{ cōdify }

DESIGN STUDIO

HOW Interactive Design Conference 2012

Advanced HTML 5 / CSS 3 / jQuery
Chris Converse

ˈkōd əˌfī   *verb*. To arrange (design) into a systematic code.

Responsive Web Design

Using CSS3 media queries in conjunction with HTML and imagery, designers can altar their web designs to accommodate varying screen sizes. This approach allows for one set of HTML code, and the CSS adapts the presentation base don the viewport size of the device browsing the web page.

Computer Screen

Tablet Screen

Hand-held Screen
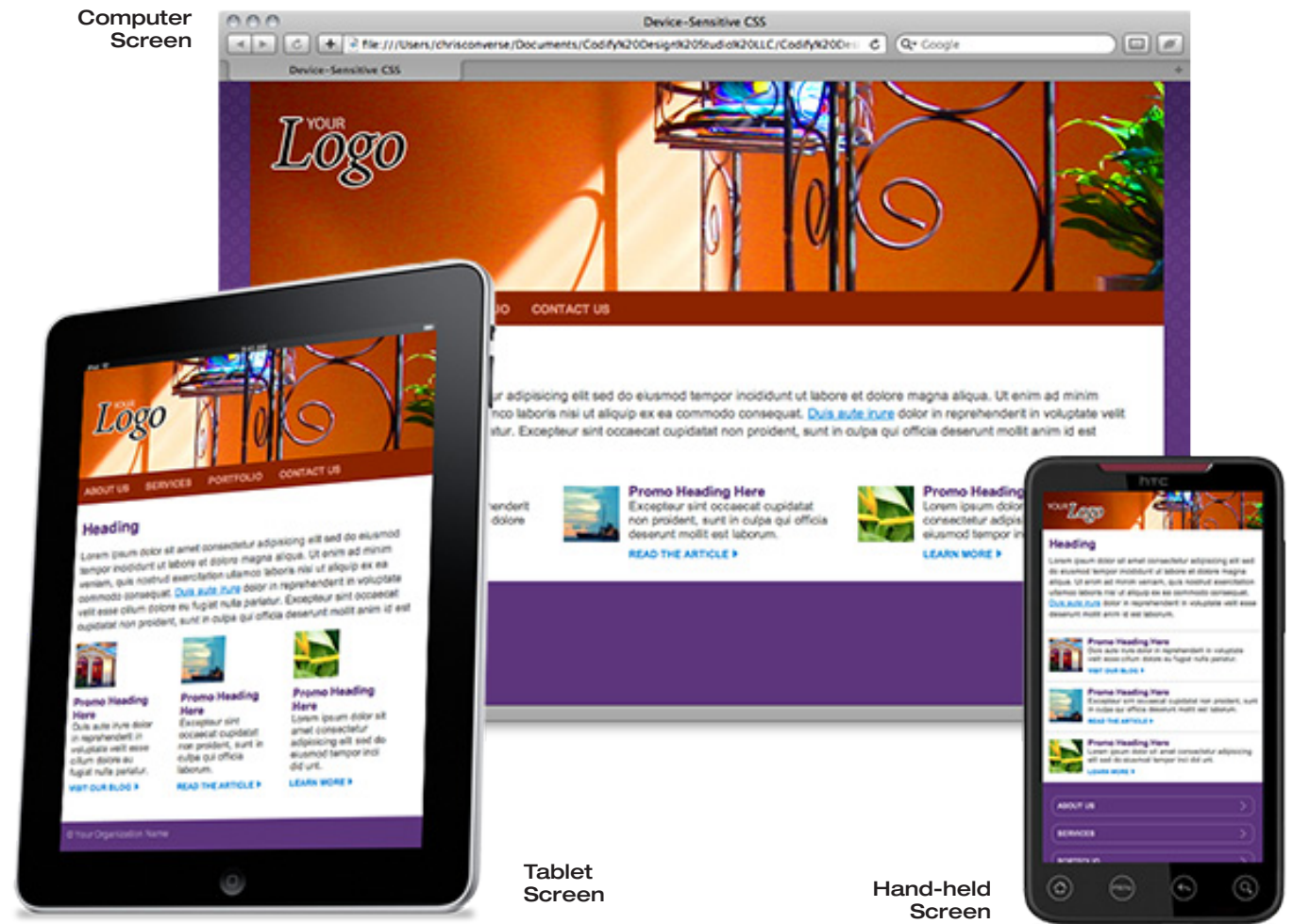
Use this QR code to view this responsive design example on your camera-enabled device, or visit:

http://codifydesign.com/go/psd-to-html

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Responsive Download

By referencing imagery with CSS, it is possible to altar the download size of your web page. The following web design boasts a 79% download savings for visitors on hand-held devices.

Large Screen
~ 118.2 Kb download

Medium Screen
~ 44.8 Kb download

Small Screen
~ 25.5 Kb download

Small banner image

Large banner image

Medium banner image

* Learn to create this responsive design from Chris Converse on HOW U: http://codifydesign.com/go/how
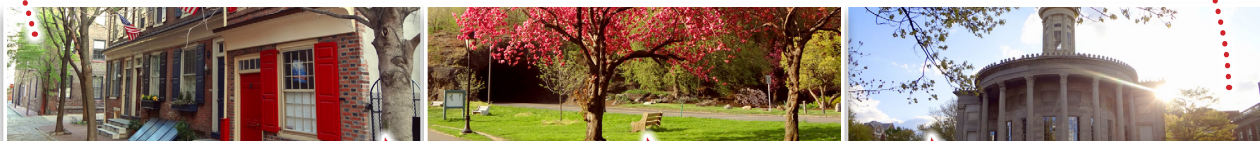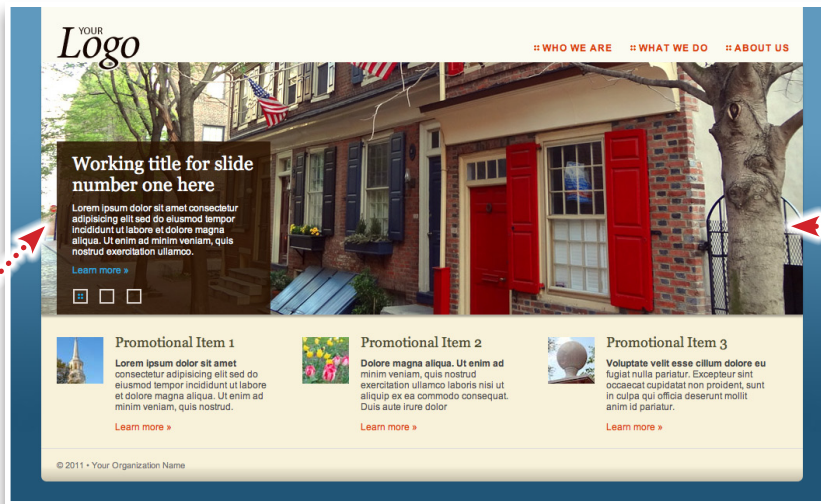
Responsive Experience

Many websites have some interactive, or animated, component for on their website to attract attention and promote deeper aspects of the site. While these user experiences are great on larger screens, the effect can be lost on hand-held devices.

Through the use of JavaScript, we can dynamically load an interactive experience based on the user's screen size.

Large banner images

Small banner image

Responsive Experience *(continued)*

The following example demonstrates an animated, and interactive, marquee for large and medium screens. If the device supports over 500 horizontal pixels, a JavaScript loads three images, lines them up with CSS, and creates an interactive experience for your user.

Large banner image lineup

Caption and navigation for the marquee

Twitter Bootstrap

The folks who brought you Twitter have created a responsive, grid-based, framework for creating web layouts and interactive experiences. The framewrok is free, open-source, and tested in all modern browsers.
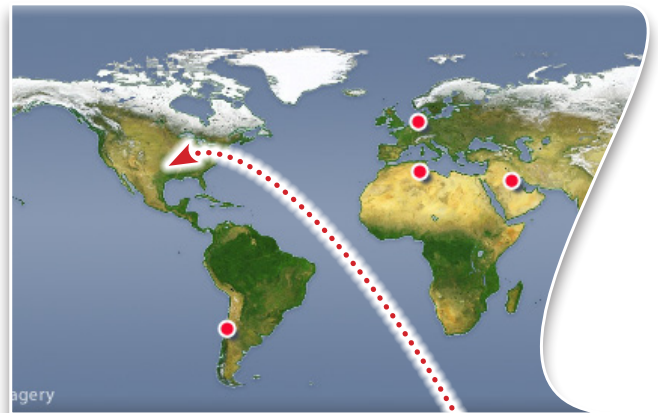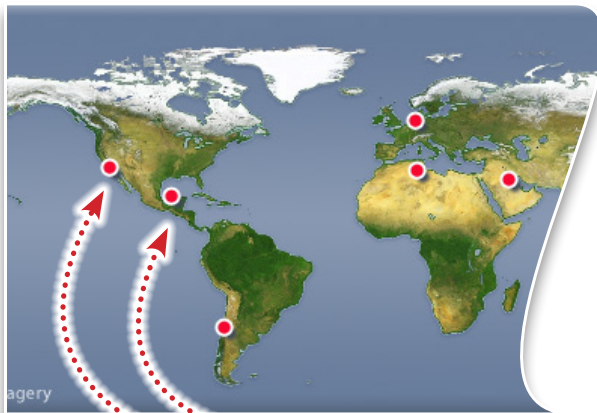
Read more at: http://twitter.github.com/bootstrap

Get 50% off an online course at: http://codifydesign.com/go/how

JavaScript and jQuery

jQuery is an open-source framework that makes it easy to manipulate HTML with JavaScript. jQuery statements, usually starting with a dollar sign ($), can be intermixed with standard JavaScript.

The much-simplified querying capability that jQuery offers has lead to it's wide scale adoption across most websites making use of interactive and engaging content.

HTML

```html
<div class="map_contianer">
    <a class="dot" title="NA" href="#" style="top:116px; left:134px;"></a>
    <a class="dot" title="AU" href="#" style="top:208px; left:510px;"></a>
    <a class="dot" title="SA" href="#" style="top:222px; left:210px;"></a>
    <a class="dot" title="NA" href="#" style="top:135px; left:175px;"></a>
    <a class="dot" title="AF" href="#" style="top:1
    <a class="dot" title="AS" href="#" style="top:97
    <a class="dot" title="ME" href="#" style="top:1
    <a class="dot" title="EU" href="#" style="top:85
    <a class="dot" title="AU" href="#" style="top:22
</div>
```

CSS

```css
<style type="text/css">
.map_contianer {
    background-image: url(images/map.jpg);
    background-repeat: no-repeat;
    background-position: 0px 0px;
    height: 300px;
    width: 700px;
    position: relative;
}
a, a:visited { color: #AA0000; margin: 0px 10px 0
a.dot {
    background-image: url(images/dots.png);
    background-repeat: no-repeat;
    background-position: 0px 0px;
    height: 20px;
    width: 20px;
    display: block;
    position: absolute;
}
a.dot:hover {
```

JavaScript

Importing and using the jQuery framework

```javascript
<script type="text/javascript" src="js/jquery-1.4.4.min.js"></script>
<script type="text/javascript">
    $(document).ready(function(){

        $('a.dot[title *= "NA"]').hide(4000);

    });
</script>
```

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CSS 3 Animation

State-based animations can now be handled through CSS. Many browsers are now supporting these animation attributes, and can provide an enhanced user experience as CSS properties change according to various screen sizes and orientations, status of user-feedback elements, or even representing the status of a user's progress within an application.

Try it for yourself on your iPad:
http://codifydesign.com/chris/lynda/samples/course-0010/

```
.teapot_orange, .teapot_clay, .teapot_blue, .teapot_black, .map_container {
    -webkit-transition: -webkit-transform 1s ease-in-out;
}
```

CSS3 Animation

iPad Web App*
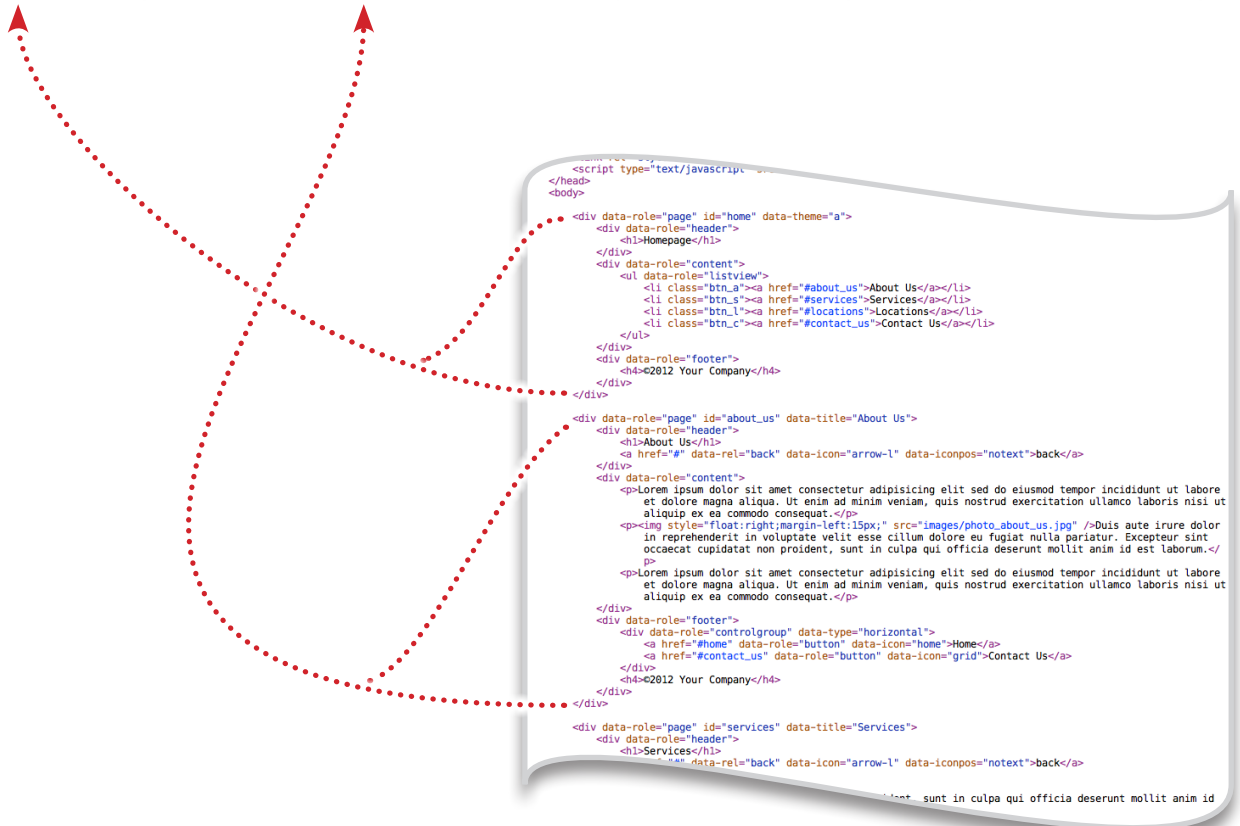**rotated to**
landscape view

iPad Web App*
rotated to
portrait view

* Learn to create this iPad Web App
from Chris Converse on Lynda.com

jQuery Mobile

Another option to responsive design for mobile devices is to change the user experience altogether. Frameworks like jQuery Mobile transform DIV areas and separate HTML files into a more app-like user expereince for mobile phones and tablets.


```html
        <script type="text/javascript
  </head>
  <body>

  <div data-role="page" id="home" data-theme="a">
      <div data-role="header">
          <h1>Homepage</h1>
      </div>
      <div data-role="content">
          <ul data-role="listview">
              <li class="btn_a"><a href="#about_us">About Us</a></li>
              <li class="btn_s"><a href="#services">Services</a></li>
              <li class="btn_L"><a href="#locations">Locations</a></li>
              <li class="btn_c"><a href="#contact_us">Contact Us</a></li>
          </ul>
      </div>
      <div data-role="footer">
          <h4>©2012 Your Company</h4>
      </div>
  </div>

  <div data-role="page" id="about_us" data-title="About Us">
      <div data-role="header">
          <h1>About Us</h1>
          <a href="#" data-rel="back" data-icon="arrow-l" data-iconpos="notext">back</a>
      </div>
      <div data-role="content">
          <p>Lorem ipsum dolor sit amet consectetur adipisicing elit sed do eiusmod tempor incididunt ut labore
             et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut
             aliquip ex ea commodo consequat.</p>
          <p><img style="float:right;margin-left:15px;" src="images/photo_about_us.jpg" />Duis aute irure dolor
             in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint
             occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.</
             p>
          <p>Lorem ipsum dolor sit amet consectetur adipisicing elit sed do eiusmod tempor incididunt ut labore
             et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut
             aliquip ex ea commodo consequat.</p>
      </div>
      <div data-role="footer">
          <div data-role="controlgroup" data-type="horizontal">
              <a href="#home" data-role="button" data-icon="home">Home</a>
              <a href="#contact_us" data-role="button" data-icon="grid">Contact Us</a>
          </div>
          <h4>©2012 Your Company</h4>
      </div>
  </div>

  <div data-role="page" id="services" data-title="Services">
      <div data-role="header">
          <h1>Services</h1>
          "#" data-rel="back" data-icon="arrow-l" data-iconpos="notext">back</a>

                                            sunt in culpa qui officia deserunt mollit anim id
```

Responsive Frameworks

The "best of both worlds" option for user experience options across devices is to load varying frameworks based on screen size. The idea here is to altar the user experience while maintaining a core set of content across those experiences.
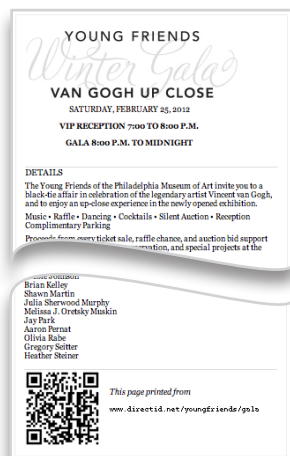
Preview this for yourself at: http://codifydesign.com/go/how
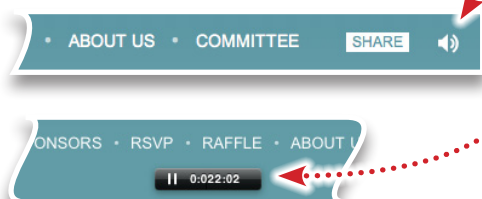

Large screen rotating panels

Small screens marked up for jQuery Mobile

Medium screen rotating panels. Includes touch events for iPads

Printer-friendly version includes CSS-based page breaks and a QR code

Music loaded with Flash on computers, and HTML5 Audio for tablets

Learn more jQuery from Chris Converse on Lynda.com
Get a **FREE 7-Day Trial** from Chris. Find an activation link at:

http://lynda.com/trial/chrisconverse

Creating a Responsive Web Design
Get **50% off** from Chris by entering the Coupon Code: **HOW**

Get a link at: http://codifydesign.com/go/how

Create an Engaging Website with Twitter Bootstrap
Get **50% off** from Chris by entering the Coupon Code: **HOW**

Get a link at: http://codifydesign.com/go/how

PSD-to-HTML: The missing Link of Web Design
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Get a link at: http://codifydesign.com/go/how

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Blog:	smartnocities.codifydesign.com
Events:	codifydesign.com/chris/events

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