links work and navigate to the correct place. All text is accurate and grammatically correct.	Fonts are readable, high-contrast, and stationary. All color information can be converted into black and white and still be understood.

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Student Resource 11.2

Test Log: Usability and Accessibility

*Student Names:*_____ *Date:*_____

Directions: First, work with your group to decide how you will complete each of the following testing tasks for your culminating project website and record your answer in the second column. Next, assign each member of your group to a specific task. Each group member should then complete a thorough usability test and, in the Errors Found column, report any errors or problems. Finally, make appropriate fixes or modifications to your site and report your changes in the last column. Review the assessment criteria at the end of this resource before you begin work.

Testing Task	How It Will Be Tested	Errors Found	How Errors Were Fixed
Links: Every link is functional and navigates to the proper location.			
Text: All text is accurate, spelled correctly, and grammatically correct.			
Images: All images appear, are aligned properly, and contain `<alt>` attributes in the `<img>` tags.			
Browser compatibility: Site validated on many platforms, browser types, versions, and connection speeds.			

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Testing Task	How It Will Be Tested	Errors Found	How Errors Were Fixed
Accessibility: Code adheres to as many Section 508 guidelines as is appropriate (for example, site map, `<alt>` attributes, page titles, link titles).			
Directory structure: Directory structure is organized and used efficiently; unused files are deleted.			
Navigation: Navigation is consistent and well organized and makes sense to end users.			

Tables: Tables contain a caption. Sample:
`<table>`
`<caption>Shopping List</caption>`
`<tr><td>...</td></tr> </table>`			

Make sure your usability and accessibility test meets or exceeds the following assessment criteria:

- There is a clear description of how each item will be tested.
- A thorough usability test is completed for each item, and all errors found are recorded.
- All site modifications are properly recorded in the test log.
- The resulting website includes all the necessary changes and bug fixes; proper version control is maintained during testing.

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Student Resource 11.3

Reading: User Testing

Your site may seem to work perfectly for you, but will it work for your actual users? As a website designer, you have now become so familiar with your site that there may be issues you don't notice or would not even think to look for or improve. If you want a good website, you must first conduct *user testing* before launching your site to the public. User testing involves sitting people down to actually try your site and observing how easily they can use the site to complete tasks or find information, and if they find it appealing. Without user testing, you won't know if your site has problems or if your users will have a positive experience.

Formulating a testing plan is the first step in user testing. A plan will help you identify your testing goals, audience, methodology, recording mechanism, and means of evaluating and using the results.

Ideally, you would recruit at least 7–10 testers who represent your target audience. The more people and the more varied the people you recruit to test the site, the more information you will get and the more accurate your results will be. When a problem or an opinion is repeated, it has more weight because personal bias and skill are minimized. But remember, a large, targeted audience can be difficult to find in a short amount of time, and testing with even one user from any segment is better than no testing at all!

User testing may need to be extremely formal and scientific for a large company with a large complex site, but a simple site may need only a small-scale, informal test. Testing on a working prototype is best, as you want your users to see and experience a basic working site. You should attempt to test your site over a web connection by publishing your site to a test server. This will be the most accurate test you can do, because it is most representative of the response time your users will experience. If publishing your site to a server is not an option, testing locally on a hard drive is also acceptable, but keep in mind that the user experience will be faster than it will be on the final site. Think about the range of platforms, browsers, and connection speeds you are able to test. The more browser compatibility checks you can do, the more you can validate your site's functionality. And there are tools online that can analyze website accessibility, like the WAVE accessibility tool (http://wave.webaim.org/).

Recording your test results is critical for when you later evaluate the data and modify the website accordingly. Determine in advance if you will record your test observations via notes or video, but remember that videotaping can be intimidating to some people, and a release form is usually needed. Always remind testers that it is the site that is being tested, not them. Also, plan ahead for how you will compensate or thank your testers.

Your testing plan should contain the method you will use to instruct testers to use the site. One efficient method is a *task-oriented* test, where you instruct people to complete specific tasks on the site. (For example, "Locate the...," "Find and read the...," etc.) Create a list of two to five appropriate tasks for your site, and then observe how your testers complete those tasks. Ask questions as they proceed through the tasks and/or create a questionnaire for testers to complete after they are finished. Rating questions work well on questionnaires. For example, "With 1 being easy and 10 being difficult, how easy was the site to use?" or "Rate the graphics and color scheme of the site" or "How likely are you to return to the site?" Also provide opportunities for open-ended commentary (e.g., "What did you like about the site?" or "What would you change about the site?" or "Do you have any other comments or suggestions?").

Review your results right after the test and add any other notes that come to mind. Think about how you will summarize and most efficiently use the results to improve your site; options include a table, a report, a chart, or another tool.

Remember, user testing should not be considered an extra, or a luxury only done if time and money permit. It is a *critical* component of the web design process. Use the list in Student Resource 11.4, Guide: User Testing Plan, to help formulate your own user testing plan.

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Student Resource 11.4

Guide: User Testing Plan

Directions: Working with your group, use the following guide to write a user testing plan for your client's website. Write or type your test plan on a separate sheet of paper, using the format shown in the headings and bullets in this resource. Before you begin work, review the assessment criteria so that you are clear on how your teacher will assess your plan.

Testing Goals:

- What are the goals of your user testing?

Target and Number of Users:

- Will your users be within a specific age range?
- Will your users be a specific gender?
- Will your users be within a specific job type?
- Will your users have a particular level of technology skills?
- How many testers will you recruit to test your site?

Testing Method:

- Will you use a task-oriented approach? If so, what tasks will you assign the testers?
- How will testers access the site?
- What platforms, browsers, and connection types will you test with users?
- How will you record the test: notes, video, other?
- Is a signed release needed?
- How will you compensate and/or thank your testers?

Recording the Test:

- Who will observe the test, who will take notes, and who will answer user questions?
- Will you create a written questionnaire for users? If so, what questions will you ask?
- How will you record bugs such as missing images, errors, broken links, or spelling errors?
- How will you record where users got stuck, struggled, or needed your help?
- What else will you record during this test?

Evaluation and Revision:

- Will you create a report summarizing your test results?
- How will you integrate the test results into your site?

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Make sure your user testing plan meets or exceeds the following assessment criteria:

- The user testing plan identifies clear goals for testing the site.
- The user testing plan defines the proposed number of testers and includes a detailed and accurate description of the target audience's age range, gender, job type, and technology skill.
- The user testing plan contains clear descriptions of the testing method; the ways that testers will access the site; the computer platforms, browsers, and connection types to be used; the method for recording the test; and the plan for compensating the testers.
- The user testing plan clearly explains how you will observe the test, how you will record information, and what information you will record.
- The user testing plan explains how you will summarize the test results and how you will integrate the results into the website.

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AOIT Web Design

Lesson 12

Hosting a Website

Student Resources

Resource	Description
Student Resource 12.1	Reading: Hosting a Website
Student Resource 12.2	Checklist: Determining Your Web Hosting Needs
Student Resource 12.3	Worksheet: Optimizing Your Website
Student Resource 12.4	Checklist: FTP
Student Resource 12.5	Reading: Creating a Website Maintenance Plan
Student Resource 12.6	Outline: Website Maintenance Plan

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Student Resource 12.1

Reading: Hosting a Website

AOIT
Web Design

Unit 5, Lesson 12

Hosting a Website

This presentation is intended to help students understand the role web hosting plays in designing a website, and the typical services most hosting companies provide.

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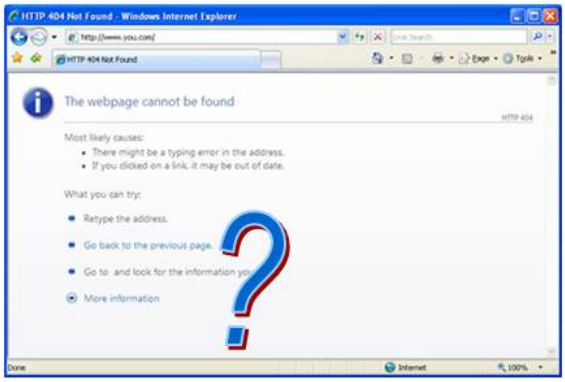
A website must be published to a live server

You have created a complete website, which sits on your local computer.

You have a registered domain name.

But...

If people type your URL into a browser, they will not yet see your web pages.



What needs to happen to your website for your site to be seen publicly?

Publishing your site to a live web server is the final step to actually seeing your hard work in web design on the World Wide Web.

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There are many options for web hosting

- Web hosting service
- ISP
- Free web hosting
- Blog service

What is the difference between an ISP and a web host?
Why is a blog service not appropriate for a company website?

If you want other people to view your website, you must first publish your site to a web server. This is best done by purchasing space on the servers of a web hosting company.

Even though you could set up your own Internet-connected PC as a web server, it is more common, much easier, and much safer to use a **web hosting service** to store your web pages on its public web servers. Paying a professional web hosting service is the only reasonable solution for the vast majority of people and companies. Unless you have the necessary training to run a web server and can do the job full time, you need a web hosting service to avoid being hacked almost instantly.

- Your **ISP** (Internet service provider) or your school's ISP may have a web hosting service.
- **Free web hosting** may also be an option, but it usually involves advertising and limited services and therefore may not be worth it.
- A **blog service** is a good way to publish personal pages but may not be appropriate for a company website. It may not allow you a custom domain name or unlimited design options.

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Web hosting services rent space on public servers

A **web hosting service** makes websites accessible via the World Wide Web.

- Web hosting companies rent space to clients on their public servers.
- The scope of hosting services and the costs vary widely.
- It's important to find a host that meets your needs.

What other services might a web hosting company provide?

Choosing a web hosting service is an important decision. Once you choose a service that meets your needs and your budget, you register your domain name with the web hosting service, and then you upload your web pages to its server.

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Web hosting services offer a variety of features

When choosing a service, consider these needs:

- Internet connectivity
- Domain name
- Web space
- Bandwidth
- Email addresses
- Database
- Advanced server features

Which service features does your client need from its web host?

The right web host for your client depends on services needed and on budget. Use this list of questions to research possible hosting packages and costs.

Internet connectivity: Can the same host also supply your Internet connection? Will a packaged service save you money?

Domain name: Have you picked a domain name? Can the host register the domain for you or your client?

Web space: How much does your content directory need? How much will the site grow? Is there a need for email storage? (If the client will use IMAP email and store all email on the server, a year's worth of email could use up a gigabyte of storage space.)

Bandwidth: How much traffic do you expect and how much information can the web host deliver? As your traffic increases, can the host handle it?

Email addresses: How many addresses with the same domain name are needed? (You certainly won't need 1,000, but it might be useful to have 10.)

Database: Does the site need to obtain and store basic contact info for clients (e.g., name and email)? In the professional world, this is a critical item.

Advanced server features: Does your web host offer advanced server features such as server-side scripts like PHP or .NET (needed to process information provided on a website) or page encryption (SSL and HTTPS for secure connections to your website)? Does it offer the version of the server-side scripts that you have used or will be using to build your website? Most hosts will either be all IIS (Microsoft and .NET) or all Linux (Apache and PHP) or give you a choice. On a flat HTML site, it doesn't make a lot of difference, but when it comes time to install server-side scripting, it will make a difference.

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Web hosting services also include support

Consider the types of support your client needs:

- Website statistics
- Technical support
- FTP access for uploading
- Development tools
- Control panel
- Web host history

Just as you considered your client's needs for services when selecting a web host for your client, consider the support required and the budget allotted for them. Use this list of questions to research possible packages and costs.

Website statistics: Some hosting services track site usage and analyze traffic patterns that show how often people come to the site and where they go. But it is better to use a third-party service such as Google Analytics for this.

Technical support: Does the host provide 24/7 access and 24/7 technical support? Does it have redundancy—that is, multiple locations in case one server location goes down temporarily? Does it offer 24/7 phone support? Generally, more support is often worth paying for.

FTP access for uploading: Does the host provide FTP access to upload and manage the content on the web server? If it provides a custom web application to manage content, will it be easy to use? Does the host offer multiple FTP logins? A lack of FTP support should probably rule out any host.

Development tools: Does your client want any site development tools so that it can upgrade or revise the site in the future? What tools does the host provide? Can you install any tools you need that are not provided by the host?

Control panel: Hosts always have a web interface that you use to manage your account. Is it easy to use? Does it give you access to the things you need? A poorly designed control panel can be very frustrating.

Web host history: How long has the host been in business? What is its track record? Search the web for reviews. Longevity is a good sign.

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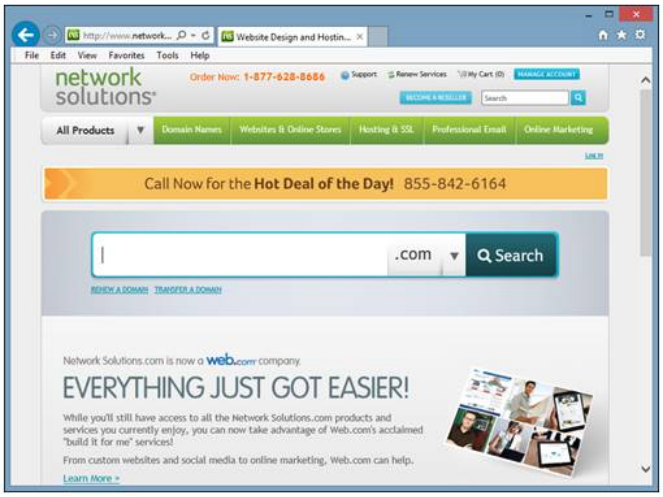
Many web hosting companies are available

A few reputable web hosts:

www.verio.com
www.powweb.com
www.earthlink.net
www.brinkster.com
www.networksolutions.com
www.godaddy.com
www.register.com
www.dreamhost.com
www.pair.com
www.bluehost.com
www.doteasy.com



What other web hosting companies have you heard of?

There are hundreds of different web hosting companies. Here are a few popular sites to begin your research.

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Student Resource 12.2

Checklist: Determining Your Web Hosting Needs

*Student Name:*_____ *Date:*_____

Directions: Take notes during your teacher's presentation of Hosting a Website. Then work with your group to list your client's needs for each of the typical hosting options. (Look for the information you need about your client on your Client Intake Form from Lesson 6.)

Web Hosting Options	Notes	Client Needs
Internet connectivity		
Domain name		
Web space		
Bandwidth		
Email addresses		

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Web Hosting Options	Notes	Client Needs
Features such as server-side scripts and page encryption		
Website statistics		
Technical support		
FTP access for uploading		
Development tools		
Web host control panel		
Web host reputation and history		

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Student Resource 12.3

Worksheet: Optimizing Your Website

*Student Name:*_____ *Date:*_____

Directions: Your teacher will assign you one of the following websites to analyze for optimization. Follow the steps below to analyze the site assigned to you.

www.apple.com
www.amazon.com
www.rhapsody.com
www.nytimes.com
www.myspace.com
www.google.com

1. Go to http://www.websiteoptimization.com/services/analyze/ and enter the URL for the site assigned to you for analysis. Review the results and the analysis, and summarize the elements that need optimization on your assigned site:

2. List at least three ways you would modify elements on the site to improve performance:

Website Optimization Checklist

Use the following checklist to help you optimize your client website:

- Compress images.
- Make pages as small in file size as possible.
- Avoid redirects when possible.
- Make sure HTML coding is clean.
- Minimize the number of total objects on each page.
- Minimize the number of multimedia elements on each page.

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Student Resource 12.4

Checklist: FTP

*Student Name:*_____ *Date:*_____

Directions: As your teacher demonstrates the FTP uploading process, take notes below. You will then use this checklist to transfer your client website files to a web server.

Using FTP to Transfer Files to a Web Server

FTP functions allow web designers to access file servers through File Transfer Protocol (FTP). You can use specific FTP software or you can access an FTP server directly within a browser. When using a browser for FTP, you will use a URL that begins with *ftp* instead of *http*. You will need a login ID and password to enter the FTP site to upload your files. A web browser can navigate an FTP server just like any other file system—with hierarchical folders and files. Through the browser, you can upload, download, rename, or delete files from the FTP server. Use the following steps to upload your client website to your web server:

1. Launch the browser.

2. Type in the FTP address:

3. Log in with your user ID and password:

4. Navigate to the server:

5. If the FTP address takes you to the root server, use the instructions sent to you by the web host to navigate to your local content directory.

6. Drag and drop or copy and paste the files from your local directory to the FTP server.

7. Check that all files have accurately transferred by making sure the total file size matches.

8. Open up a separate browser window and type in your URL.

9. Determine if your site downloads rapidly.

10. Check every page of your site in the browser to see if all elements are displaying properly and all links work. You can use a tool like Online Broken Link Checker (http://www.brokenlinkcheck.com/) to check all the links on your website and get a report of any broken links.

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Student Resource 12.5

Reading: Creating a Website Maintenance Plan

Directions: Read the following information, and then use Student Resource 12.6 and work with your group to formulate a maintenance plan for your client's website.

Ongoing maintenance of a website is often overlooked in the website design process. Many web designers do not budget or plan for maintaining the site they have just created. But in fact, maintenance is a critical part of web design, and it begins the minute a site launches.

Most websites are living, breathing entities that need updates and changes over time—they are never truly *done*. Some websites are created using content management systems or blogging sites, in which case clients or individuals can edit the content themselves. Work on these sites may not involve HTML coding, but such sites do need continual updates and maintenance.

Your role as the web designer is to determine what the needed changes are, who will make them, when they need to be made, and how they will be made and tested. A maintenance plan is a tool used to describe each of these elements.

There may be timely content that needs to be refreshed frequently, or a client may want to continually add fresh content to keep users coming back for more. To keep track of desired changes, an editorial schedule should be created. There may be user feedback after a site launches, or additional bugs may be found. A client may want to expand the amount of content or the number of pages on the site as the business grows. So the plan should account for how often and by whom updating content and subsequent website testing will be done. At some point the site may begin to look dated or the company may change its branding, so the site will have to adapt as well. A client may decide he wants more bells and whistles on the site. How often is the client willing and wanting to do a full site "redesign"? Your maintenance plan should address all of these possibilities.

An important part of site maintenance is protecting the site from hackers. Because websites are hosted in what amounts to public spaces, there are always automated "spiders" looking to see if installations have vulnerabilities they can exploit to remotely install software to hijack the site or promote nefarious products or activities. The danger is minimal with a simple HTML site, but as the client's site grows more complex and/or uses content management systems or complex scripting, it is critically important to ensure any third-party software you use is kept up-to-date.

Finally, your plan should indicate how the maintenance will take place. The site is now live, so changes and client approvals will have to be done in a testing or local area and then, using proper version control, uploaded to the live site when they are ready.

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Student Resource 12.6

Outline: Website Maintenance Plan

Directions: Working with your culminating project group, create a maintenance plan for your client's website. Complete the following plan outline, basing your responses on what you learned in the reading (Student Resource 12.5). Your plan should be about one to two pages long. See the example maintenance plan on the following page for guidance.

Roles

- Website Maintenance Manager (manages scheduling, client contact, client approvals):
- Client Project Manager (key point of contact at client office; provides approvals, etc.):
- Content Editor (responsible for making changes to or adding content to the website):
- Programmer (responsible for bug fixes, site upgrades, revisions, etc.):
- Tester (responsible for testing all changes and upgrades prior to client review):

Process

- The process we will use to find and fix bugs, gain client approval, and upload changes to the live server is:

Editorial Schedule

- Specific web page, content to be changed or added, author, and date required:
- Specific web page, content to be changed or added, author, and date required:

Upgrade Schedule

- Version 2.0:
    - Description of modifications and feature additions:
    - Estimated release date:
- Version 3.0 (etc.):

Make sure your maintenance plan meets or exceeds the following assessment criteria:

- The plan clearly explains the procedures for handling the following:
    - Managing ongoing maintenance of client's website
    - Making necessary modifications
    - Testing the site after modifications are made
    - Making fixes needed when new bugs are found
- The plan provides a concise editorial schedule for content updates, identifies the parts of the website that need regular updates or additions, and states who is responsible for providing the content.
- The plan provides any known information and possible release dates for site redesigns or feature additions.
- The plan describes where the site modifications and testing will take place and who is responsible for approvals and uploading the changes to the live server.
- The plan is well organized and clearly written, with no spelling or grammatical errors.

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Example: Maintenance Plan for FairTeacherGrading.com

Roles: The following people will be responsible for maintaining and upgrading the website.

- **Website Maintenance Manager**: Sally Jackson
- **Client Project Manager**: Bruce Waters, VP Product Development
- **Programmer**: Angela Frost
- **Tester**: Joey Sanchez

Process: The following process will be used to maintain the website.

- First day of each month: Sally Jackson solicits all new or updated content needed from authors.
- 5th of the month: All new or updated content is submitted to Sally Jackson for formatting, editing, and layout into web page format.
- 8th of the month: Sally Jackson submits new or updated content to Bruce Waters for approval and feedback.
- 10th of the month: Bruce provides feedback and Sally makes needed modifications.
- 12th of the month: Sally provides new content to Angela Frost to upload to the testing server. Joey Sanchez conducts testing on all new content and elements within the site and reviews any comments or bugs reported by users. Joey then works with Angela Frost and Sally Jackson to make any necessary modifications to new or existing content.
- 15th of the month: Angela uploads the modified and new content to the live server.

Editorial Schedule: The following pages will be updated on a continual basis.

- On the 15th of every month, the newsletter page will be updated with new content. The content for the newsletter will be provided by various authors from the web development team and within the company, and will be submitted to Sally Jackson by the 5th of the month. Sally will edit the content and gain approval from Bruce Waters by the 8th. She will then submit the content to Joey Sanchez for testing on the 12th of each month, and for uploading on the 15th by Angela Frost.
- On the 15th of every month, the home page will be updated with new headlines, news, or current events. Sally Jackson will select the home page content by the 5th of the month and distribute the content for approval by Bruce Waters. She will send the updated home page content to Joey Sanchez for testing on the 12th of each month, and for uploading on the 15th by Angela Frost.
- On the 15th of every two months, the Events page will be updated with a new two-month calendar. Events and information will be provided by various company staff members and will be submitted to Sally Jackson by the 5th of the month. Sally will edit the content and gain approval from Bruce Waters. She will then submit the calendar to Joey Sanchez for testing on the 12th of each month, and for uploading on the 15th by Angela Frost.

Upgrade Schedule: The following is a known redesign or upgrade.

- Version 2.0: The company intends to complete an upgrade of the website (Version 2) in approximately six months. The upgrade will include the new company branding, which is now in the works, a searchable database of teachers, a blog for users, and the ability to print PDF admin reports on each teacher. Meetings to begin the redesign process will begin in September, and the target release will be in December. Sally Jackson and Bruce Waters will kick off the process at the beginning of the school year.

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AOIT Web Design

Lesson 13

Attracting Traffic

Student Resources

Resource	Description
Student Resource 13.1	Student Presentations: Attracting Traffic
Student Resource 13.2	Note Taking: Attracting Traffic
Student Resource 13.3	Assignment Sheet: Plan for Attracting Traffic

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Student Resource 13.1

Student Presentations: Attracting Traffic

Directions: The best website in the world won't do you or your client any good unless people are using it. So how do you attract people to your site and keep them coming back often? Step one is to build a great website—which, of course, you have done. Next, you must attract visitors to your site and retain their interest once they are there. Your teacher will assign you one of the four topics listed below, and you and your group will prepare an eight-minute presentation on the topic and present it to your class. Review the assessment criteria at the end of this resource before you begin work.

Guidelines for Your Presentation

- Use the tips below to research your topic online. Make sure the sources that you consult to find information are recent. As the web grows and develops, strategies for attracting traffic change, and the information you present to the class needs to be up-to-date.
- Plan to use a computer and an LCD projector to show supporting examples about your topic from the Internet. You may use presentation software such as Microsoft PowerPoint, but it is optional.
- Make sure your presentation is clear and organized and does not exceed eight minutes.
- Make good use of teamwork and cooperative effort to prepare for and conduct the presentation.

Research Tips

Group 1: Driving Traffic to Your Website

Web traffic refers to the number of visitors to a site and the number of pages those people visit on the site.

- Demonstrate how online marketing tools, such as newsletters, tips, event calendars, articles, blogs, or discussion groups, can help drive traffic to a site.
- Demonstrate how tools such as polls, contests, RSS, and calculators can make a site "sticky."
- Show examples of a simple domain name and how it can be used effectively in offline marketing materials such as ads, magazine articles, business cards, brochures, and so on.
- What is a reciprocal link and how can it help build site popularity?
- What is a favicon and how can it attract visitors?
- Describe how a "cost-per-click" service such as Google AdWords works.
- Show examples of and explain the pros and cons of banner ads, pop-up ads, and bulk emails.

Group 2: Search Engine Optimization

Search engine optimization (SEO) refers to efforts to improve a website's performance with search engines in order to improve the volume and quality of visitors to the website.

- Discuss typical user actions when faced with a long list of search engine results, and explain why getting proper placement on search engines is as important as the website itself.
- Explain how a search engine has spiders that "crawl" the web to index and rank new web pages, and show how you can actually register your site with various search engines (e.g., https://www.google.com/webmasters/tools/submit-url).

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- Demonstrate the proper way to write a title tag in HTML code (concise, no more than 40–60 characters, placed above the description, etc.), and demonstrate a proper description meta tag in both the HTML code and on a search engine results page.
- Discuss how reciprocal links affect search engine ranking (the more sites that link to you the better, but the more sites that these sites also link to, the worse for your site).
- What are Google Penguin and Google Panda, and how do they affect SEO?
- What is keyword density and how does it affect the rank of a page? How does keyword placement affect the rank of a page? What is the best approach to using keywords?

Group 3: Building Online Credibility

Online credibility is what leads web users to believe in and trust the content found on a website, and therefore return to that site.

- Demonstrate ways that websites can easily allow users to verify the accuracy of the information on a site (citations, references, links, dates of review or update, etc.).
- Find examples of websites that offer the most interesting content above the fold.
- Compare how a professional-looking and easy-to-use site appears much more credible than a confusing, unprofessional site.
- Why does having experts and partners with appropriate credentials, as well as an affiliation with a real organization, help users assign credibility to a site?
- Find a site with errors or inaccuracies, and show how even the smallest errors can hurt credibility.
- Show examples of good contact pages and how providing multiple means of contact (phone, email, mail, feedback forms) can boost credibility. Demonstrate how to place a `mailto` link within the HTML code.
- Why can too many ads, offers, and so forth be annoying to users and cost a site credibility?
- Demonstrate a group or a forum such as Google or Yahoo! Groups. Explain how adding a forum to a site can help build online credibility as well as attract and retain visitors. Also explain the potential negative impact of forums or blogs that are not kept up-to-date. Actively building that community is a full-time job, in many cases.

Group 4: Gathering and Tracking Site Statistics

Website statistics provide information about the users of a site—which page they go to most, which page they spend the most time on, which page they enter the site from, and so on.

- Explain what information is contained on a web server log (e.g., time and date visited, duration of stay, entry point, browser type, referring websites, page views, etc.).
- Who usually provides the web tracking software for a site? Show some examples of web hosting companies who provide this service.
- Demonstrate how a log analyzer formats the server data into useful tools, and how those tools may affect how a web designer modifies a site.
- Describe how a hit is calculated (for each file within a page).
- How could viewing statistics on a “top path” help improve a website’s usability?
- In what ways can you leverage Google Analytics to analyze traffic?

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Make sure your presentation meets or exceeds the following assessment criteria:

- The presentation clearly defines the topic area and covers each of the research tips provided.
- The presentation shows examples of websites that do and do not demonstrate success in the topic area.
- The presentation gives a correct demonstration of technical tasks and coding needed to implement the techniques covered.
- The presentation clearly explains the potential benefits and risks of implementing the techniques covered.

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Student Resource 13.2

Note Taking: Attracting Traffic

*Student Name:*_____ *Date:*_____

Directions: During the group presentations, take notes on each topic area below. You will use your notes in an upcoming class period to help create a plan for attracting traffic for your client.

Driving Traffic to Your Website

Definition:

Results expected (traffic, user experience, etc.):

Techniques:

Site modifications needed to implement:

Search Engine Optimization (SEO)

Definition:

Results expected (traffic, user experience, etc.):

Techniques:

Site modifications needed to implement:

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Building Online Credibility

Definition:

Results expected (traffic, user experience, etc.):

Techniques:

Site modifications needed to implement:

Gathering and Tracking Site Statistics

Definition:

Results expected (traffic, user experience, etc.):

Techniques:

Site modifications needed to implement:

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Student Resource 13.3

Assignment Sheet: Plan for Attracting Traffic

Directions: Join your culminating project group and formulate a plan for attracting traffic to your client's website, using your notes from the presentations. Each member of your group should serve as a reference for the part of the plan he or she researched and presented. Review the assessment criteria at the end of this resource before you begin work.

Guidelines for Your Plan

- Your plan should be about two pages long.
- Use the prompts listed below as an outline for each paragraph in your plan.
- Make sure that your plan suggests various tasks your client can perform, the potential results, and specific instructions for implementation.

Plan Outline

Overview: (why your client needs a plan to attract traffic to the site)

Driving Traffic to Your Website

- Description: (define why this is relevant to your client)
- Expected results: (impact on traffic, user experience, etc.)
- Recommendations: (explain the changes that the client should make)
- Implementation: (describe in detail the changes needed on the site, the marketing pieces that need to be developed, the new software or services that need to be purchased, etc.)

Search Engine Optimization (SEO)

- Description: (define why this is relevant to your client)
- Expected results: (impact on traffic, user experience, etc.)
- Recommendations: (explain the techniques that the client should implement)
- Implementation: (describe in detail the changes needed on the site, the marketing pieces that need to be developed, the new software or services that need to be purchased, etc.)

Building Online Credibility

- Description: (define why this is relevant to your client)
- Expected results: (impact on traffic, user experience, etc.)
- Recommendations: (explain the changes that the client should make)
- Implementation: (describe in detail the changes needed on the site, the marketing pieces that need to be developed, the new software or services that need to be purchased, etc.)

Gathering and Tracking Site Statistics

- Description: (define why this is relevant to your client)
- Expected results: (impact on traffic, user experience, etc.)
- Recommendations: (explain the changes that the client should implement)
- Implementation: (describe in detail the changes needed on the site, the marketing pieces that need to be developed, the new software or services that need to be purchased, etc.)

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Make sure your plan meets or exceeds the following assessment criteria:

- The plan provides thoroughly researched recommendations for driving traffic to the website.
- The plan provides clear recommendations for search engine optimization.
- The plan clearly explains recommendations for building online credibility.
- The plan provides clear and complete recommendations for gathering and tracking site statistics.
- The plan is well organized and free of spelling and grammatical errors.

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AOIT Web Design

Lesson 14

Exploring Web Industry Careers and Learning from Industry Experts

Student Resources

Resource	Description
Student Resource 14.1	Reading: Web Industry Employment Overview
Student Resource 14.2	Wish List: Interesting Jobs
Student Resource 14.3	Reading: Writing an Effective Cover Letter
Student Resource 14.4	Analysis: Cover Letter Example
Student Resource 14.5	Writing Assignment: Cover Letter

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Student Resource 14.1

Reading: Web Industry Employment Overview

Nowadays, it seems as though almost every company and every person has a website. If you have experience with website creation, your employment prospects are terrific. There are plenty of jobs available for people with the right education and skills.

According to Salary.com, the median salary for a web designer was $60,866 in 2011. A web administrator earned an average of $73,793 annually in 2011, and a senior web developer earned an average of $76,691 annually in 2011.

Types of Employment

If you work in the web industry, you will have several different options for employment. You may choose to work for a specific company, developing and maintaining its website. In that situation, it's important to choose a company whose products you enjoy or believe in.

If you work for a consulting firm or as a freelancer, you may be handling projects and assignments for many different companies in many different industries. A consultant may work at a firm with other consultants, while freelancers work for themselves. In this situation, it is even more important to be good at handling many different projects at the same time. Being a consultant or a freelancer basically means you have several different bosses, or clients, at once, and you have to stay on top of projects for different businesses simultaneously.

Specializations within the Web Industry

Once you have determined which type of employment situation you would enjoy most, you need to think about what kind of job you'd like to have and whether it best suits your skills and personality. Some of the most common web industry jobs are described below.

Web Designer: A web designer is typically responsible for the overall look and feel of a website. Web designers need to understand graphic design but also be able to work on a site's functionality. They may work with colleagues or clients to develop the initial concept for a website, or that concept may already be decided on and then given to them to implement. Designers may use HTML or WYSIWYG tools to build the site, or work with others who will do the coding. Since designers need to listen to their clients or colleagues and then create a site based on that information, they need strong listening, verbal, and visual communication skills. They also need to be flexible and willing to revise their designs, and work well under pressure. A web designer needs a background in fine arts or graphic arts as well as an understanding of computers and programming for the web. An associate's or bachelor's degree may be helpful but is not always necessary.

Information Architect: Information architects, sometimes also called user experience designers, literally plan out how to present a website to the user. Their behind-the-scenes work may not be obvious to everyone, but it is very important. They develop a plan to make sure the website meets a company's goals. They may also analyze the site's audience, identify the audience's needs, and make sure the site design meets those needs via testing and focus groups. They may also lay out the site's architecture, which can be used as a blueprint on which all other site design decisions are based. They need a strong knowledge of user interface design, web design, website architecture, and site navigation. In general, information architects need a bachelor's degree in computer science or a similar field. They also need good communication skills and an ability to work under pressure.

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Webmaster/Developer: Webmasters are responsible for the ongoing maintenance and development of a website. They may also be involved in the initial development of the site. They make sure the site looks and functions correctly on a variety of different computers. They make sure the site loads quickly, they update the site, and they fix any bugs on the site, such as broken links. They may also be in charge of deciding what kind of computer and software will be used to develop the website and what hosting company to use, and therefore must understand the variety of web software and service options available. Some webmaster jobs will be available to people with an associate's degree, but for the more complicated jobs, the higher paying jobs, or the supervisory jobs, a bachelor's degree is needed.

Project Manager/Producer (PM): Project managers or producers are responsible for planning, budgeting, scheduling, and tracking an entire web project. They must keep all members of the web team on the same page and be sure everyone is always on time and on budget. They must also continually balance the needs and expectations of the client with the budget and goals of the site. The PM needs to be able to communicate effectively with a client about the timeline and budget, as many clients decide they want new features and functions beyond what was originally scoped for the project. It is the role of the PM to keep the objectives, milestones, resources, and costs clear for all members of the team as well as for the client. Website project managers typically have a few years' experience in other web team roles and/or management roles.

Future Jobs in the Web Industry: Web design and development is an ever-changing industry, and as technology grows and develops, so do the job descriptions. As soon as Web 2.0 was out, Web 3.0 began developing. There are varying definitions of what phase three of the web will be, but the majority of theories focus around a user-centric approach. A whole new era of the web industry will open with the advent of Web 3.0. More user-centric applications will be developed, more features will be customizable, and emphasis will be on user engagement. For web designers, this means a much higher focus on user interface design. Today, we have web professionals that specialize in user interface (UI) design, but not all web professionals have a strong knowledge of it. In the future, you will see a lot more web professionals learning how to create websites that are more adapted to the user perspective, and the flow throughout a website will be enhanced. The latest web browsers and other online gadgets have all begun to utilize HTML5 and employ the wide range of functional additions that this new standard offers. You are also likely to see improvements in JavaScript, CSS, and more. Finally, the web is no longer limited to a computer screen; displaying web pages on mobile devices and tablets is clearly a trend that will continue to develop.

Getting Started

Any career in the web industry requires a certain level of computer expertise and a familiarity with a range of web design, programming, and graphic software. In addition to taking AOIT courses, you can get a part-time job or an internship or even volunteer your computer skills to build experience. Many IT companies offer internship programs, and many non-IT companies and not-for-profit organizations need help with their websites.

Communication skills are also very important, especially the ability to explain IT information to people who are not computer literate or less computer literate.

Website creation is an interesting combination of technical and graphic design skills, so it's important to have some training or experience in computer graphics as well. Many designers create an online portfolio of their work to show prospective employers. You've already created one website that you could include in your portfolio. By building websites for friends, family members, organizations, or local businesses, you can create an outstanding portfolio that will make you a strong candidate for an entry-level job in web design.

The web industry is dynamic, and change happens quickly. It's important to keep up with the latest technology trends and to learn new standards. Having a solid network of teachers, mentors, and others in the industry is key to staying current. Many web professionals keep up-to-date by following online blogs

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(http://www.smashingmagazine.com), by participating in online design/development sharing groups (http://codepen.io/about), or by listening to industry-related podcasts (http://shoptalkshow.com/). You may even try joining a local web designer Meetup group (www.meetup.com).

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Student Resource 14.2

Wish List: Interesting Jobs

*Student Name:*_____ *Date:*_____

Directions: Using Student Resource 14.1, Reading: Web Industry Employment Overview, write down at least three jobs that you read about that you might want to do. Then write down why the job interests you and include at least two or three examples of skills, knowledge, and personal characteristics a person needs in order to succeed in that job.

Job Title	Why It Interests Me	Skills, Knowledge, or Personal Characteristics Needed
***Example**: Movie Star*	***Example**: I'd like to be famous and make a lot of money, and I like movies.*	***Example**: Have extensive professional training in acting* *Look good on camera*

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Student Resource 14.3

Reading: Writing an Effective Cover Letter

Overview

A cover letter is a letter that you write to accompany your resume when you are applying for a job. Its purpose is to thoroughly explain your interest in the position and highlight the skills that make you a good match. A cover letter is your opportunity to give the employer specific information about what you can contribute to his or her company or organization. Employers usually look for well-written cover letters to screen out applicants who are not sufficiently interested in the position or who lack the required writing skills.

Format of a Cover Letter

Your Name
Street Address
City, State Zip Code
Telephone Number
Email Address

Month, Day, Year

Mr./Ms./Dr. FirstName LastName
Title
Name of Organization
Street or PO Box Address
City, State ZIP Code

Dear Mr./Ms./Dr. LastName:

Opening paragraph: Explain why you are writing and how you learned of the organization or position.

Second paragraph: State why you are interested in the position and/or the company. Show that you know enough about the company or position and show how your background is relevant. Mention specific qualifications and/or experience that make you a good fit. Explain in more detail relevant items in your resume. Mention that your resume is enclosed, as well as any other enclosures, such as references, if applicable.

Concluding paragraph: Indicate that you would like the opportunity to interview for the position. State what you will do to follow up, such as telephone the employer within two weeks. If you will be in the employer's location and could offer to schedule a visit, indicate when. State that you would be glad to provide additional information as needed. Thank the person for his or her consideration.

Sincerely,
(Your handwritten signature)
Your name typed

Enclosure(s): resume

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Tips for an Effective Cover Letter

- If at all possible, address your letter to the specific person who is doing the hiring. You can often find this information with a little research. If not, it is appropriate to write “Dear Hiring Manager.”

- Say how you learned about the position or the organization and explain why you are applying for a job. Be specific. Example: “I am looking for an entry-level position in the web industry and saw your advertisement in *The Cincinnati Ledger*.”

- If you learned about the position through someone in particular, or if someone recommended that you apply, mention that. It is a way to immediately tell your reader that other people believe that you are a good potential hire. Example: “My Internship Supervisor, Ann Lucasio, is very familiar with your company and encouraged me to apply for your opening as an assistant producer.”

- Call attention to elements of your background—education, leadership, experience—that are relevant to the position you are seeking. Be as specific as possible. Example: “The courses I have taken in website creation at Skowheegee High School have given me a good understanding of what it takes to be an effective web professional. My experience working the IT help desk for the past three summers has given me valuable experience as well.”

- Reflect your attitude, enthusiasm, and communication skills. Remember that this may be your only opportunity to stand out in your quest for getting an interview. Example: “I thrive on the busy environment of a successful web business. Even the most hectic days at the help desk were exciting to me because I like to challenge myself to keep calm and collected no matter what.”

- Provide or refer to any information specifically requested in a job posting that might not be covered in your resume. For example, include the date you will be available to start work, or make a reference to a writing sample that you have included, if the potential employer has requested one.

- Indicate what you will do to follow up. Example: “I hope to hear from you by next week and will phone your office on Friday to make sure you have received my application.”

- Do not let even one spelling or grammatical error slip through. Review your letter multiple times and have at least one other person proofread it.

- Have current references lined up to vouch for you. Past employers, teachers, and current colleagues would be appropriate people to recommend you for a job. Make sure that these people know that they may be contacted.

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Student Resource 14.4

Analysis: Cover Letter Example

*Student Names:*_____ *Date:*_____

Directions: Review the following cover letter, which is tailored to the job description on the following page. With a partner, make notes in the margin next to each element of the letter and highlight any phrases or sections that make the letter particularly effective.

John Lamont
55 Ellsworth Dr.
Boston, MA 02108
(555) 723-8943
johnjohn@bu.edu

July 3, 2013

Dr. Emma Johnson
Principal, Warren Elementary School
101 Beluga Rd.
Warren, MA 01083

Dear Dr. Johnson:

From your company's website, I learned about your need for a fourth grade teacher in the coming school year. Having grown up in the Warren area, I'm very interested in teaching at your school. I have recently completed my Bachelor of Science degree in Family and Child Development with a concentration in Elementary Education at Boston University, and I will be available for employment in August. I have enclosed my resume for your consideration.

The teacher preparation program at Boston University includes a full academic year of student teaching. Last semester I taught second grade and this semester, fourth grade. These valuable experiences have afforded me the opportunity to develop lesson plans on a wide range of topics, for varying levels of academic ability; to observe and participate in effective classroom management approaches; to assist with parent-teacher conferences; and to complete in-service training on diversity, math and reading skills, and community relations.

I have also spent the past three years tutoring third, fourth, and fifth graders in math, reading, and science in an after-school program designed for at-risk youth in inner-city Boston. This gave me a unique opportunity to work with an ethnically and culturally diverse population. It also helped me identify ways to customize the mainstream curriculum to meet these children's needs. Many of the children needed their unique learning styles to be addressed. By providing this to them in a more intimate setting, I helped them see that success was well within their reach.

I look forward to putting my knowledge and experience into practice in the public school system. Next week I will be in Warren, and I will call you before my arrival in the hope of setting up an interview. I can be reached before then at (555) 723-8943. Thank you for your consideration.

Sincerely,

John Lamont

Enclosures: resume, district application

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Job Description

Position: Fourth Grade Teacher

Date Posted: July 2, 2013

Commitment: Full-Time

School Year: 2013–2014

Requirements:

- Must be state-certified to teach elementary ed.
- Bachelor's degree or higher
- Minimum one year of student teaching

Qualifications:

- Sincere desire to work in an outstanding elementary school and to commit to the learning and growth of elementary students
- Ability to work collaboratively with grade-level team members
- Strong desire to grow professionally in a learning community
- Bilingual and/or working with diverse populations a plus

How to Apply: Please send letter of interest, resume, and completed district application to:

Dr. Emma Johnson
Principal
Warren Elementary School
101 Beluga Rd.
Warren, MA 01083
ejohnson@warrenelem.edu

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Student Resource 14.5

Writing Assignment: Cover Letter

*Student Name:*_____ *Date:*_____

Directions: Read the job descriptions on the following pages and select the web industry job you would like to apply for based on your interests, qualifications, and experience. Then use the chart below to make a list of the requirements and/or qualifications the employer is looking for in the ideal candidate, and list all of your own qualifications and experience that might match what they are looking for in the right-hand column.

Use the information in your chart as a basis for your cover letter. Remember to follow the cover letter format in Student Resource 14.3. Also, you may want to refer to the notes you took during the guest speaker's visit. Before you start writing, be sure to review the rubric for a good cover letter that your teacher gives you.

What the Employer Is Looking For	What I Can Offer
***Example**: Self-starters who can take initiative on projects*	***Example**: I took the lead in organizing the costumes for the school play, and it was a great success.*

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Job #1: Game Site Webmaster

We are a small, leading game company in business for over 10 years. We update our web content every day.

We are looking for a contractor to start immediately, half-time or full-time. If it works out, it can turn into a permanent position. Candidates should be:

- Very responsive to emails. Completely reliable.
- Competent working with HTML/CSS and have the necessary tools already.
- Comfortable working remotely and self-motivated.
- Available, at least for an hour, 7 days a week. Available all day on Fridays.
- Decent at written English.

Experience with some of the following would be a bonus:

- Subversion
- PHP
- Perl
- Ruby on Rails
- Graphics editing/creation

This is a telecommuting position only. So that we can occasionally meet face-to-face, local candidates are strongly preferred.

Job #2: Web Business Manager

We are seeking an all-around web business manager to coordinate the various business and marketing needs for two small, exciting Internet start-ups focusing on alternative health and medicine. You will receive the many benefits and rewards of being in a hot, new underwritten company.

Job Tasks:

- Manage website development with contract web design firms
- Compose e-newsletter campaigns and develop contact database system
- Ensure timely and accurate web updates
- Develop marketing partnerships and advertising campaigns
- Manage sales and customer service
- Handle any legal and intellectual property needs
- Oversee various start-up business needs that may arise

Qualifications:

- Proven experience in the tasks required
- Bachelor’s degree
- Mac and Internet proficiency; HTML, Photoshop, and web editing software skills
- Understanding of multichannel marketing, usability, and target audience
- Ability to keep current on creative design, marketing, and online trends

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- Extensive interest and knowledge of alternative health and personal development market
- Be motivated, highly organized, self-starting, collaborative, flexible, and detail-oriented
- Have great sense of humor, as well as discipline and appropriate sense of urgency

Please don't apply if you don't meet most, if not all, of these requirements. Pay is negotiable based on experience level. Hours vary from 20 to 40 per week.

Job #3: Web Developer, Corporate Intranet

We are the world's first and largest specialized staffing firm. We are looking for two creative and energetic web developers to build portlets/widgets, maintain content, and implement presentation elements for our global intranet services team. Our group partners with IT to implement solutions using Vignette, SharePoint, open source applications, and Web 2.0 technologies. Developers are expected to collaborate and contribute ideas toward objectives in line with our longer-term enterprise portal vision and strategy. The responsibilities include interaction with business stakeholders and end users, documenting requirements, and participating in QA testing.

Qualifications:

Most importantly, we are looking for self-starters who can take initiative on projects, exhibit strong problem-solving abilities, and learn new software quickly. Interaction with business, IT, and end users is required for these positions, so strong verbal and written communication and team collaboration skills are a must. We are seeking people with a bachelor's degree or equivalent and 3+ years' experience in web development. Experienced users of Web 2.0 social technologies (such as having active accounts on Facebook and LinkedIn, maintaining personal blog or website, managing photos on Flickr, posting videos on YouTube, using Twitter, etc.) are highly desired.

Technical skills include:

- Strong XHTML, CSS, JavaScript and JSP coding skills, ability to modify code without WYSIWYG HTML editors, and best practices
- Familiarity with Web 2.0 technologies (Ajax, Web Services, etc.)
- Familiarity with modern accessibility techniques (semantic markup, unobtrusive JavaScript, etc.) and Web Internationalization (i18n) standards
- Familiarity with search applications and search optimization
- Experience with XPath and writing XSL Transformations is a plus
- Experience with enterprise portal technology and/or content management systems (especially Vignette) is a plus

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AOIT Web Design

Lesson 15

Project Presentation and Course Closure

Student Resources

Resource	Description
Student Resource 15.1	Feedback Form: Website Fair

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Student Resource 15.1

Feedback Form: Website Fair

Project: Students:

Would you hire this group to build a website for you? Why or why not?

What is your first impression of this website?

List three things that were done really well on the website.

1.

2.

3.

List three things you think this group could have done better.

1.

2.

3.

Was the group able to answer your questions effectively? Give an example.

Thanks for participating in this Website Fair and for giving us your feedback. Please submit this form to the class teacher before you leave.

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