PACE

INSTITUTE OF TECHNOLOGY & SCIENCES

(Approved by AICTE, NEW DELHI & Govt.of Andhra Pradesh, Affiliated to JNTU., Kakinada)

www.pace.ac.in

WEB TECHNOLOGIES

LAB MANUAL FOR

CSE & IT

INDEX

LAB OBJECTIVE

- Overview Object Web Technologies
- Basic Concept of Web Technologies
- Advance Programming

1) Introduction to object oriented programming concepts- java as an object oriented programming language. Introduction to java application and applets-control structures-methods-arrays.
2) Object based and object oriented programming creating packages-using overloaded constructors-static class variables-data abstraction and information hiding-relation between super class objects and subclass objects composition verses inheritance-polymorphism- dynamic method binding abstract super classes and concrete super classes –inheriting interface-use of inner classes and wrapper classes-String to kenizer and String Suffer classes.
3) Role of object oriented programming in designing GUI –Graphs and Java20overview of swing- event handling, adapter classes and layout managers. Advance GUI components- JPopup Menus- JDesktopPane- advance layout managers.

4) Exception handling and multithreading in object oriented programming- When exception handling should be used-java exception handling – exceptions and inheritance-multithreading in java-thread synchronization-daemon threads Runnable interface- Files and streams in java
    5) Network and Database handling through object oriented programming –using JOSC –processing queries-overview of servlet –introduction to networking – establishing a simple server and a client – introduction to RMI – implementing the remote interface.

INTRODUCTION ABOUT LAB

There are 66 systems (Compaq Presario) installed in this Lab. Their configurations are as follows:

Processor	:	DUAL CORE 1.67 GH$_z$
RAM	:	256 MB
Hard Disk	:	40 GB
Mouse	:	Optical Mouse
Network Interface card	:	Present

Software

- All systems are configured in **DUAL BOOT** mode i.e., Students can boot from Windows XP or Linux as per their lab requirement.

  This is very useful for students because they are familiar with different Operating Systems so that they can execute their programs in different programming environments.

- Each student has a separate login for database access

  Oracle 9i client version is installed in all systems. On the server, account for each student has been created.

  This is very useful because students can save their work (scenarios', pl/sql programs, data related projects ,etc) in their own accounts. Each student work is safe and secure from other students.

- Latest Technologies like **DOTNET** and **J2EE** are installed in some systems. Before submitting their final project, they can start doing mini project from 2nd year onwards.

- **MASM (Macro Assembler)** is installed in all the systems

  Students can execute their assembly language programs using MASM. MASM is very useful students because when they execute their programs they can see contents of Processor **Registers** and how **each instruction** is being executed in the **CPU**.

- Rational Rose Software is installed in some systems. Using this software, students can depict UML diagrams of their projects.

- Softwares installed: C, C++, JDK1.5, MASM, OFFICE-XP, J2EE and DOTNET, Rational Rose.

- Systems are provided for students in the 1:1 ratio.

- Systems are assigned numbers and same system is allotted for students when they do the lab.

Guidelines to Students

- Equipment in the lab for the use of student community. Students need to maintain a proper decorum in the computer lab. Students must use the equipment with care. Any damage is caused is punishable.

- Students are required to carry their observation / programs book with completed exercises while entering the lab.

- Students are supposed to occupy the machines allotted to them and are not supposed to talk or make noise in the lab. The allocation is put up on the lab notice board.

- Lab can be used in free time / lunch hours by the students who need to use the systems should take prior permission from the lab in-charge.

- Lab records need to be submitted on or before date of submission.

- Students are not supposed to use floppy disks

- Use of computer network is encouraged.

Web Technologies Syllabus Programs (JNTU)

S.No	**Programs**
1, 2	Develop static pages (using only HTML) of an online Book store. The pages should resemble: www.amazon.com The website should consist the following pages. Home page, Registration and user Login, User profile page, Books catalog, Shopping cart, Payment By credit card, order confirmation.
3, 4	Validate the registration, user login, user profile and payment by credit card pages using JavaScript.
5	Write an XML file which will display the Book information which includes the following: 1) Title of the book 2) Author Name 3) ISBN number 4) Publisher name 5) Edition 6) Price Write a Document Type Definition (DTD) to validate the above XML file. Display the XML file as follows. The contents should be displayed in a table. The header of the table should be in color GREY. And the Author names column should be displayed in one color and should be capitalized and in bold. Use your own colors for remaining columns. Use XML schemas XSL and CSS for the above purpose.
6	**VISUAL BEANS:** Create a simple visual bean with a area filled with a color. The shape of the area depends on the property shape. If it is set to true then the shape of the area is Square and it is Circle, if it is false. The color of the area should be changed dynamically for every mouse click.
7	1) Install TOMCAT web server. While installation assign port number 8080. Make sure that these ports are available i.e., no other process is using this port. 2) Access the above developed static web pages for books web site, using these servers by Putting the web pages developed in week-1 and week-2 in the document root. Access the pages by using the urls : http://localhost:8080/rama/books.html

8	**User Authentication :** Assume four users user1, user2, user3 and user4 having the passwords pwd1, pwd2, pwd3 And, pwd4 respectively. Write a servelet for doing the following. 1. Create a Cookie and add these four user id’s and passwords to this Cookie. 2. Read the user id and passwords entered in the Login form (week1) and authenticate with the values (user id and passwords) available in the cookies. If he is a valid user(i.e., user-name and password match) you should welcome him by name(user-name) else you should display “ You are not an authenticated user “.
9	Install a database(Mysql or Oracle). Create a table which should contain at least the following fields: name, password, email-id, phone number(these should hold the data from the registration form). Practice 'JDBC' connectivity. Write a java program/servlet/JSP to connect to that database and extract data from the tables and display them. Experiment with various SQL queries. Insert the details of the users who register with the web site, whenever a new user clicks the submit button in the registration page (week2).
10	Write a JSP which does the following job: Insert the details of the 3 or 4 users who register with the web site (week9) by using registration form. Authenticate the user when he submits the login form using the user name and password from the database.

WEEK- 1, 2:

AIM:

- **Develop static pages (using only HTML) of an online Book store. The pages should resemble: www.amazon.com. The website should consist the following pages.**

- **Home page**
- **Registration and user Login**
- **User profile page**
- **Books catalog**
- **Shopping cart**
- **Payment by credit card Order Conformation**

PROCEDURE:

Home page

Main.html:

```
<html>
<head>
<title>
Amazon</title>
</head>
<body bgcolor="cyan"> <center>
<strong><h1>Welcome to AMAZON</h1></strong>
<form method="post" action="login.html" target=_blank >
<h4>for books</h4><input type="submit" value="click here">
</form>
</center>
</body>
</html>
```

- **Registration and user Login**

Login.html:

```
<html>
<head>
<title>
login page</title>
</head>
<body bgcolor="cyan"> <center>
<strong><h1> AMAZON </h1></strong></center>
<right>
<table align="right">

<tr>
<td><h4>user name</td>
<td><input type="text" ></td>
<td></td>
</tr>

<tr>
<td><h4>password</td>
<td><input type="password"></td>
<td></td>
</tr>

<tr>
<td>
<form method="post" action="catalog.html"  >
<input type="submit" value="submit" >
</form>
</td>
<td>
<form method="post" action="userpro.html"  >
<input type="submit" value="register" >
&nbsp;&nbsp;
<input type="reset" value="reset"></form></td>
</tr>

</table>

</body>
</html>
```

- **User profile page**

Userpro.html:

```
<html>
<head>
<title>
login page</title>
</head>
<body bgcolor="cyan">
<center><strong><h1> AMAZON </h1></strong></center>
<form method="post" action="catalog.html" >
<right>
<table align="left">
<tr>
<td><h4>user name</td>
<td><input type="text" ></td>
<tr>
<tr>
<td><h4>password</td>
<td><input type="password"></td>
</tr>
<tr>
<td><h4>confirm password</td>
<td><input type="password"></td>
</tr>
<tr>
<td><h4>male &nbsp;&nbsp;
<option >
<input type="radio" name="sex" id="male"></td>
<td><h4>female &nbsp; &nbsp;
<input type="radio" name="sex" id="female" ></td>
</option>
</tr>
<tr>
<td>Address</td>
<td><textarea name="address" rows=5 cols=19>
</textarea>
</td>
<tr>
<td>
<input type="submit" value="submit" ></td>
<td>
<input type="reset" value="reset"></td>
</tr>
```

```
</form>
</body>
</html>
```

- **Books catalog**

Catalog.html:

```
<html>
<head>
<title>
books catalog</title>
</head>
<body bgcolor="cyan">
<center><h1>AMAZON</h1></center>
<form method="post" action="shopping.html">
<left>
<table>
<tr>
 <td><b><h3>frontend books</td>
<td></td></tr>
<tr>
<td></td>
 <td><h4>C&Ds</td>
</tr>
<tr>
<td></td>
 <td><h4>Ads</td>
</tr>
<tr>
<td></td>
 <td><h4>JAVA
 </td></tr>
<tr>
 <td><b><h3>backend books</td>
<td></td>
</tr>
<tr>
<td></td>
 <td><h4>Oracle</td>
</tr>
<tr>
<td></td>
<td><h4>Ms SQL Server
</td></tr>
<tr>
```

```
<td></td>
<td><h4>MySql </td>
</tr>
</table>
</h4>
<center>
<b>for buy one of these books
<br>
</b><input type="submit" value="click here">
</center>
</form>
</body>
</html>
```

• Shopping cart

Shopping.html:

```
<html>
<head><title>shopping cart</title>
</head>
<body bgcolor="cyan">
<center><h1>
Shopping Cart</h1></center>
<br><br><br><br><br>
<table align="center">
<tr>
<td>Text Books</td>
<td>
<select >
<optgroup label="select the book">
<option value="C&Ds">C&Ds
<option value="Ads">Ads
<option value="Java">Java
<option value="Oracle">Oracle
<option value="Ms SQL Server">Ms SQL Server
<option value="MySql">MySql
</optgroup>
</select>
</td></tr>
<tr>
<td>
 Quantity</td>
<td>
<input type="text" id="q">
</td></tr>
```

```
<tr>
<td></td>
<td>
<form method=post action="payment.html">
<input type="submit" value=ok />
</form>
</td></tr>
</table>
<center>
<pre>Cost of one book is"500" + shipping "100"</pre>
</center>
<body>
</html>
```

- ## Payment by credit card

Payment.html:

```
<html>
<head><title>payment</title></head>
<body bgcolor="cyan">
<center><h1>Payment By Credit Card</h1></center>
<form method=post action="ordrconform.html">
<br><br><br><br><br>
<table align="center">
<tr>
<td>
<h4>Total Amount</h4></td>
<td><input type="text">
</td>
</tr>
<tr>
<td><h4>Credit Card Number</td>
<td><input type="text"></td>
</tr>
<tr>
<td>
</td>
<td><input type="submit" value=OK>
</td>
</tr>
</table>
</form></body>
</html>
```

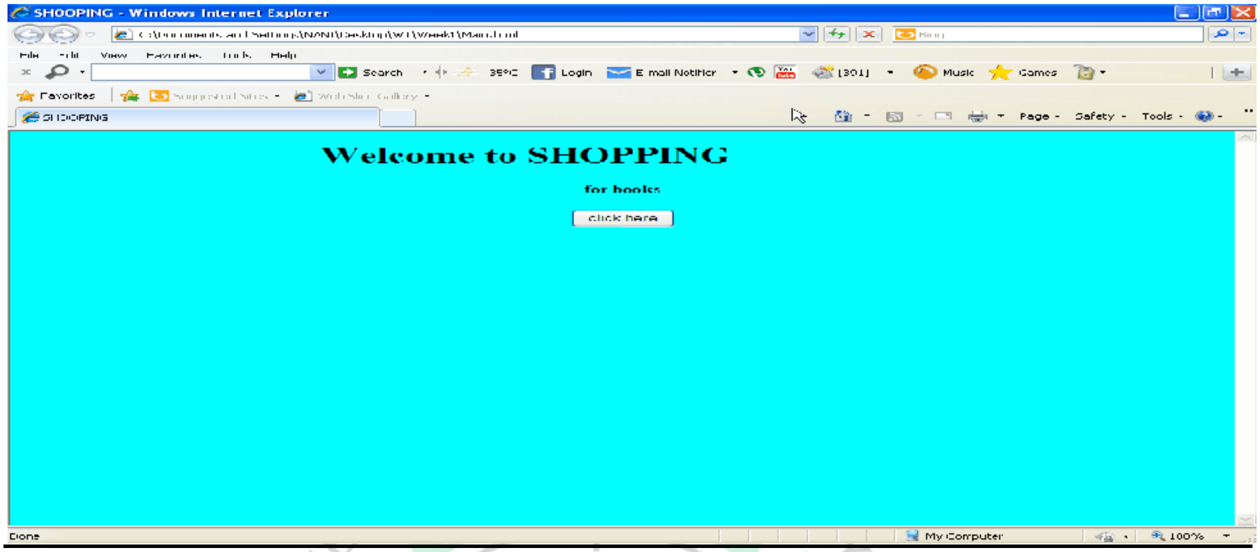
- **<u>Order Conformation</u>**

<u>Ordrconform:</u>

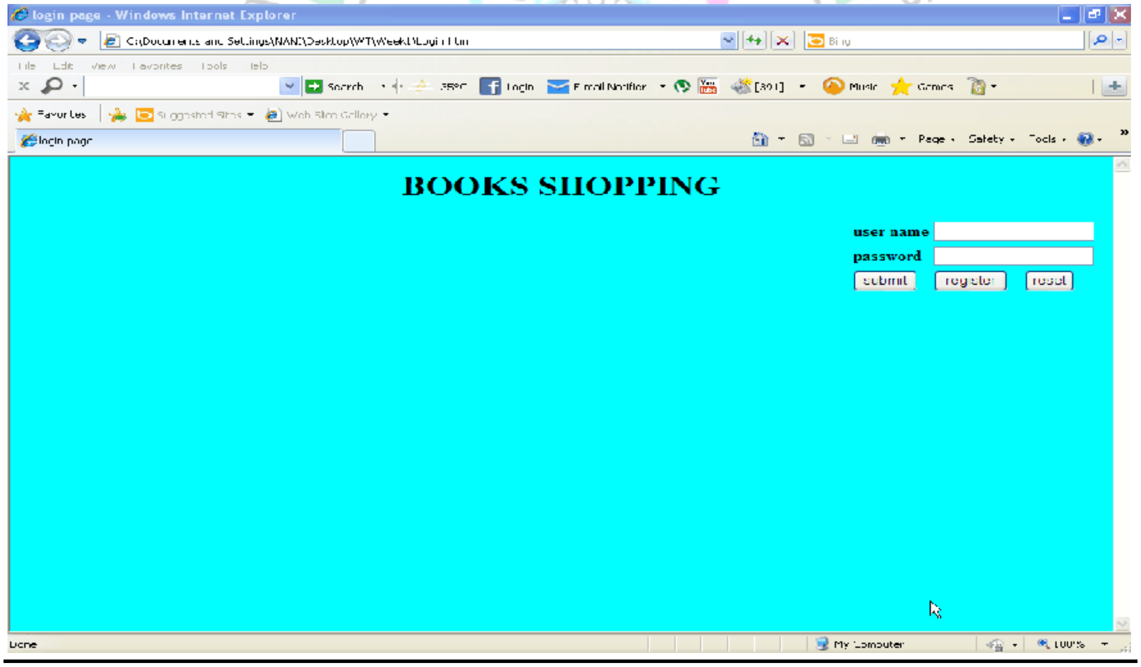
```
<html>
<head><title>order conformation</title><M/head>
<body bgcolor="cyan">
<center>
<h1><b>BOOK SHOPPING</h1>
<pre><strong>
<b>Your order Is Conformed
</strong></pre>
<h2><b>THANK YOU</h2>
</center>
</body></html>
```

OUTPUT:

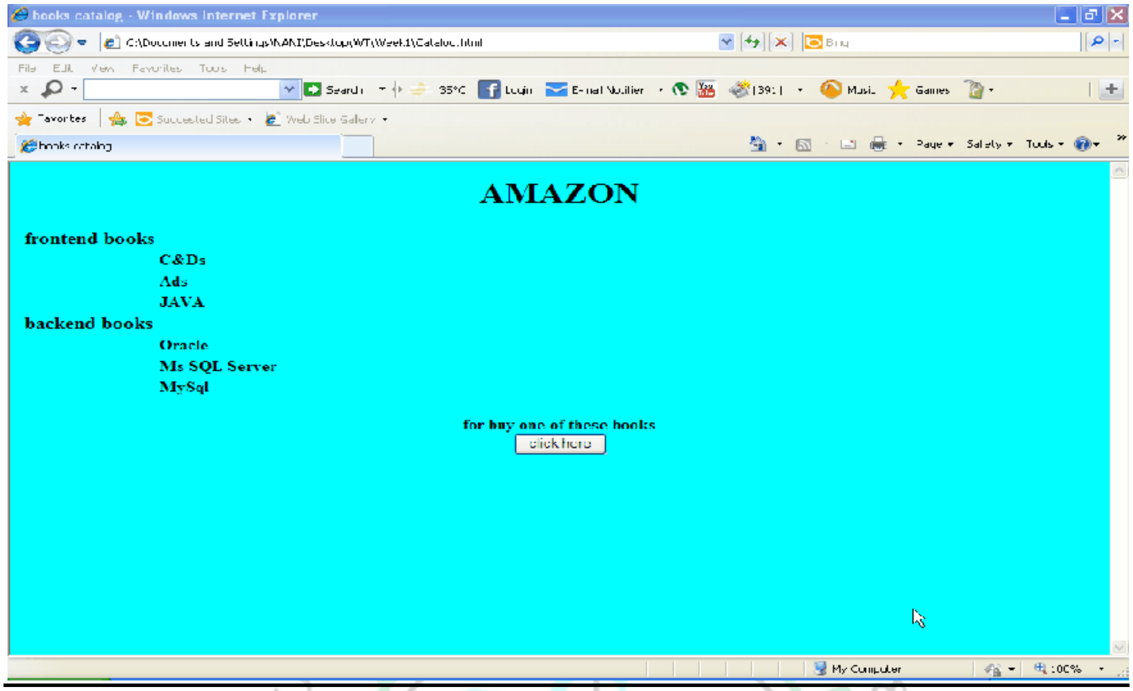
Main.html:



Login.html:



Catalog.html:


books catalog - Windows Internet Explorer
C:\Documents and Settings\NANI\Desktop\WT\Week1\Catalog.html
File Edit View Favorites Tools Help
Favorites
Suggested Sites
Web Slice Gallery
books catalog
Page Safety Tools
My Computer
100%

AMAZON

frontend books

- C&Ds
- Ads
- JAVA

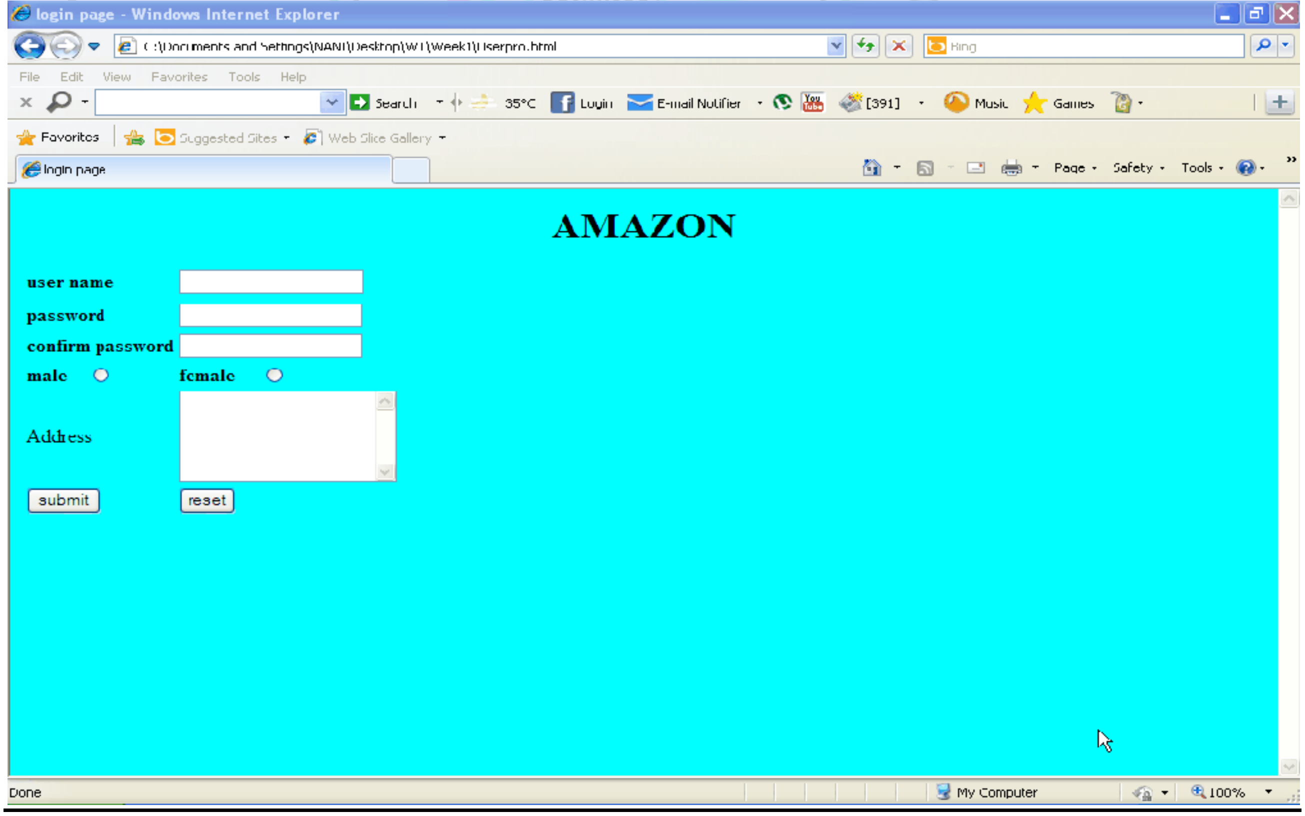
backend books

- Oracle
- Ms SQL Server
- MySql

for buy one of these books

click here

Userpro.htm


login page - Windows Internet Explorer
C:\Documents and Settings\NANI\Desktop\WT\Week1\Userpro.html
File Edit View Favorites Tools Help
Favorites
Suggested Sites
Web Slice Gallery
login page
Page Safety Tools
Done
My Computer
100%

AMAZON

user name

password

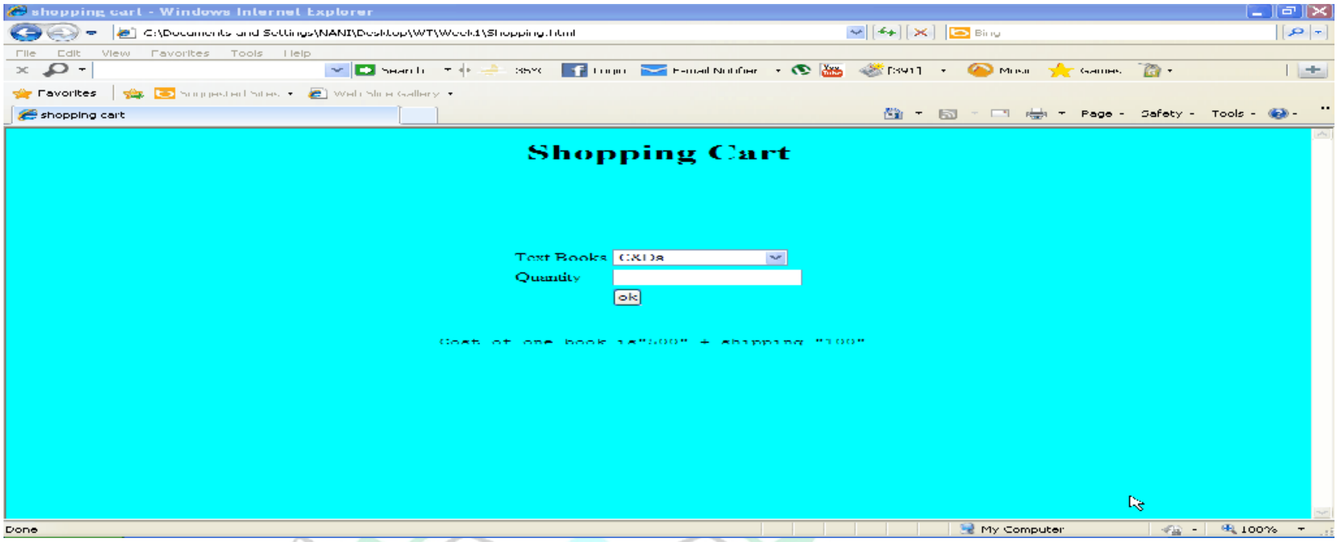
confirm password

male ○ female ○

Address

submit reset

Shooping.html:


shopping cart - Windows Internet Explorer
C:\Documents and Settings\NANI\Desktop\WT\Week1\Shopping.html
File Edit View Favorites Tools Help
Favorites
shopping cart
Page Safety Tools
Done
My Computer
100%

Shopping Cart

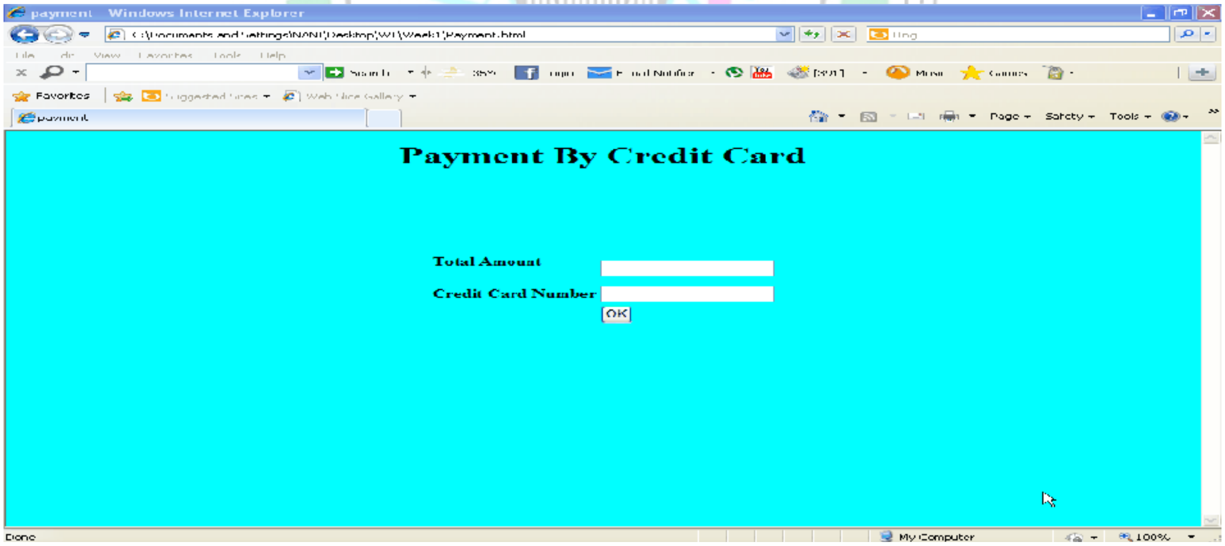
Text Books C&Ds

Quantity

ok

Cost of one book is"500" + shipping "100"

Payment.html:


payment - Windows Internet Explorer
C:\Documents and Settings\NANI\Desktop\WT\Week1\Payment.html
File Edit View Favorites Tools Help
Favorites
payment
Page Safety Tools
Done
My Computer
100%

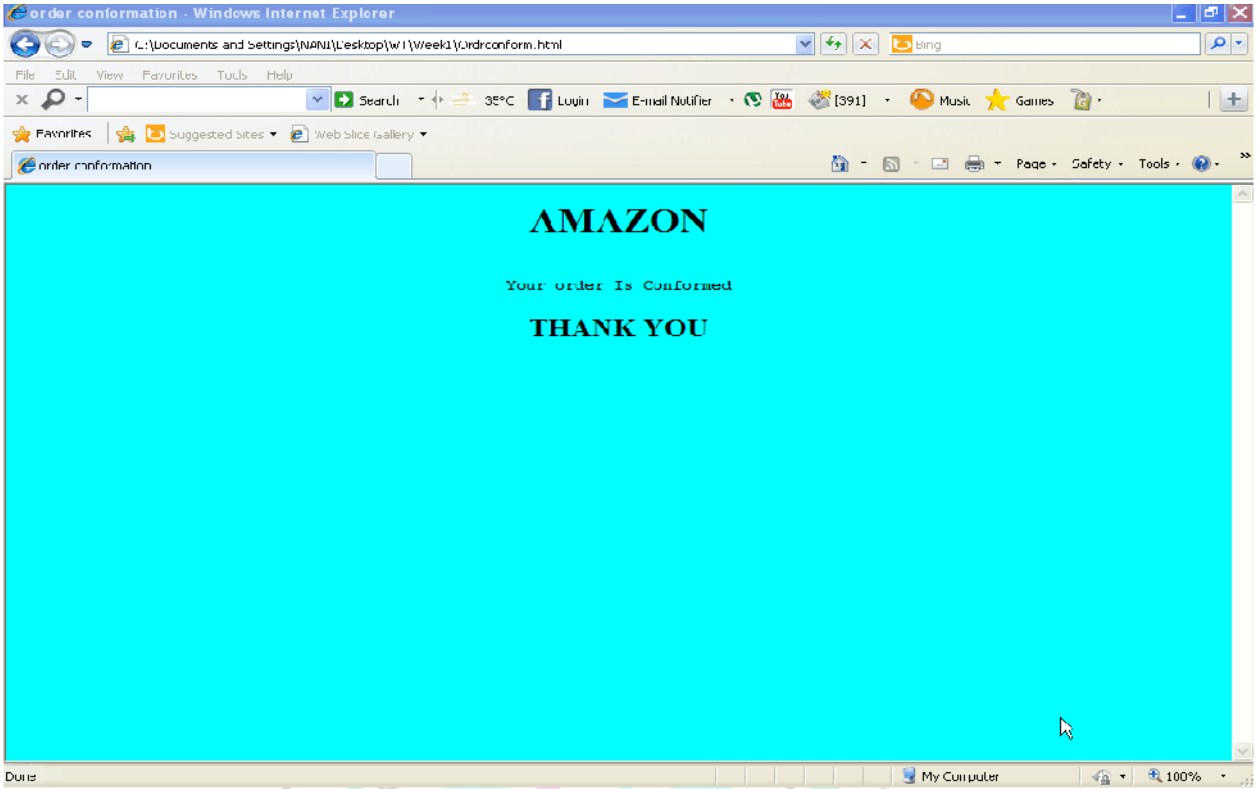
Payment By Credit Card

Total Amount

Credit Card Number

OK

Ordrconform.html:


order conformation - Windows Internet Explorer
C:\Documents and Settings\NANI\Desktop\WT\Week1\Ordrconform.html
Bing
File Edit View Favorites Tools Help
Search 35°C Login E-mail Notifier [391] Music Games
Favorites Suggested Sites Web Slice Gallery
order conformation
Page Safety Tools
Done My Computer 100%

AMAZON

Your order Is Conformed

THANK YOU

WEEK- 3, 4 :

AIM

- **Validate the Registration, user login, user profile and payment by credit card pages using JavaScript.**

PROCEDURE:

- ### Home page:

Main.html:

```
<html>

  <frameset rows="25%,*">
   <frame src="top.html" name="top" scrolling ="no" frameborder ="0">
   <frameset cols="25%,75%">
   <frame src="left.html" name="left" scrolling ="no" frameborder ="0">
   <frame src="right.html" name="right" scrolling ="auto" frameborder ="0">
   </frameset>
   </frameset>
</html>
```

Top.html:

```
<html>
   <body bgcolor="pink">
   <br><br>
   <marquee><h1 align=”center”><b><u>ONLINE BOOK
   STORAGE</u></b></h1></marquee>
   </body>
   </html>
```

Right.html:

```
<html>
  <body>
  <br><br><br><br><br>
  <h2 align="center">
  <b><p> welcome to online book storage. Press login if you are
  having id otherwise press registration.
  </p></b></h2>
  </body>   </html>
```

Left.html:

```
    <html>
      <body bgcolor="pink">
      <h3>
      <ul>
      <li><a href="login.html" target="right"><font color="black">
      LOGIN</font></a></li><br><br>
      <li><a href="profile.html" target="right"><font color="black">
      USER PROFILE</font></a></li><br><br>
      <li><a href="catalog.html" target="right"><font color="black">
      BOOKS CATALOG</font></a></li><br><br>
      <li><a href="scart.html" target="right"><font color="black">
      SHOPPINGCART</font></a></li><br><br>
      <li><a href="payment.html" target="right"><font color="black">
      PAYMENT</font></a></li><br><br>
      <br><br>
      </ul>
      </body>
      </html>
```

Registration and user Login

Login.html:

```
<html>
<body bgcolor="pink"><br><br><br>
<script language="javascript">
function validate()
{
var flag=1;
if(document.myform.id.value==""||
document.myform.pwd.value=="")
{
alert("LoginId and Password must be filled")
flag=0;
}
if(flag==1)
{
alert("VALID INPUT");
window.open("catalog.html","right");
}
else
{
alert("INVALID INPUT");
//document.myform.focus();
}
}
</script>
<form name="myform">
<div align="center"><pre>
LOGIN ID:<input type="text" name="id"><br>
PASSWORD:<input type="password" name="pwd"><br><br>
</pre>
<input type="button" value="ok" onClick="validate()">&nbsp;&nbsp;&nbsp;&nbsp;
<input type="reset" value="clear" >
</div>

</form>
</body>
</html>
```

- ## User profile page

Profile.html:

```
<html>
  <body bgcolor="pink"><br><br>
  <script type="text/javascript">
   function validate()
    {
     var flag=1;
      if(document.myform.name.value==""||
         document.myform.addr.value==""||
         document.myform.phno.value==""||
         document.myform.id.value==""||
         document.myform.pwd.value=="")
          {
                          alert("Enter all the details");
            flag=0;
          }
          var str=document.myform.phno.value;
                          var x=new RegExp("\\d","g");
                          if(!(str.match(x)))
                          {
                                  if(!(str.length==10))
                                  flag=0;
                          }
                          var str1=document.myform.id.value;
                          var x1=new RegExp("^[A-Z][a-zA-Z]+$","g");
                          if(!(str1.match(x1)))
                          {
                                  flag=0;
                                  alert("Invalid UserID");
                                  }
                                  var str1=document.myform.pwd.value;
                          var x1=new RegExp("^[A-Z][a-zA-Z]+$","g");
                          if(!(str1.match(x1)))
                          {
                                  flag=0;
                                  alert("Invalid password");
                                  }
                if(flag==1)
                     {
                      alert("VALID INPUT");
                   window.self.location.href="login.html";
                         }
```

```
                              else
                            {
                                alert("INVALID INPUT");
                                document.myform.focus();
                              }
                              }
                     </script>
                     <form name="myform">
                      <div align="center"><pre>
                        NAME        :<input type="text" name="name"><br>
                        ADDRESS  :<input type="type" name="addr"><br>
                        CONTACT NUMBER:<input type="text" name="phno"><br>
                         LOGINID  :<input type="text" name="id"><br>
                        PASSWORD          :<input type="password" name="pwd"></pre><br><br>
                       </div>
<br><br>
<div align="center">
<input type="button" value="ok" onClick="validate()">&nbsp;&nbsp;&nbsp;
<input type="reset" value="clear">
 </form></body></html>
```

- **Books catalog:**

Scart.html:

```
<html>
<body bgcolor="pink"><br><br><br>
<script language="javascript">
   function validate()
    {
     var flag=1;
      if(document.myform.title.value=="")
         {
           flag=0;
         }

           str=document.myform.title.value;

           if(str=="c"||str=="C")
                {
                 document.myform.t1.value="C";
                 document.myform.t2.value=444;
                 }
           else if(str=="jsp"||str=="JSP")
```

```
                {
                document.myform.t1.value="JSP";
                document.myform.t2.value=555;
                }
            else
                {
                flag=0;
                }

              if(flag==1)
                  {
                  alert("VALID INPUT");
                    }
                      else
                    {
                        alert("INVALID INPUT");
                        document.myform.focus();
                      }
                      }
                </script>
<form name="myform" action="payment.html" target="right">
<div align="center"><pre>
BOOK TITLE :<input type="text" name="title"><br>
</pre><br><br>
Book Title:     <input type="text" name="t1" disabled>
Book Cost:      <input type="text" name="t2" disabled>
</div>
<br><br>
<div align="center">
<input type="submit" value="ok" onClick="validate()">&nbsp;&nbsp;&nbsp;&nbsp;
<input type="reset" value="clear">
<input type="submit" value="Purchase">
</form>
</body>
</html>
```

- **Shopping cart:**

Catalog.html:

```
<html>
<body bgcolor="pink"><br><br><br>
<script language="javascript">
   function validate()
    {
     var flag=1;
      if(document.myform.id.value==""||
         document.myform.title.value==""||
         document.myform.no.value==""||
         document.myform.cost.value=="")
          {
            flag=0;
         }

      str=document.myform.title.value;
      var str1=document.myform.cost.value;
      if(!((str=="c"&& str1==444) || (str=="jsp" && str1==555)))
                  {
                  flag=0;
                  }

      if(flag==1)
                  {
                    alert("VALID INPUT");

                    }
           else
                  {
                    alert("INVALID INPUT");
                    document.myform.focus();
                     }
     }
</script>
<form name="myform"  action="scart.html" target="right">
<div align="center"><pre>
LOGIN ID          :<input type="text" name="id"><br>
TITLE             :<input type="text" name="title"><br>
NO.OF BOOKS           :<input type="text" name="no"><br>
COST OF BOOK          :<input type="text"name="cost"><br>
</pre><br><br>
```

```
</div>
<br><br>
<div align="center">
<input type="submit" value="ok"  onClick="validate()"> &nbsp;&nbsp;&nbsp;&nbsp;
<input type="reset" value="clear">
</form>
</body>
</html>
```

- **Payment by credit card**

Payment.html:

```
<html>
<body bgcolor="pink"><br><br><br>
<script language="javascript">
function validate()
{
var flag=1;
if(document.myform.id.value==""|| document.myform.pwd.value==""||
document.myform.amount.value==""|| document.myform.num.value=="")
{
 flag=0;
}
var str=document.myform.amount.value;
var x=new RegExp("\\d","g");
if(!(str.match(x)))
{
flag=0;
}
var str1=document.myform.num.value;
var x1=new RegExp("\\d","g");

if(!(str.match(x1)))
{
flag=0;
}
if(flag==1)
{
alert("VALID INPUT");
window.self.location.href="order.html";
}
else
{
```

```
alert("INVALID INPUT");
document.myform.focus();
}
}
</script>
<form name="myform">
<div align="center"><pre>
LOGIN ID                :<input type="text" name="id"><br>
PASSWORD                :<input type="password" name="pwd"><br>
AMOUNT                          :<input type="text" name="amount"><br>
CREDITCARDNUMBER        :<input type="PASSWORD" name="num"><br></pre><br><br>
</div>
<br><br>
<div align="center">
<input type="button" value="ok" onClick="validate()">&nbsp;&nbsp;&nbsp;&nbsp;
<input type="reset" value="clear" >
</form>
</body>
</html>
```

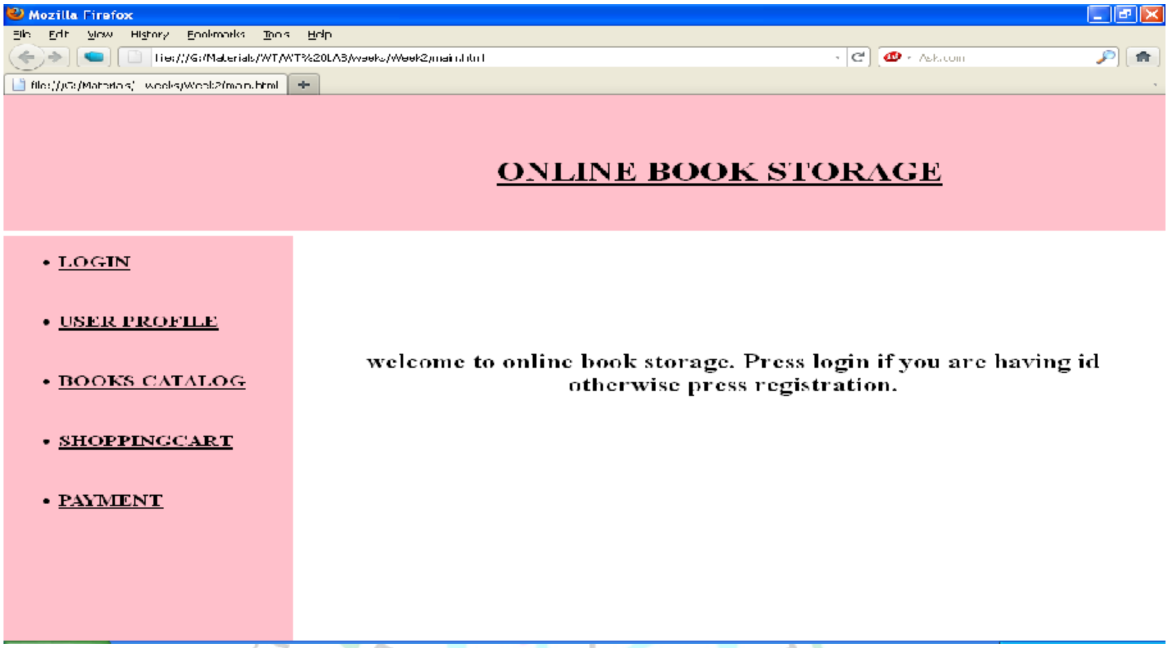
- **Order Conformation**

Order.html:

```
<html>
<head><title>order conformation</title><M/head>
<body bgcolor="cyan">
<center>
<h1><b>AMAZON</h1>
<pre><strong>
<b>Your order Is Conformed
</strong></pre>
<h2><b>THANK YOU</h2>
</center>
</body>
</html>
```

OUTPUT:

Main.html

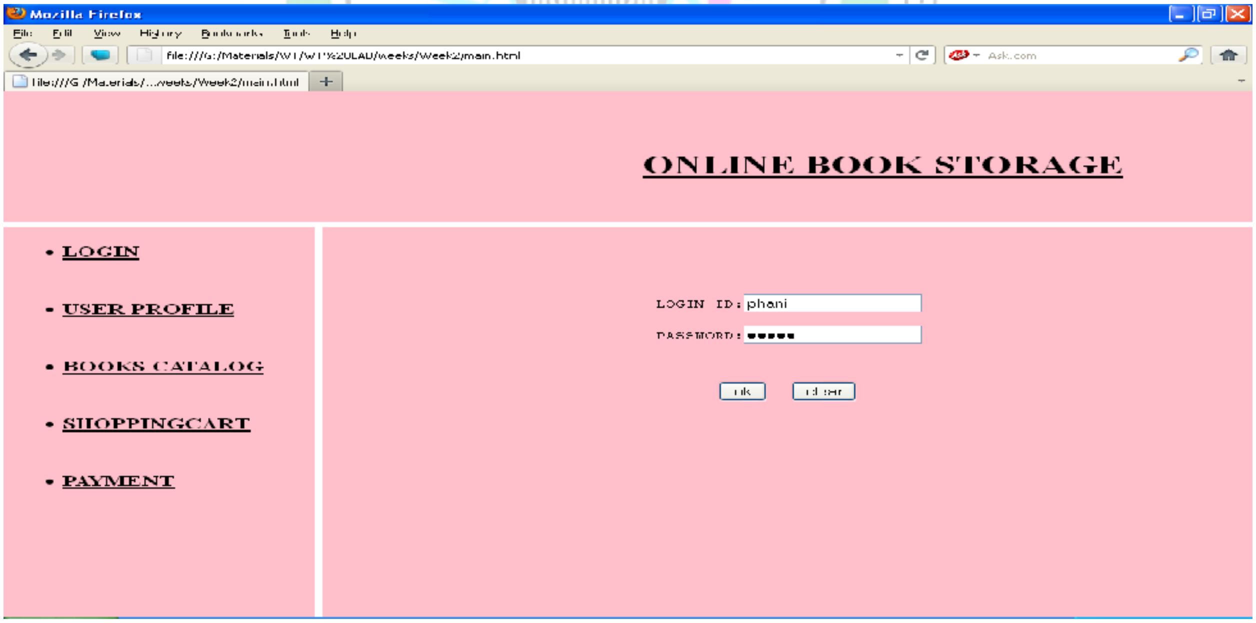

Mozilla Firefox
File Edit View History Bookmarks Tools Help
file:///G:/Materials/WT/WT%20LAB/weeks/Week2/main.html
Ask.com
file:///G:/Materials/...weeks/Week2/main.html

ONLINE BOOK STORAGE

- LOGIN
- USER PROFILE
- BOOKS CATALOG
- SHOPPINGCART
- PAYMENT

welcome to online book storage. Press login if you are having id otherwise press registration.

Login.html:


Mozilla Firefox
File Edit View History Bookmarks Tools Help
file:///G:/Materials/WT/WT%20LAB/weeks/Week2/main.html
Ask.com
file:///G:/Materials/...weeks/Week2/main.html
ok
clear

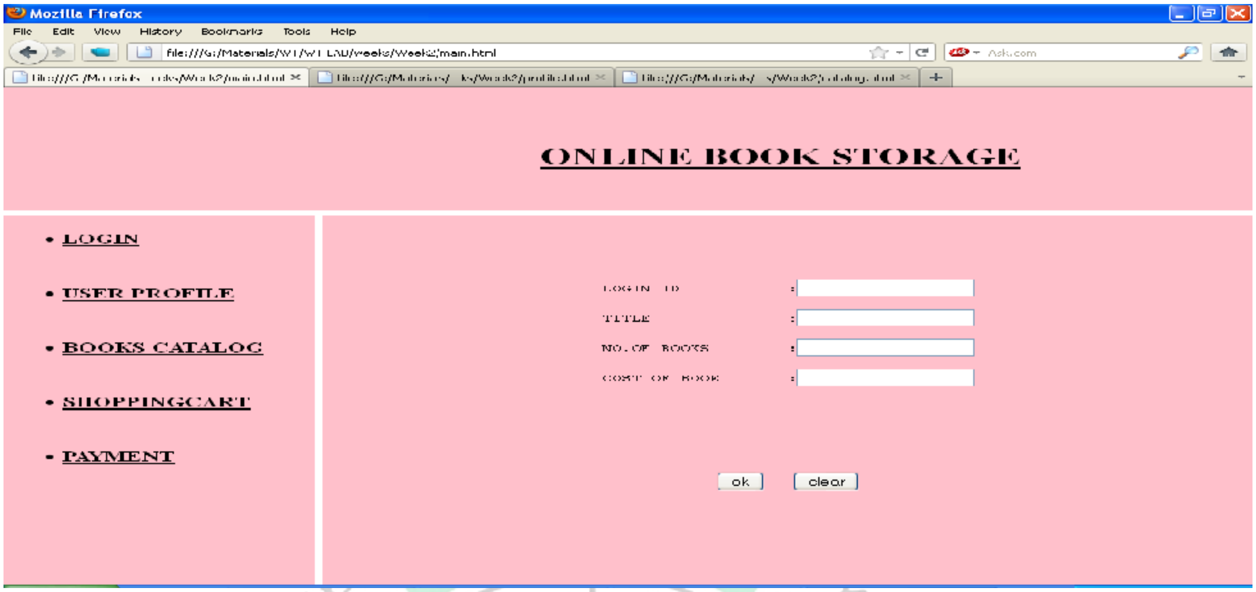
ONLINE BOOK STORAGE

- LOGIN
- USER PROFILE
- BOOKS CATALOG
- SHOPPINGCART
- PAYMENT

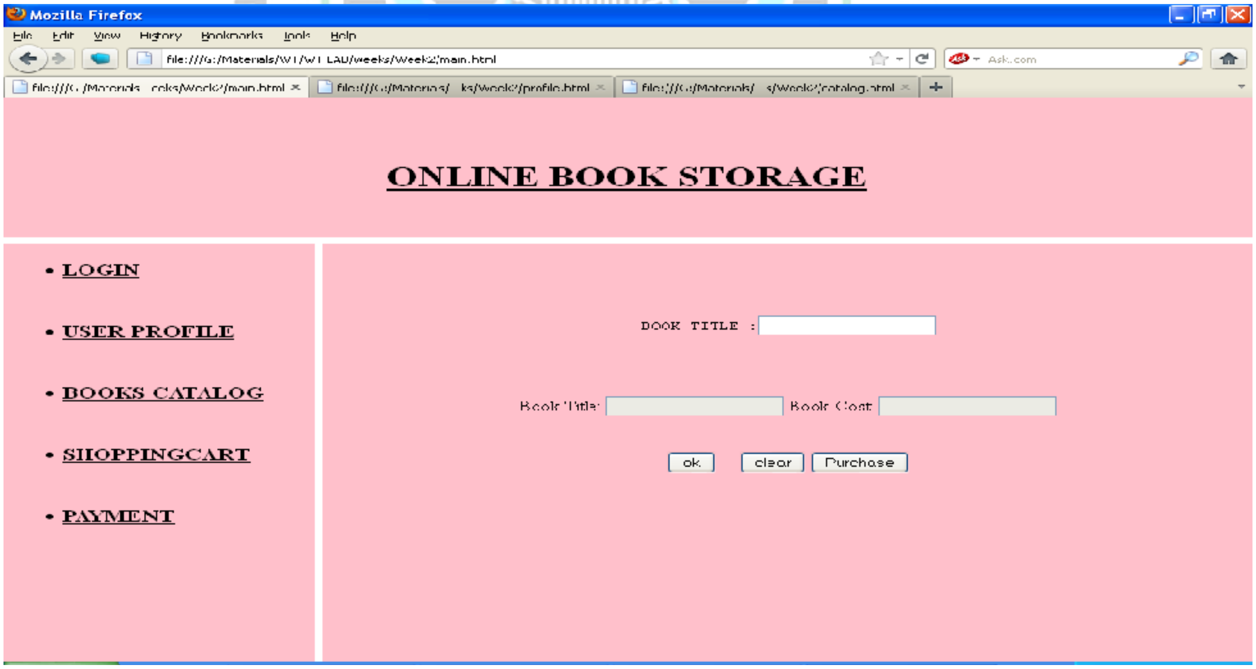
LOGIN ID: phani

PASSWORD: •••••

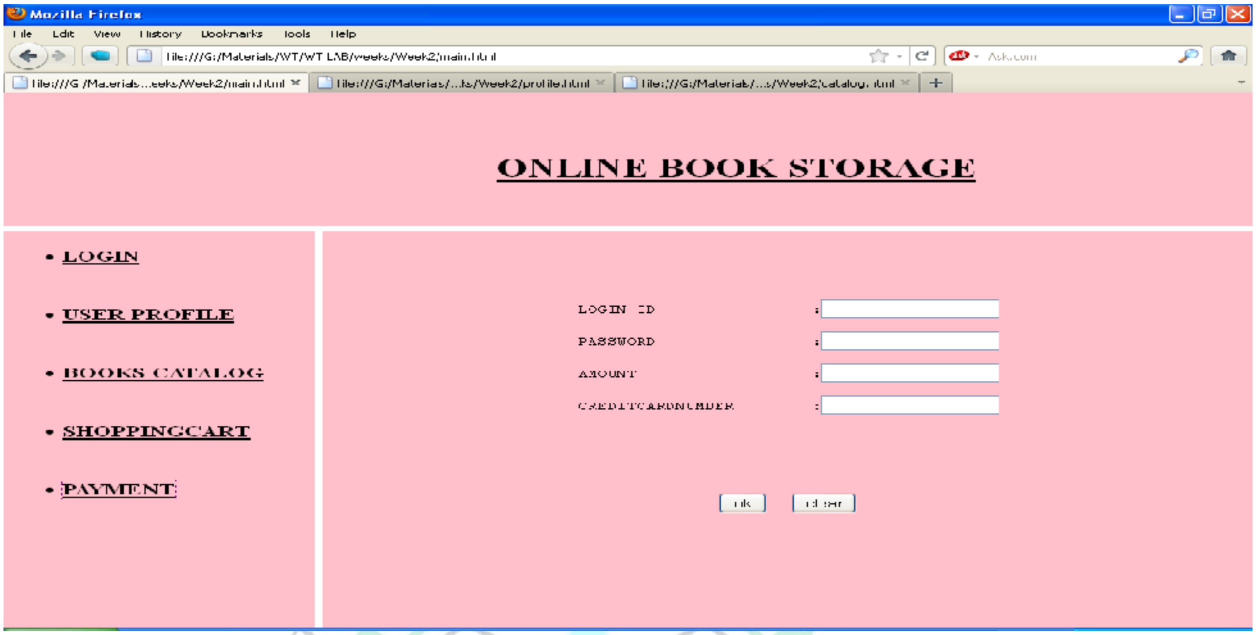
Catalog.html:



Scart.html:



Payment.html:

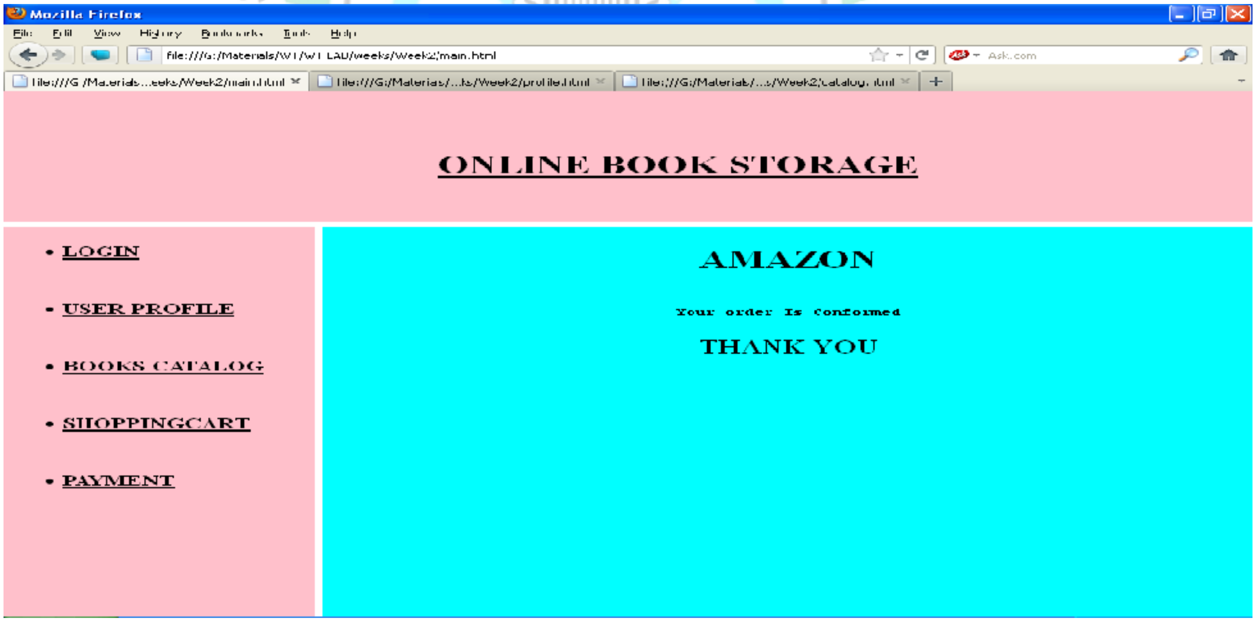

Mozilla Firefox
File Edit View History Bookmarks Tools Help
file:///G:/Materials/WT/WT LAB/weeks/Week2/main.html
Ask.com
ok
clear

ONLINE BOOK STORAGE

- LOGIN
- USER PROFILE
- BOOKS CATALOG
- SHOPPINGCART
- PAYMENT

LOGIN ID	:
PASSWORD	:
AMOUNT	:
CREDITCARDNUMBER	:

Order.html


Mozilla Firefox
File Edit View History Bookmarks Tools Help
file:///G:/Materials/WT/WT LAB/weeks/Week2/main.html
Ask.com

ONLINE BOOK STORAGE

- LOGIN
- USER PROFILE
- BOOKS CATALOG
- SHOPPINGCART
- PAYMENT

AMAZON

Your order Is Conformed

THANK YOU

WEEK-5.

AIM: Write an XML file which will display the Book information which includes the following:
1) Title of the book
2) Author Name
3) ISBN number
4) Publisher name
5) Edition
6) Price
Write a Document Type Definition (DTD) to validate the above XML file.

Display the XML file as follows.

The contents should be displayed in a table. The header of the table should be in color GREY. And the Author names column should be displayed in one color and should be capitalized and in bold. Use your own colors for remaining columns. Use XML schemas XSL and CSS for the above purpose.

1. Books.DTD:

```
<!ELEMENT details (title, author, ISBN_Number, publisher, edition, price) >
<!ELEMENT title (#PCDATA)>
<!ELEMENT author (#PCDATA)>
<!ELEMENT ISBN_Number (#PCDATA)>
<!ELEMENT  publisher (#PCDATA)>
<!ELEMENT edition (#PCDATA)>
<!ELEMENT price (#PCDATA)>
```

2. Th.CSS

```
.thb
{
background-color:gray;
}
.bg
{
background-color:red;
}
```

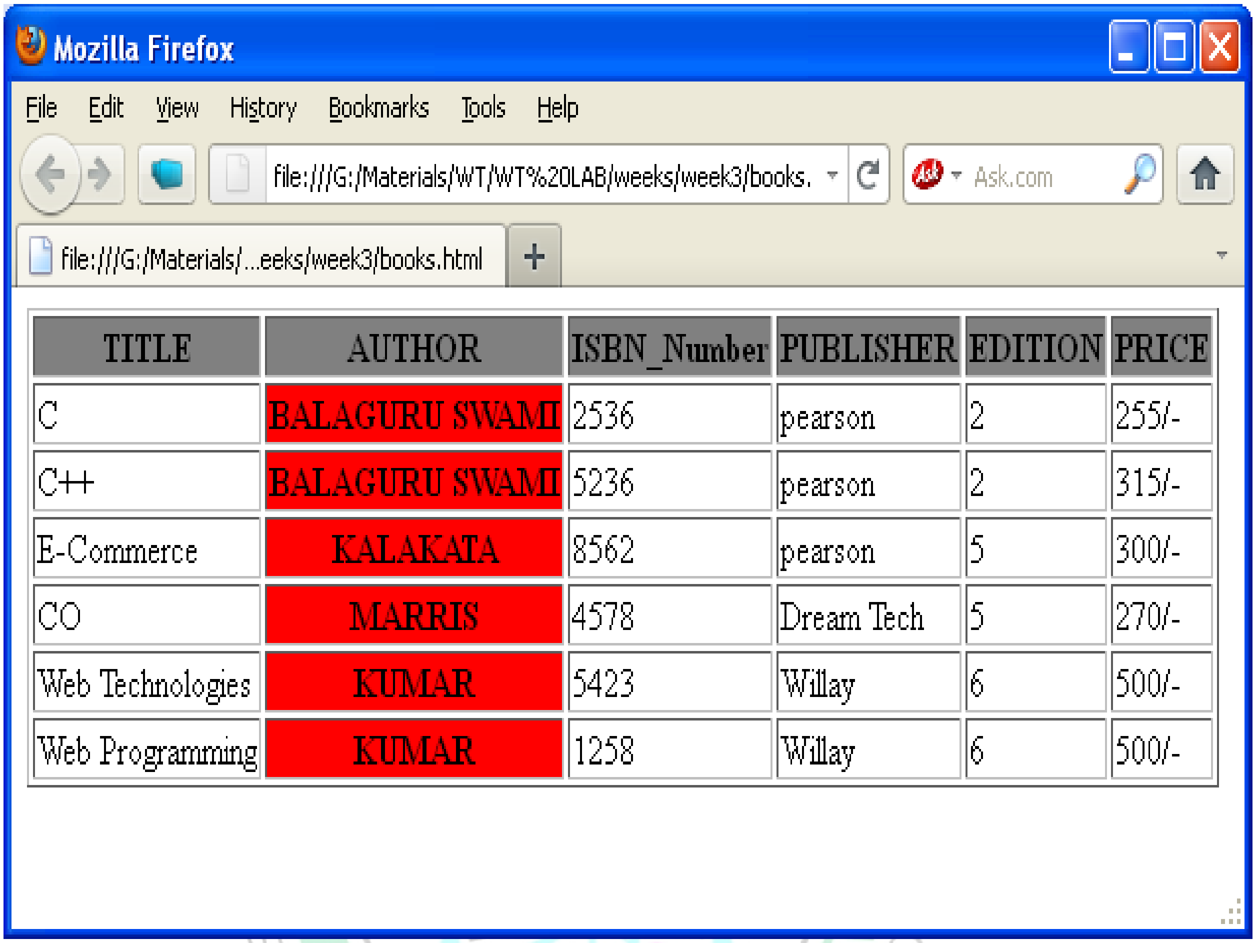
3. Books.XML:

```
<?xml version="1.0"?>
<!DOCTYPE book SYSTEM "books.dtd">
<book>
        <details>
                <title> C</title>
                <author> BalaGuru Swami</author>
                <ISBN_Number>2536</ISBN_Number>
                <publisher>pearson</publisher>
                <edition>2</edition>
                <price>255/-</price>
        </details>
        <details>
                <title> C++</title>
                <author> BalaGuru Swami</author>
                <ISBN_Number>5236</ISBN_Number>
                <publisher>pearson</publisher>
                <edition>2</edition>
                <price>315/-</price>
        </details>

        <details>
                <title> E-Commerce</title>
                <author> Kalakata</author>
                <ISBN_Number>8562</ISBN_Number>
                <publisher>pearson</publisher>
                <edition>5</edition>
                <price>300/-</price>
        </details>
        <details>
                <title> CO</title>
                <author> Marris </author>
                <ISBN_Number>4578</ISBN_Number>
                <publisher>Dream Tech</publisher>
                <edition>5</edition>
                <price>270/-</price>
        </details>
        <details>
                <title> Web Technologies</title>
                <author> Kumar </author>
                <ISBN_Number>5423</ISBN_Number>
                <publisher>Willay</publisher>
                <edition>6</edition>
                <price>500/-</price>
        </details>
        <details>
                <title> Web Programming</title>
                <author> Kumar </author>
                <ISBN_Number>1258</ISBN_Number>
                <publisher>Willay</publisher>
                <edition>6</edition>
                <price>500/-</price>
        </details>
</book>
```

4. **Books.HTML:**

```
<html>
<head>
<link rel="stylesheet" type="text/css" href="th.css">
</head>
<body>

<script type="text/javascript">

if (window.XMLHttpRequest)
  {// code for IE7+, Firefox, Chrome, Opera, Safari
  xmlhttp=new XMLHttpRequest();
  }
else
  {// code for IE6, IE5
  xmlhttp=new ActiveXObject("Microsoft.XMLHTTP");
  }
xmlhttp.open("GET","books.xml",false);
xmlhttp.send();
xmlDoc=xmlhttp.responseXML;

document.write("<table border='1'>");
var x=xmlDoc.getElementsByTagName("details")
document.write("<tr><th class='thb'>");
document.write("TITLE</th><th class='thb'>AUTHOR</th><th
class='thb'>ISBN_Number</th><th class='thb'>PUBLISHER</th><th
class='thb'>EDITION</th><th class='thb'>PRICE</th></tr>");
for (i=0;i<x.length;i++)
  {
  document.write("<tr><td>");
  document.write(x[i].getElementsByTagName("title")[0].childNodes[0].nodeValue);
  document.write("</td><th class='bg'>");
document.write(x[i].getElementsByTagName("author")[0].childNodes[0].nodeValue.toUpperCase());
  document.write("</th><td>");

document.write(x[i].getElementsByTagName("ISBN_Number")[0].childNodes[0].nodeValue);
  document.write("</td><td>");

document.write(x[i].getElementsByTagName("publisher")[0].childNodes[0].nodeValue);
  document.write("</td><td>");
  document.write(x[i].getElementsByTagName("edition")[0].childNodes[0].nodeValue);
  document.write("</td><td>");
  document.write(x[i].getElementsByTagName("price")[0].childNodes[0].nodeValue);
  document.write("</td></tr>");

  }
document.write("</table>");
</script>

</body>
</html>
```

OUTPUT:


Mozilla Firefox
File Edit View History Bookmarks Tools Help
file:///G:/Materials/WT/WT%20LAB/weeks/week3/books.
Ask.com
file:///G:/Materials/...eeks/week3/books.html
+

TITLE	AUTHOR	ISBN_Number	PUBLISHER	EDITION	PRICE
C	BALAGURU SWAMI	2536	pearson	2	255/-
C++	BALAGURU SWAMI	5236	pearson	2	315/-
E-Commerce	KALAKATA	8562	pearson	5	300/-
CO	MARRIS	4578	Dream Tech	5	270/-
Web Technologies	KUMAR	5423	Willay	6	500/-
Web Programming	KUMAR	1258	Willay	6	500/-

Week-6:

VISUAL BEANS:

Create a simple visual bean with a area filled with a color. The shape of the area depends on the property shape. If it is set to true then the shape of the area is Square and it is Circle, if it is false. The color of the area should be changed dynamically for every mouse click.

Process:

Create a New Bean

Here are the steps that you must follow to create a new Bean:
1. Create a directory for the new Bean.
2. Create the Java source file(s).
3. Compile the source file(s).
4. Create a manifest file.
5. Generate a JAR file.
6. Start the BDK.
7. Test.

The following sections discuss each of these steps in detail.

Create a Directory for the New Bean

You need to make a directory for the Bean. To follow along with this example, create **colors directory**. Then change to that directory.

Create the Source File for the New Bean

The source code for the **Colors** component is shown in the following listing. It is located in the file **Colors.java**.

The color of the component is determined by the private **Color** variable **color**, and its shape is determined by the private **boolean** variable **rectangular**. The constructor defines an anonymous inner class that extends **MouseAdapter** and overrides its **mousePressed( )** method. The **change( )** method is invoked in response to mouse presses. The component is initialized to a rectangular shape of 200 by 100 pixels.

The **change( )** method is invoked to select a random color and repaint the component. The **getRectangular( )** and **setRectangular( )** methods provide access to the one property of this Bean. The **change( )** method calls **randomColor( )** to choose a color and then calls **repaint( )** to make the change visible. Notice that the **paint( )** method uses the **rectangular** and **color** variables to determine how to present the Bean.

SOURCE CODE:- Colors.java:

```
import java.awt.*;
import java.awt.event.*;
public class Colors extends Canvas
{
transient private Color color;
private boolean rectangular;
public Colors()
{
addMouseListener(new MouseAdapter() {
public void mousePressed(MouseEvent me) {
change();
}
});
rectangular = false;
setSize(200, 100);
change();
}
public boolean getRectangular()
{
return rectangular;
}
public void setRectangular(boolean flag)
{
this.rectangular = flag;
repaint();
}
public void change()
{
color = randomColor();
repaint();
}
private Color randomColor()
{
int r = (int)(255*Math.random());
int g = (int)(255*Math.random());
int b = (int)(255*Math.random());
return new Color(r, g, b);
}
public void paint(Graphics g)
{
Dimension d = getSize();
int h = d.height;
int w = d.width;
g.setColor(color);
if(rectangular)
{
g.fillRect(0, 0, w-1, h-1);
}
else
{
g.fillOval(0, 0, w-1, h-1);
}
}
}
```

Compile the Source Code for the New Bean

Compile the source code to create a class file. Type the following:
javac Colors.java.

Create a Manifest File

You must now create a manifest file. Put the source code for your manifest file in the file **colors.mft**.
It is shown here:

```
Manifest-Version: 1.0
Name: Colors.class
Java-Bean: True
```

This file indicates that there is one **.class** file in the JAR file and that it is a Java Bean. Notice that the **Colors.class** file in the current directory.

Generate a JAR File

Beans are included in the ToolBox window of the BDK only if they are in JAR files in the directory **c:\bdk\jars**. These files are generated with the jar utility.
Enter the following:

jar cvfm colors.jar colors.mft *.class

This command creates the file **colors.jar.**

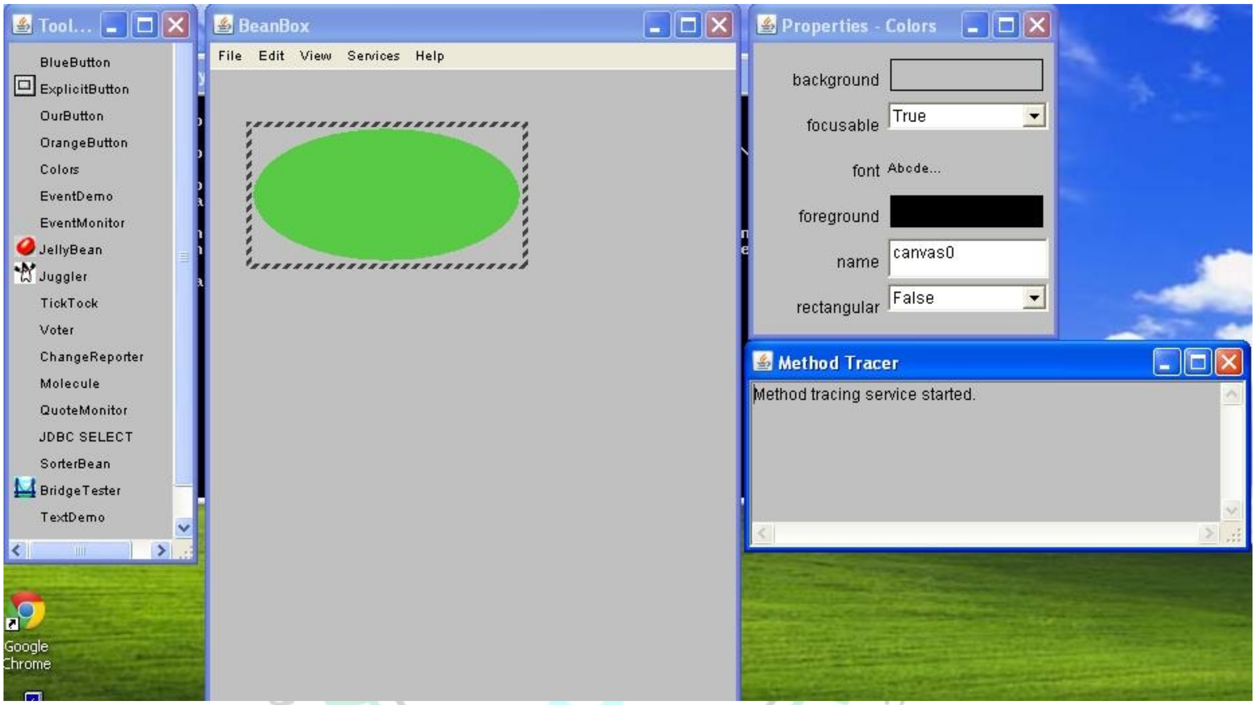
Start the BDK

Change to the directory **c:\bdk\beanbox** and type **run**. This causes the BDK to start. You should see three windows, titled ToolBox, BeanBox, and Properties. The ToolBox window should include an entry labeled "Colors" for your new Bean.

Create an Instance of the Colors Bean

After you complete the preceding steps, create an instance of the **Colors** Bean in the BeanBox window. Test your new component by pressing the mouse anywhere within its borders. Its color immediately changes. Use the Properties window to change the **rectangular** property from **false** to **true**. Its shape immediately changes.

Screen shot for circle:



background

focusable True

font Abcde...

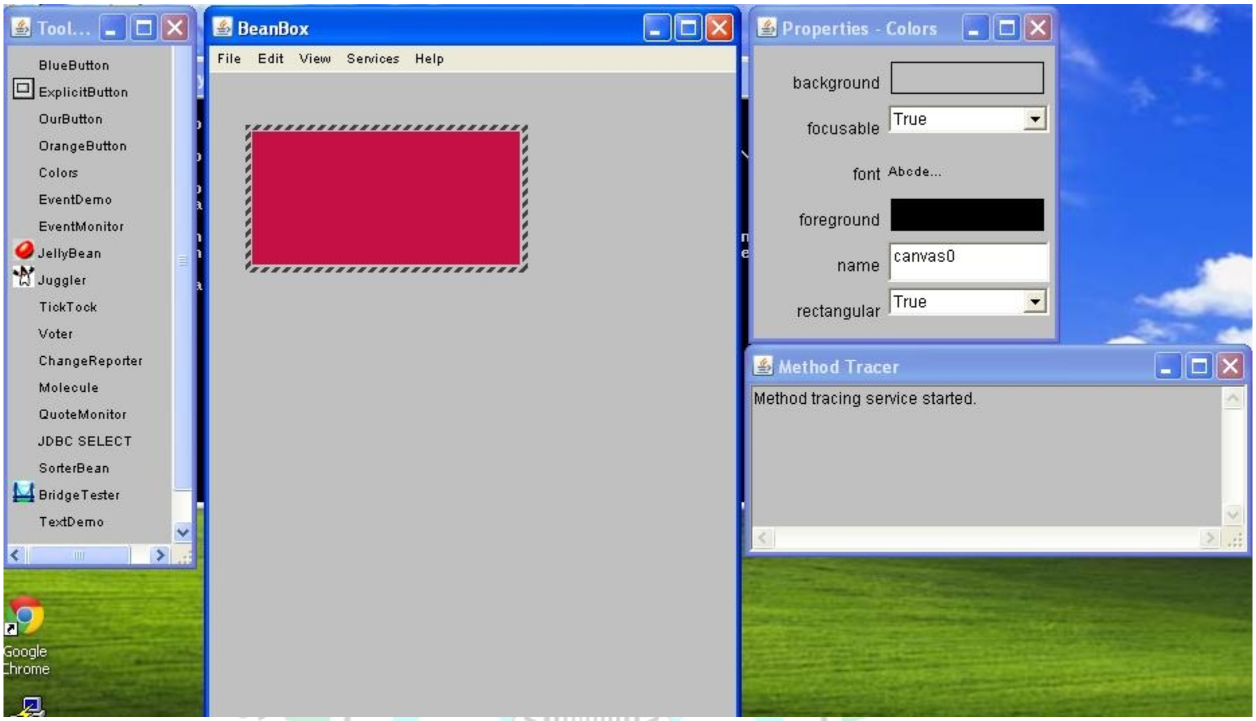
foreground

name canvas0

rectangular False

Method tracing service started.

Screen shot for triangle:



background

focusable True

font Abcde...

foreground

name canvas0

rectangular True

```
Method tracing service started.
```

Week-7:

1) Install TOMCAT web server. While installation assign port number 8080. Make sure that these ports are available i.e., no other process is using this port.
2) Access the above developed static web pages for books web site, using these servers by Putting the web pages developed in week-1 and week-2 in the document root.
Access the pages by using the urls : http://localhost:8080/rama/books.html

1. Install the TOMCAT web server:

Step 1:

Installation of JDK:

Before beginning the process of installing Tomcat on your system, ensure first the availability of JDK on your system program directory. Install it on your system if not already installed (because any version of tomcat requires the Java 1.6 or higher versions) and then set the class path (environment variable) of JDK. To set the **JAVA_HOME Variable:** you need to specify the location of the java run time environment to support the Tomcat else Tomcat server can not run.

This variable contains the path of JDK installation directory.

```
set JAVA_HOME=C:\Program Files\Java\jdk1.6
```

Note: it should not contain the path up to bin folder. Here, we have taken the URL path according to our installation convention.
For Windows OS, go through the following steps:

First, right click on the

My Computer->properties->advance->Environment
Variables->New->set the Variable name =
JAVA_HOME and variable value = C:\Program
Files\Java\jdk1.6

Now click on all the subsequent ok buttons one by one. It will set the JDK path.

Step 2:

For setting the class path variable for JDK, do like this:

First, right click on the

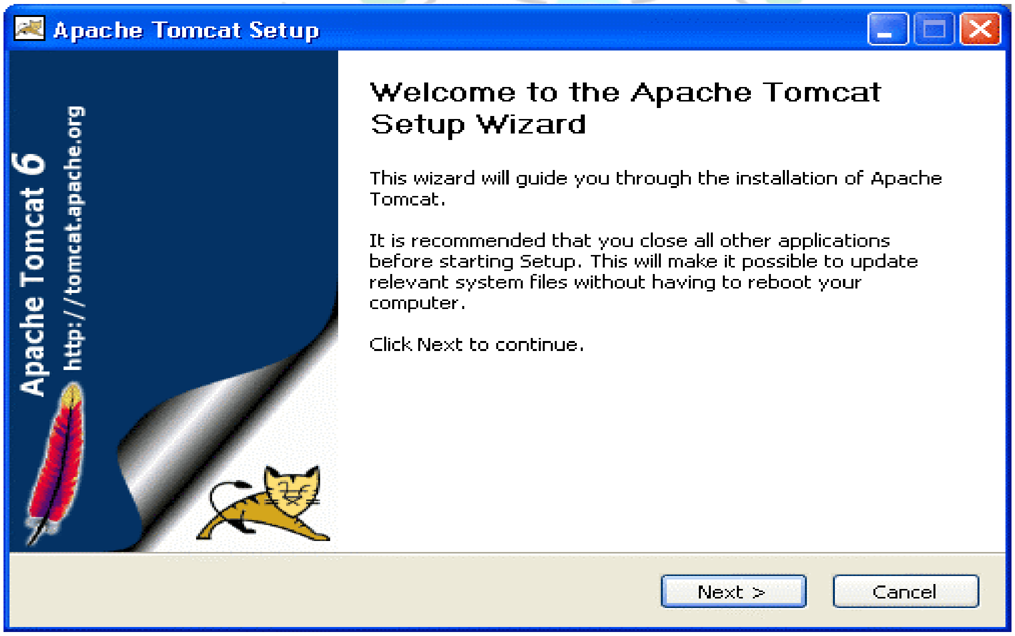
My Computer->properties->advance->Environment Variables->path.

Now, set bin directory path of JDK in the path variable

Step 3:

The process of installing Tomcat 6.0 begins here from now. It takes various steps for installing and configuring the Tomcat 6.0.

For Windows OS, Tomcat comes in two forms: .zip file and .exe file (the Windows installer file). Here we are exploring the installation process by using the .exe file. First unpack the zipped file and simply execute the '.exe' file.



Welcome to the Apache Tomcat Setup Wizard

This wizard will guide you through the installation of Apache Tomcat.

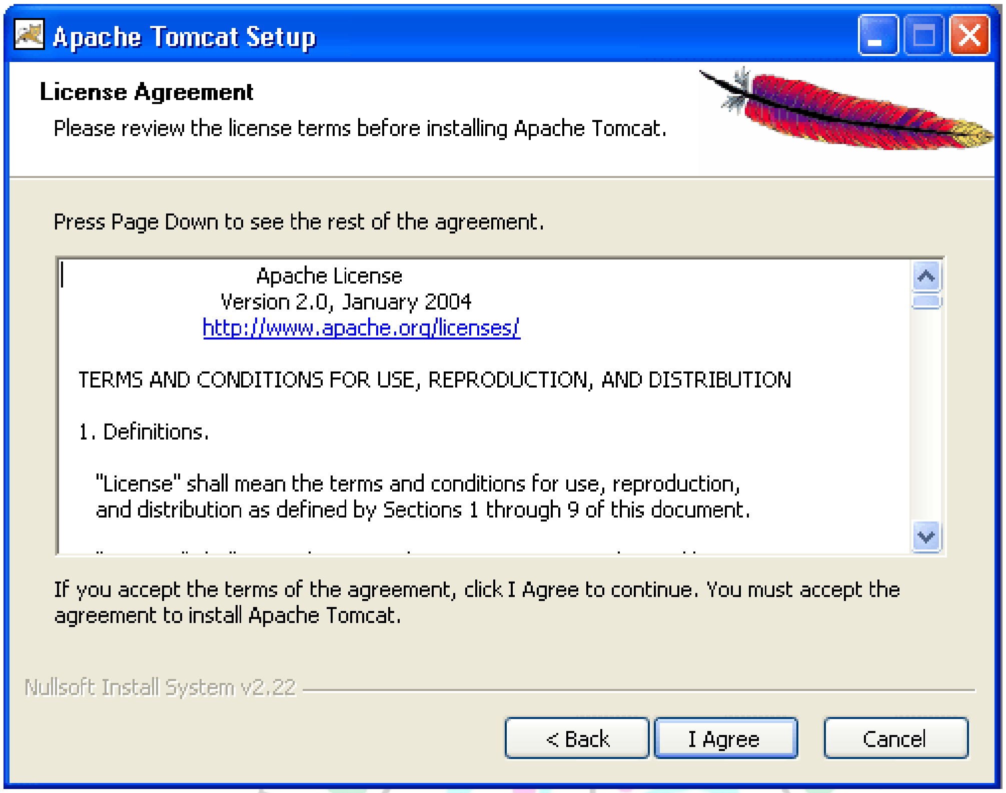
It is recommended that you close all other applications before starting Setup. This will make it possible to update relevant system files without having to reboot your computer.

Click Next to continue.

A Welcome screen shot appears that shows the beginning of installation process. Just click on the 'Next' button to proceed the installation process.

Steps 4:

A screen of 'License Agreement' displays.



Apache Tomcat Setup

License Agreement

Please review the license terms before installing Apache Tomcat.

Press Page Down to see the rest of the agreement.

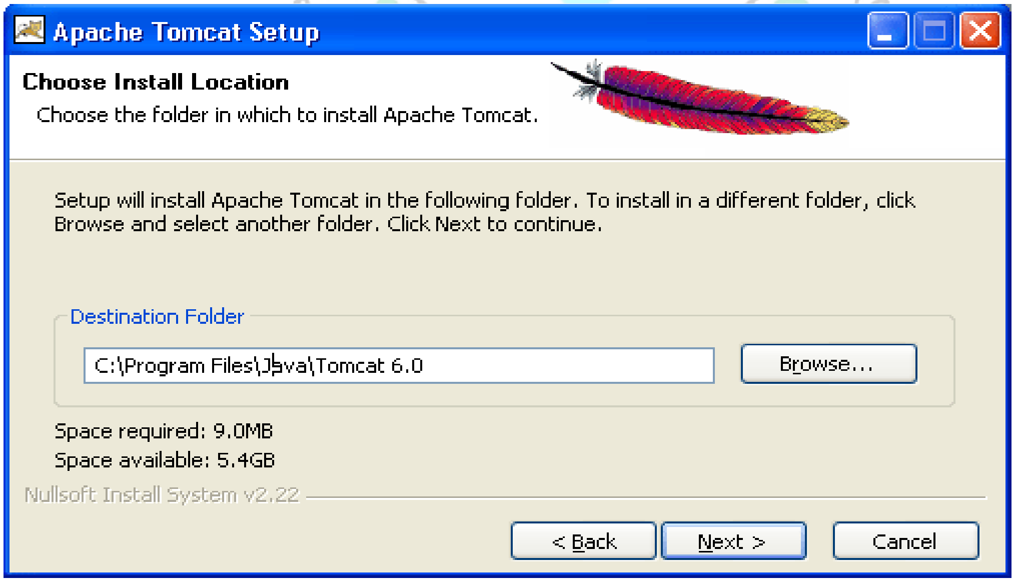
```
                    Apache License
                Version 2.0, January 2004
              http://www.apache.org/licenses/

 TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

 1. Definitions.

   "License" shall mean the terms and conditions for use, reproduction,
   and distribution as defined by Sections 1 through 9 of this document.
```

If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install Apache Tomcat.

Click on the 'I Agree' button.

Step 5:

A screen shot appears asking for the 'installing location'



Apache Tomcat Setup

Choose Install Location

Choose the folder in which to install Apache Tomcat.

Setup will install Apache Tomcat in the following folder. To install in a different folder, click Browse and select another folder. Click Next to continue.

Destination Folder: C:\Program Files\Java\Tomcat 6.0

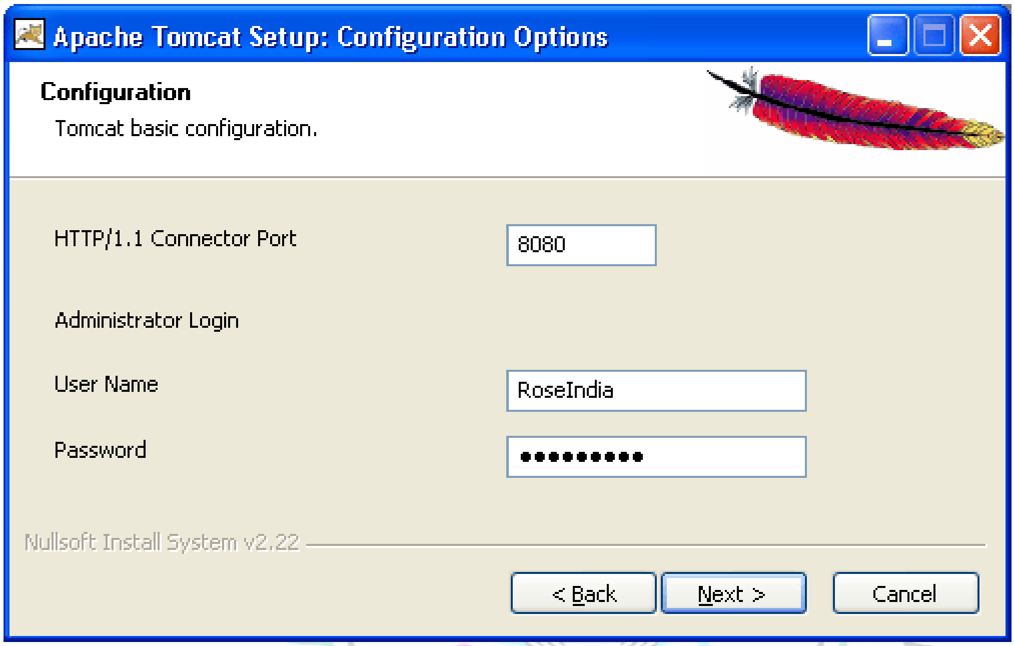
Space required: 9.0MB

Space available: 5.4GB

Choose the default components and click on the 'Next' button.

Step 6:

A screen shot of 'Configuration Options' displays on the screen. Choose the location for the Tomcat files as per your convenience. You can also opt the default Location



Apache Tomcat Setup: Configuration Options

Configuration

Tomcat basic configuration.

HTTP/1.1 Connector Port: 8080

Administrator Login

User Name: RoseIndia

Password: ••••••••••

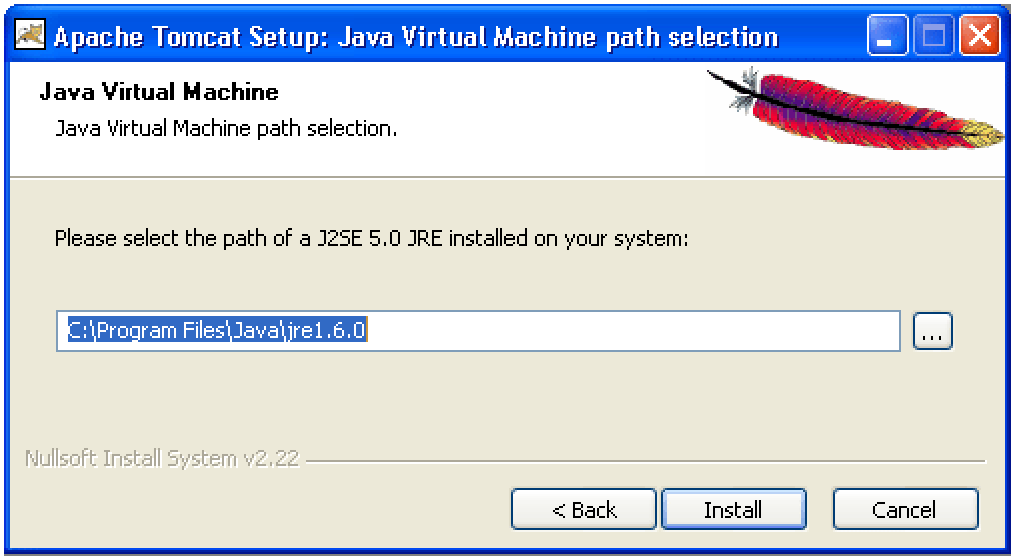
The port number will be your choice on which you want to run the tomcat server. The port number 8080 is the default port value for tomcat server to proceed the HTTP requests. The user can also change the 'port number' after completing the process of installation; for this, users have to follow the following tips.

Go to the specified location as " **Tomcat 6.0 \conf \server.xm**l ". Within the server.xml file choose "Connector" tag and change the port number.

Now, click on the 'Next' button to further proceed the installation process.

Step 7:

A Window of Java Virtual Machine displays on the screen



Apache Tomcat Setup: Java Virtual Machine path selection

Java Virtual Machine

Java Virtual Machine path selection.

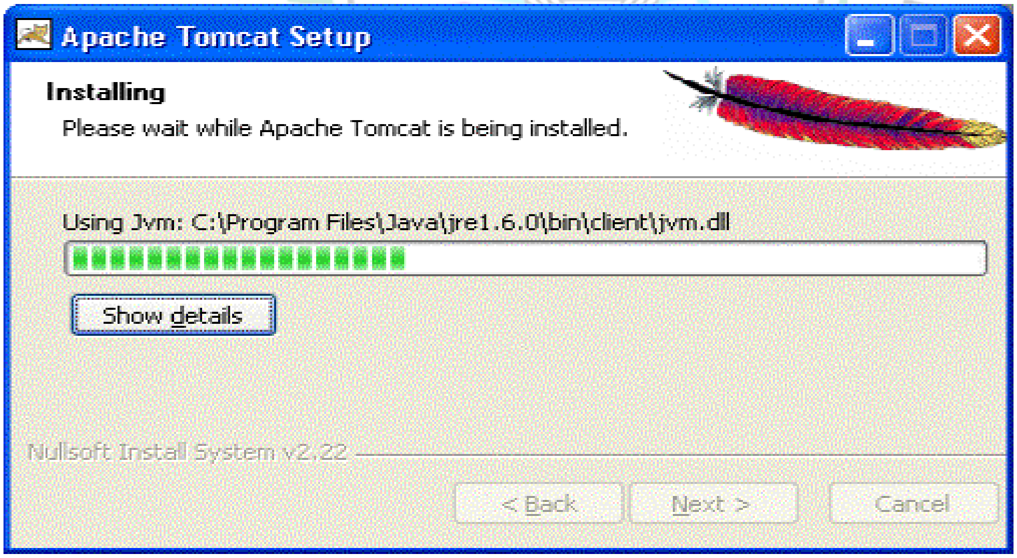
Please select the path of a J2SE 5.0 JRE installed on your system:

C:\Program Files\Java\jre1.6.0

This window asks for the location of the installed Java Virtual Machine. Browse the location of the JRE folder and click on the Install button. This will install the Apache tomcat at the specified location.

Step 8:

A processing window of installing displays on the screen.



Apache Tomcat Setup

Installing

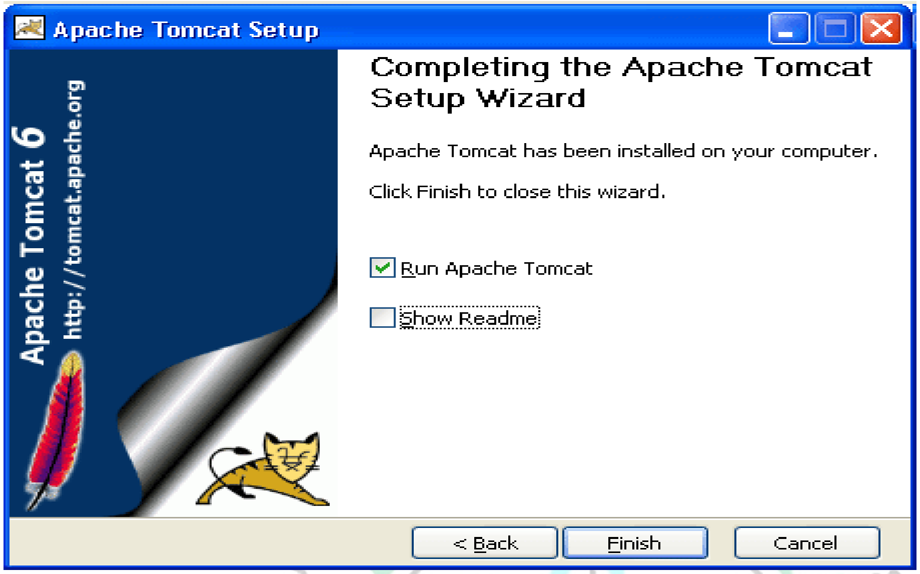
Please wait while Apache Tomcat is being installed.

Using Jvm: C:\Program Files\Java\jre1.6.0\bin\client\jvm.dll

To get the information about installer click on the "Show details" button

Step 9:

A screen shot of 'Tomcat Completion' displays on the screen.


Apache Tomcat Setup

Completing the Apache Tomcat Setup Wizard

Apache Tomcat has been installed on your computer.

Click Finish to close this wizard.

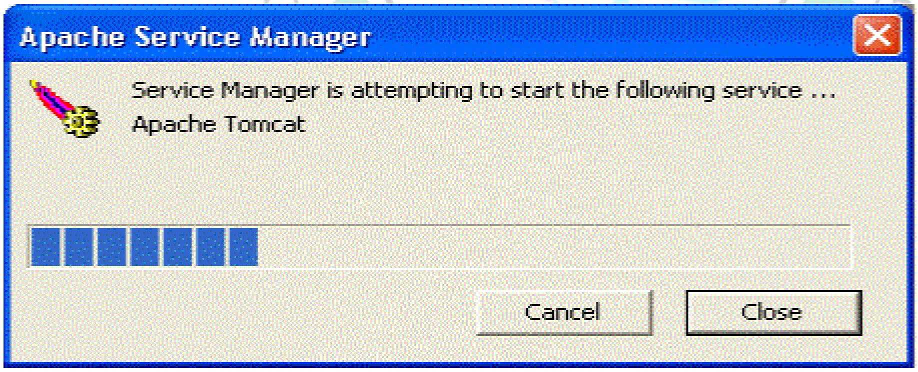
☑ Run Apache Tomcat

□ Show Readme

Click on the 'Finish' button.

Step 10:

A window of Apache Service Manager appears with displaying the running process.

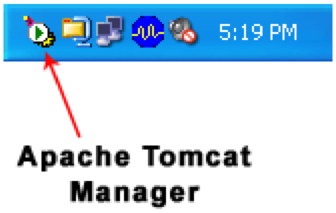

Apache Service Manager

Service Manager is attempting to start the following service ...
Apache Tomcat

Let the running process goes on.

Step 11:

After completing the installation process, the Apache Tomcat Manager appears on the toolbar panel like shown in the below picture.



Start the Tomcat Server:

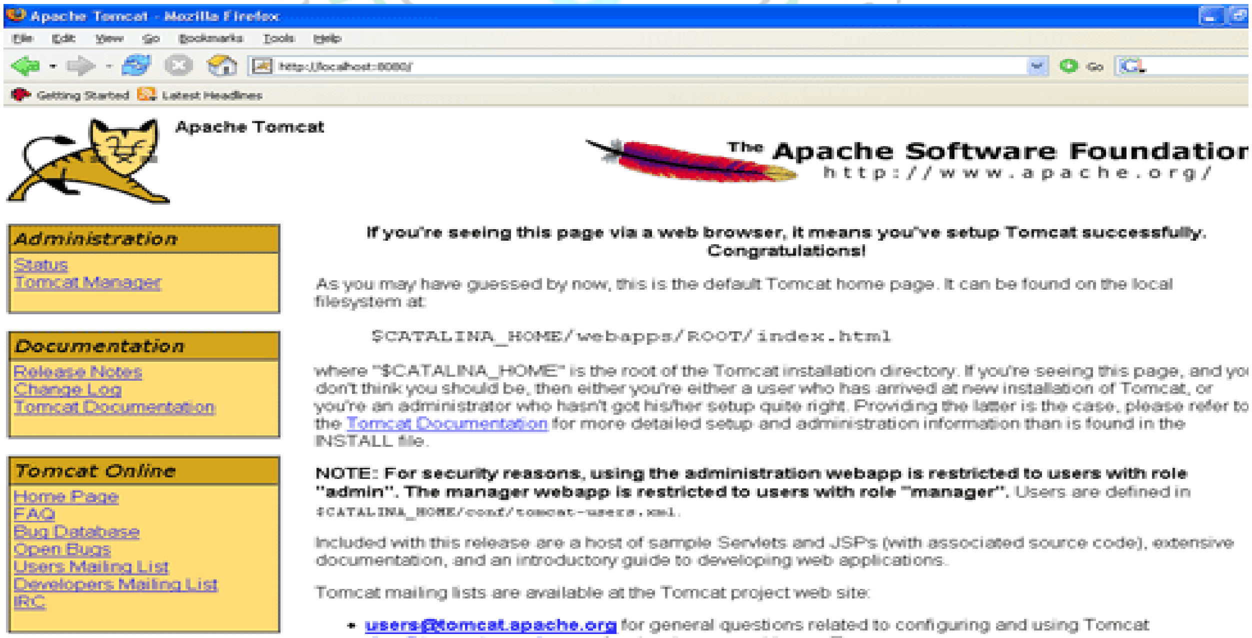
1.Start the tomcat server from the bin folder of Tomcat 6.0 directory by double clicking the "tomcat6.exe" file.

OR create a shortcut of this .exe file at your desktop.

2. Now Open web browser and type URL http://localhost:8080 in the address bar to test the server

3. To Stop the Tomcat Server: Stop the server by pressing the "Ctrl + c" keys.

The screen of Apache Tomcat software looks like this:



If you're seeing this page via a web browser, it means you've setup Tomcat successfully. Congratulations!

As you may have guessed by now, this is the default Tomcat home page. It can be found on the local filesystem at:

```
$CATALINA_HOME/webapps/ROOT/index.html
```

where "$CATALINA_HOME" is the root of the Tomcat installation directory. If you're seeing this page, and yo don't think you should be, then either you're either a user who has arrived at new installation of Tomcat, or you're an administrator who hasn't got his/her setup quite right. Providing the latter is the case, please refer to the Tomcat Documentation for more detailed setup and administration information than is found in the INSTALL file.

NOTE: For security reasons, using the administration webapp is restricted to users with role "admin". The manager webapp is restricted to users with role "manager". Users are defined in `$CATALINA_HOME/conf/tomcat-users.xml`.

Included with this release are a host of sample Servlets and JSPs (with associated source code), extensive documentation, and an introductory guide to developing web applications.

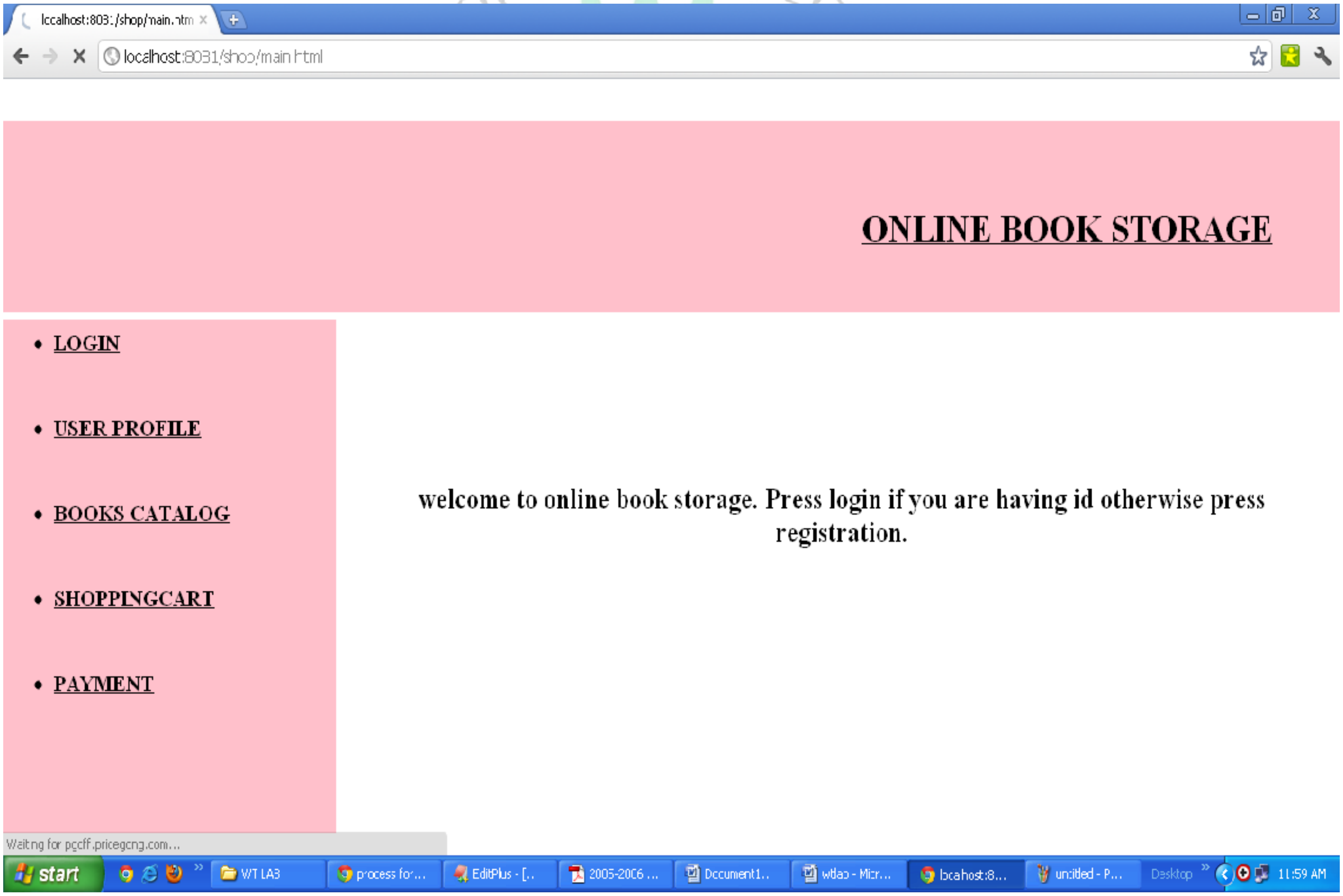
Tomcat mailing lists are available at the Tomcat project web site:

- users@tomcat.apache.org for general questions related to configuring and using Tomcat

PROCEDURE:

1. First install the tomcat into the system.
2. Then make a sub directory(eg., books) in the \tomcat\webapps.
3. Under books create WEB-INF directory and also place week1 programs in this books directory only.
4. After this start tomcat by giving the following command at the instll_dir>tomcat>bin
5. Catalina.bat run
6. At the I.E(web browser) give the url as http://localhost:8080/ books /main.html
7. Port no 8080 is assigned for the tomcat.

Screen shot:



ONLINE BOOK STORAGE

- LOGIN
- USER PROFILE
- BOOKS CATALOG
- SHOPPINGCART
- PAYMENT

welcome to online book storage. Press login if you are having id otherwise press registration.

Week-8:
User Authentication :

Assume four users user1, user2, user3 and user4 having the passwords pwd1, pwd2, pwd3 And, pwd4 respectively. Write a servelet for doing the following.

1. Create a Cookie and add these four user id's and passwords to this Cookie.
2. Read the user id and passwords entered in the Login form (week1) and authenticate with the values (user id and passwords) available in the cookies.

If he is a valid user(i.e., user-name and password match) you should welcome him by name(user-name) else you should display " You are not an authenticated user ".

PROCEDURE:

1. First install the tomcat into the system.
2. Then make a subdirectly(eg., tr) in the \tomcat\webapps.
3. Under tr create WEB-INF directory and also place the html files in this tr directory only.
4. Next under WEB-INF create two subclasses lib,classes and web.xml
5. Next place all the class files under the classes and jar files(servlet-api.jar,classes12.jar etc…) under lib subdirectories.
6. After this start tomcat by giving the following command at the instll_dir>tomcat>bin
7. Catalina.bat run
8. At the I.E(web browser) give the url as http;//localhost:8080//tr/htmlfile or servlet url pattern
9. Portno 8080 is assigned for the tomcat.

Login.html:

```
<html>

<body bgcolor="pink">

<form action="show" method="get">

<center>User Name: <input type="test" name="name"><br>

Password:<input type="password" name="pass"><br>

<input type="submit" name="b1">

<input type="Button" name="b2" value="Reset">

</center>

</form>

</body>

</html>
```

Login.java:

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
/** Example using servlet initialization. Here, the message
 *  to print and the number of times the message should be
 *  repeated is taken from the init parameters.
 */
public class login extends HttpServlet
{
        public void doPost(HttpServletRequest request, HttpServletResponse response)
         throws ServletException, IOException
        {
         response.setContentType("text/html");
          String na=request.getParameter("name");
          String pa=request.getParameter("pass");
          PrintWriter out = response.getWriter();
          Cookie nam1=new Cookie("user1","pace");
          Cookie nam2=new Cookie("user2","phani");
          Cookie nam3=new Cookie("user3","cse");
          Cookie nam4=new Cookie("user4","ece");
          Cookie pas1=new Cookie("pwd1","college");
          Cookie pas2=new Cookie("pwd2","kumar");
          Cookie pas3=new Cookie("pwd3","it");
          Cookie pas4=new Cookie("pwd4","eee");
          int flag=0;
          String nam[]={nam1.getValue(),nam2.getValue(),nam3.getValue(),nam4.getValue()};
          String pas[]={pas1.getValue(),pas2.getValue(),pas3.getValue(),pas4.getValue()};
        for(int i=0;i<4;i++)
          {
               if(nam[i].equals(na)&&pas[i].equals(pa))
               {
                 flag=1;
               }
        }
        if(flag==1)
        {
                 out.println("<title>The ShowMessage Servlet</title>");
               out.println("<BODY BGCOLOR=\"#FDF5E6\">\n" +"<H1 ALIGN=CENTER>
               WELCOME <br/>TO</br> " +na.toUpperCase() + "</H1>");
               out.println("</BODY></HTML>");
         }
         else
         {
                out.println("<title>The ShowMessage Servlet</title>");
               out.println("<BODY BGCOLOR=\"#FDF5E6\">\n" + "<H1 ALIGN=CENTER>
               User is invalid </H1>");
                 out.println("</BODY></HTML>");
        }

    }
}
```

Web.xml:

```
<web-app>
        <servlet>
                <servlet-name>log </servlet-name>
                <servlet-class>login </servlet-class>
        </servlet>
        <servlet-mapping>
                <servlet-name>log </servlet-name>
                <url-pattern> /show </url-pattern>
        </servlet-mapping>
</web-app>
```

Create a directory:

Create a directory “cookies”, in that directory copy login.html file and create a directory a ”WEB-INF”. In that WEB-INF directory again create directory “classes” and copy web.xml file.

Compile the servlet:

Compile the servlet file then copy the class file of that servlet into the directory

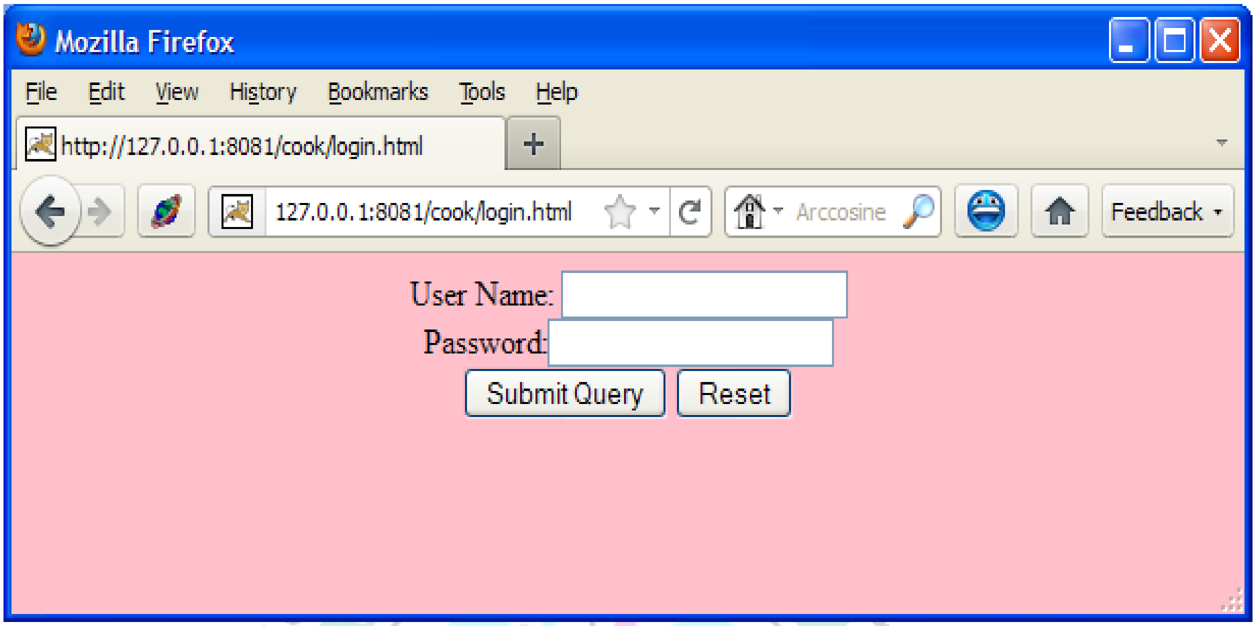
C:\Program Files\Apache Software Foundation\Tomcat 6.0\cookies\WEB-INF\classes.

Open the server:

1. Start tomcat by giving the following command at the instll_dir>tomcat>bin Catalina.bat run
2. At the I.E(web browser) give the url as http://localhost:8080/ cookies /login.html

OUTPUT:

Login.html:

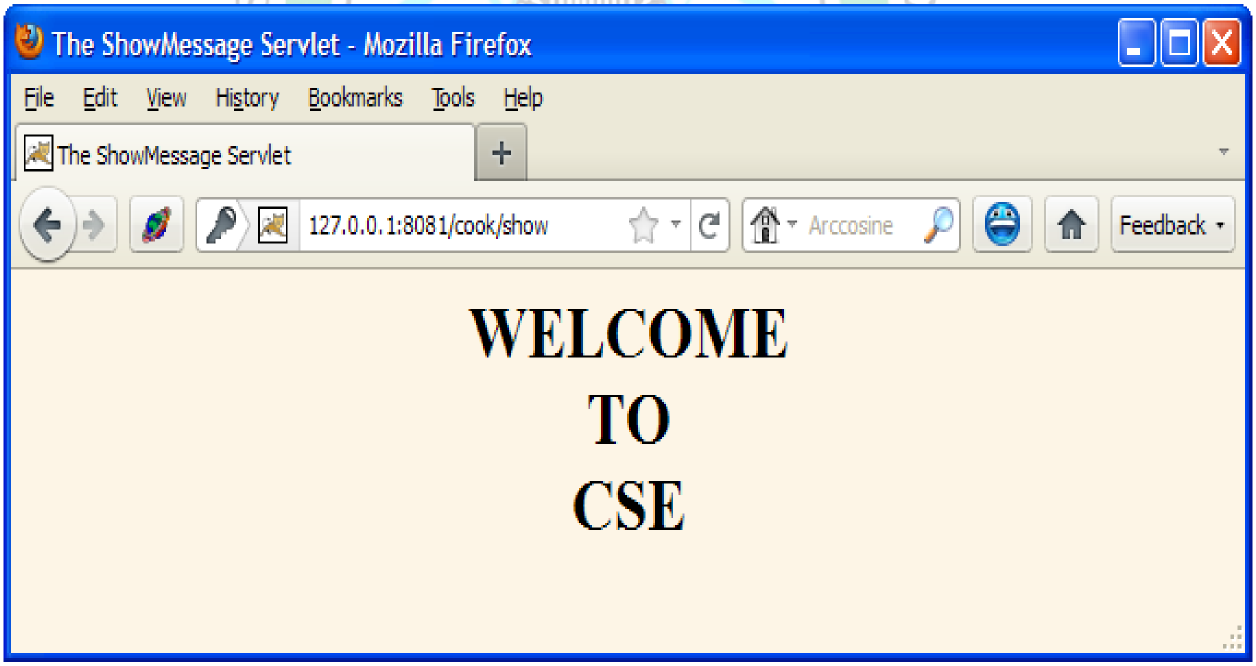

Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://127.0.0.1:8081/cook/login.html
127.0.0.1:8081/cook/login.html
Arccosine
Feedback

User Name:

Password:

Submit Query Reset

Login.java:


The ShowMessage Servlet - Mozilla Firefox
File Edit View History Bookmarks Tools Help
The ShowMessage Servlet
127.0.0.1:8081/cook/show
Arccosine
Feedback

WELCOME

TO

CSE

Week-9:

Install a database(Mysql or Oracle).
Create a table which should contain at least the following fields: name, password, email-id, phone number(these should hold the data from the registration form).

Practice 'JDBC' connectivity.
Write a java program/servlet/JSP to connect to that database and extract data from the tables and display them. Experiment with various SQL queries. Insert the details of the users who register with the web site, whenever a new user clicks the submit button in the registration page (week2).

Main.html:

```
<html>
<body>
<br /><br /><br /><br /><br />
<h1 align="center"><U>ONLINE BOOK STORAGE</U></h1><br/><br /><br />
<h2 align="center"><pre>
<b>Welcome to online book storage.
Press LOGIN if you are having id
otherwise press REGISTRATION
</b></pre></h2>
<br /><br /><pre>
<div align="center"><a href="login.html">LOGIN</a> <a href="reg.html">
REGISTRATION</a></div></pre>
</body>
</html>
```

login.html:

```
<html>
<body><br /><br /><br />
<form name="myform" method="post" action="login">
<div align="center"><pre>
LOGIN ID :<input type="text" name="id" /><br />
PASSWORD :<input type="password" name="pwd" /></pre><br /><br />
</div>
<br /><br />
<div align="center">
<input type="submit" value="ok"/>
&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;<input type="reset" value="clear" />
</div>
</form>
</body>
</html>
```

Profile.html

```
<html>
<body><br /><br /><br />
<form name="myform" method="post" action="profile">
<div align="center"><pre>
LOGIN ID :<input type="text" name="id" /><br />
</pre><br /><br />
</div>
<br /><br />
<div align="center">
<input type="submit" value="ok" onclick="validate()" />
&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;<input type="reset" value="clear" />
</div>
</form>
</body>
</html>
```

Userinfo.html

```
<html>
<head>
<title>User Info Entry Form</title>
</head>
<body bgcolor="white">
<form action="userinfo1.jsp" method="post">
<table>
<tr>
<td>Name:</td>
<td><input type="text" name="userName" >
</td>
</tr>
<tr>
<td>Sex:</td>
<td><input type="text" name="sex" >
</td>
<td>(Male or female)</td>
</tr>
<tr>
<td colspan=2><input type="submit"></td>
</tr>
</table>
</form>
</body>
</html>
```

Reg.html

```
<html>
<body><br /><br />
<form name="myform" method="post" action="reg">
<table align="center" >

   <tr>
      <td>NAME</td>
      <td>:<input type="text" name="name" /></td>
   </tr>
   <tr>
      <td>ADDRESS</td>
      <td>:<input type="text" name="addr" /></td>
   </tr>
   <tr>
      <td>CONTACT NUMBER</td>
      <td>:<input type="text" name="phno" /></td>
   </tr>
   <tr>
      <td>LOGINID</td>
      <td>:<input type="text" name="id" /></td>
   </tr>
   <tr>
      <td>PASSWORD</td>
      <td>:<input type="password" name="pwd" /></td>
   </tr>
</table>
<br /><br />
<div align="center">
<input type="submit" value="ok" onclick="validate()" />
&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;<input type="reset" value="clear" />
</div>
</form>
</body>
</html>
```

login.java

```
import java.sql.*;
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class login extends HttpServlet
{
        public void service(HttpServletRequest req,HttpServletResponse resp)
        throws ServletException,IOException
        {
                PrintWriter pw=resp.getWriter();
                pw.println("<html><body>");
                String id=req.getParameter("id");
                String pwd=req.getParameter("pwd");
                String s1="",s2="";
                try
                {
                        Class.forName("oracle.jdbc.driver.OracleDriver");
                        Connection con=
                        DriverManager.getConnection("jdbc:oracle:thin:@localhost:1522:XE","system",
                        "tiger");
                        Statement stmt=con.createStatement();
                        String sqlstmt="select * from login";
                        ResultSet rs=stmt.executeQuery(sqlstmt);
                        int flag=0;
                        while(rs.next())
                        {
                                s1=rs.getString(4);
                                s2=rs.getString(5);
                        }

                                if(id.equals(s1)&&pwd.equals(s2))
                                {
                                        flag=1;
                                }

                        if(flag==0)
                        {
                        pw.println("<br><br>SORRY INVALID ID TRY AGAIN ID<br><br>");
                        pw.println("<a href=\"login.html\">press LOGIN to RETRY</a>");
                        }
                        else
                        {
                        pw.println("<br><br>WELCOME TO "+id.toUpperCase()+"<br><br>");
                        pw.println("<h3><ul>");
                        pw.println("<li><a href=\"profile.html\"><fontcolor=\"black\">
                                USER   PROFILE</font></a></li><br><br>");
                        pw.println("<li><a href=\"catalog.html\"><fontcolor=\"black\">BOOKS
                        CATALOG</font></a></li><br><br>");
                        pw.println("<li><a href=\"order.html\"> <fontcolor=\"black\">ORDER
                        CONFIRMATION</font></a></li></ul><br><br>");
                        }
                        pw.println("</body></html>");
                }
                catch(Exception e)
                {
                        resp.sendError(500,e.toString());
                }
        }
}
```

reg.java:

```
import java.sql.*;
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class  reg extends HttpServlet
{
        public void service(HttpServletRequest req, HttpServletResponse resp)
        throws ServletException,IOException
        {
                PrintWriter pw=resp.getWriter();
                resp.setContentType("text/html");
                pw.println("<html><body>");
                String name=req.getParameter("name");
                String addr=req.getParameter("addr");
                String phno=req.getParameter("phno");
                String id1=req.getParameter("id");
                String pwd1=req.getParameter("pwd");

                try
                {
                        Class.forName("oracle.jdbc.driver.OracleDriver");
                        Connection con=DriverManager.getConnection
                                ("jdbc:oracle:thin:@localhost:1522 :XE","system","tiger");
                        Statement stmt=con.createStatement();
                        String sqlstmt="select * from login";
                        ResultSet rs=stmt.executeQuery(sqlstmt);
                        int flag=0;
                        while(rs.next())
                        {


                                if(id1.equals(rs.getString(4))&&pwd1.equals(rs.getString(5)))
                                {
                                        flag=1;
                                }
                        }
                        if(flag==1)
                        {
                        pw.println("<br><br>SORRY INVALID ID ALREADY EXITS
                                                TRY AGAIN WITH NEW ID<br><br>");
                        pw.println("<a href=\"reg.html\">press REGISTER to RETRY</a>");
                        }
                        else
                        {
                        Statement stmt1=con.createStatement();
                        stmt1.executeUpdate("insert into login values
                                        ('"+name+"','"+addr+"','"+phno+"','"+id1+"','"+pwd1+"')");
                        pw.println("<br><br>YOUR DETAILS ARE ENTERED<br><br>");
                        pw.println("<a href=\"login.html\">press LOGIN to login</a>");
                        }
                        pw.println("</body></html>");
                }
                catch(Exception e)
                {
                        resp.sendError(500,e.toString());
                }
        }
}
```

Catalog.java:

```
import java.sql.*;
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class catalog extends HttpServlet
{
        public void service(HttpServletRequest req,HttpServletResponse resp)
        throws ServletException,IOException
        {
                PrintWriter pw=resp.getWriter();
                pw.println("<html><body>");
                String title=req.getParameter("title");
                try
                {
                        Class.forName("oracle.jdbc.driver.OracleDriver");
Connection con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1522:XE","system","tiger");
                        Statement stmt=con.createStatement();
                        String sqlstmt="select * from book where title=\'"+title+"\'";
                        ResultSet rs=stmt.executeQuery(sqlstmt);
                        int flag=0;
                        while(rs.next())
                        {
                                pw.println("<div align=\"center\">");
                                pw.println("TITLE                :"+rs.getString(1)+"<br>");
                                pw.println("AUTHOR             :"+rs.getString(2)+"<br>");
                                pw.println("VERSION            :"+rs.getString(3)+"<br>");
                                pw.println("PUBLISHER          :"+rs.getString(4)+"<br>");
                                pw.println("COST                 :"+rs.getString(5)+"<br>");
                                pw.println("</div>");
                                flag=1;
                        }
                        if(flag==0)
                        {
                        pw.println("<br><br>SORRY INVALID TITLE TRY AGAIN <br><br>");
```

```
			pw.println("<a href=\"catalog.html\">press HERE to RETRY</a>");
			}
			pw.println("</body></html>");
		}
		catch(Exception e)
		{
			resp.sendError(500,e.toString());
		}
	}
}
```

profile.java:

```
import java.sql.*;
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class profile extends HttpServlet
{
	public void service(HttpServletRequest req,HttpServletResponse resp)
	throws ServletException,IOException
	{
		PrintWriter pw=resp.getWriter();
		pw.println("<html><body>");
		String id=req.getParameter("id");
		try
		{
			Class.forName("oracle.jdbc.driver.OracleDriver");
			Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1522:XE","system","tiger");
			Statement stmt=con.createStatement();
			String sqlstmt="select * from login where id='"+id+"'";
			ResultSet rs=stmt.executeQuery(sqlstmt);
			int flag=0;
			pw.println("<br><br><br>");
			while(rs.next())
			{
				pw.println("<div align=\"center\">");
				pw.println("NAME		:"+rs.getString(1)+"<br>");
				pw.println("ADDRESS	:"+rs.getString(2)+"<br>");
				pw.println("PHONE NO		:"+rs.getString(3)+"<br>");
				pw.println("</div>");
				flag=1;
			}
			if(flag==0)
			{
			pw.println("<br><br>SORRY INVALID ID TRY AGAIN ID<br><br>");
			pw.println("<a href=\"profile.html\">press HERE to RETRY</a>");
			}
			pw.println("</body></html>");
		}
```

```
                catch(Exception e)
                {
                        resp.sendError(500,e.toString());
                }
        }
}
```

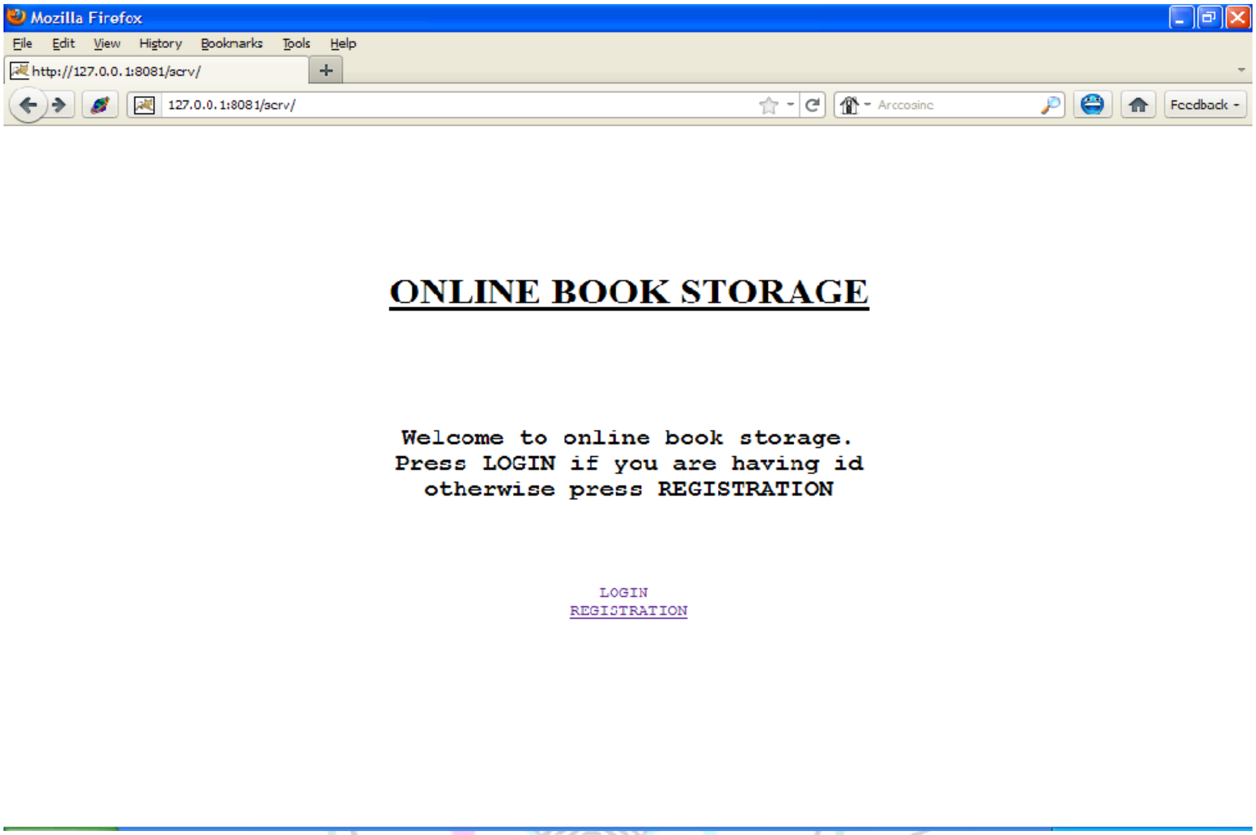
Order.java:

```
import java.sql.*;
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class order extends HttpServlet
{
         public void service(HttpServletRequest req,HttpServletResponse resp)
         throws ServletException,IOException
         {
        int count;
                PrintWriter pw=resp.getWriter();
                pw.println("<html><body>");
                String id=req.getParameter("id");
                String pwd=req.getParameter("pwd");
                String title=req.getParameter("title");
                String count1=req.getParameter("no");
                String date=req.getParameter("date");
                String cno=req.getParameter("cno");
                try
                {
                        count=Integer.parseInt(count1);
                        Class.forName("oracle.jdbc.driver.OracleDriver");
Connection con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1522:XE","system","tiger");
                        Statement stmt=con.createStatement();
                        String sqlstmt="select * from login";
                        ResultSet rs=stmt.executeQuery(sqlstmt);
                        int flag=0,amount,x;
                        while(rs.next())
                        {
                                if(id.equals(rs.getString(4))&&pwd.equals(rs.getString(5)))
                                {
                                        flag=1;
                                }
                        }
                        if(flag==0)
                        {
                        pw.println("<br><br>SORRY INVALID ID TRY AGAIN ID<br><br>");
                        pw.println("<a href= \" order.html \" >press HERE to RETRY</a>");

                        }
                        else
                        {
```

```
                                    Statement stmt2=con.createStatement();
                                    String s="select cost from book where title='"+title+"'";
                                    ResultSet rs1=stmt2.executeQuery(s);
                                    int flag1=0;
                                    while(rs1.next())
                                    {
                                             flag1=1;
                                             x=Integer.parseInt(rs1.getString(1));
                                             amount=count*x;

         pw.println("<br><br>AMOUNT:"+amount+"<br><br><br><br>");
         Statement stmt1=con.createStatement();
         stmt1.executeUpdate("insert into details values('"+id+"','"+title+"','"+amount+"','"+cno+"')");
         pw.println("<br>YOUR ORDER has taken<br>");
                                    }
                                    if(flag1==0)
                                    {
                           pw.println("<br><br><br>SORRY INVALID ID TRY AGAIN ID<br><br>");
                           pw.println("<a href=\"order.html\">press HERE to RETRY</a>");

                      }
                 }

                   pw.println("</body></html>");
                 con.close();
           }
           catch(Exception e)
           {
              resp.sendError(500,e.toString());
         }
     }
}
```

OUTPUT:

Main.html:

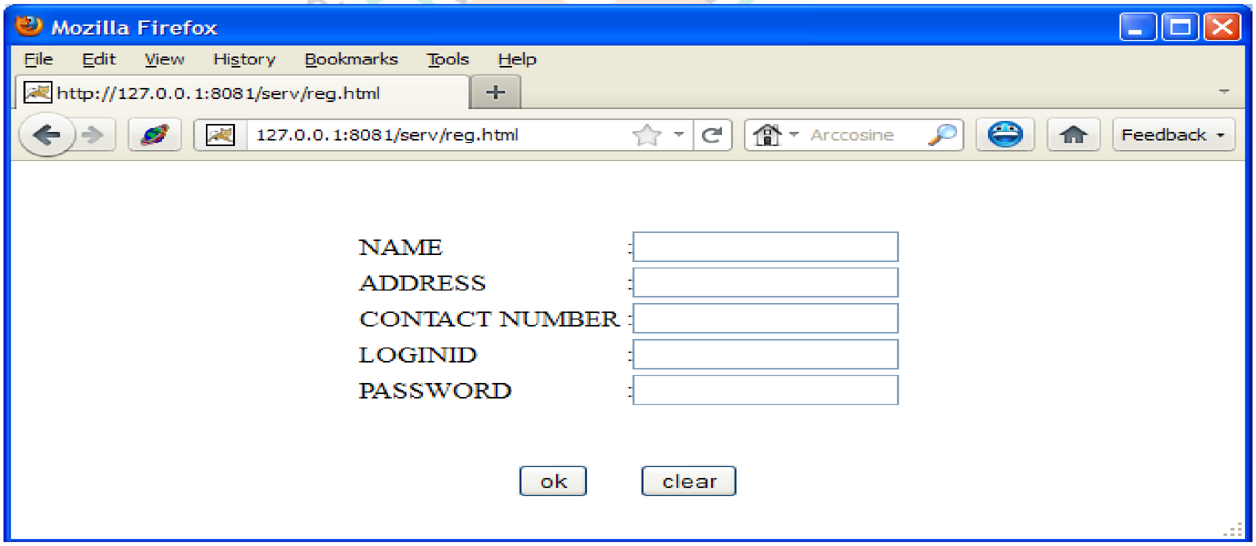

Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://127.0.0.1:8081/serv/
127.0.0.1:8081/serv/
Arccosine
Feedback

ONLINE BOOK STORAGE

```
Welcome to online book storage.
Press LOGIN if you are having id
otherwise press REGISTRATION
```

LOGIN
REGISTRATION

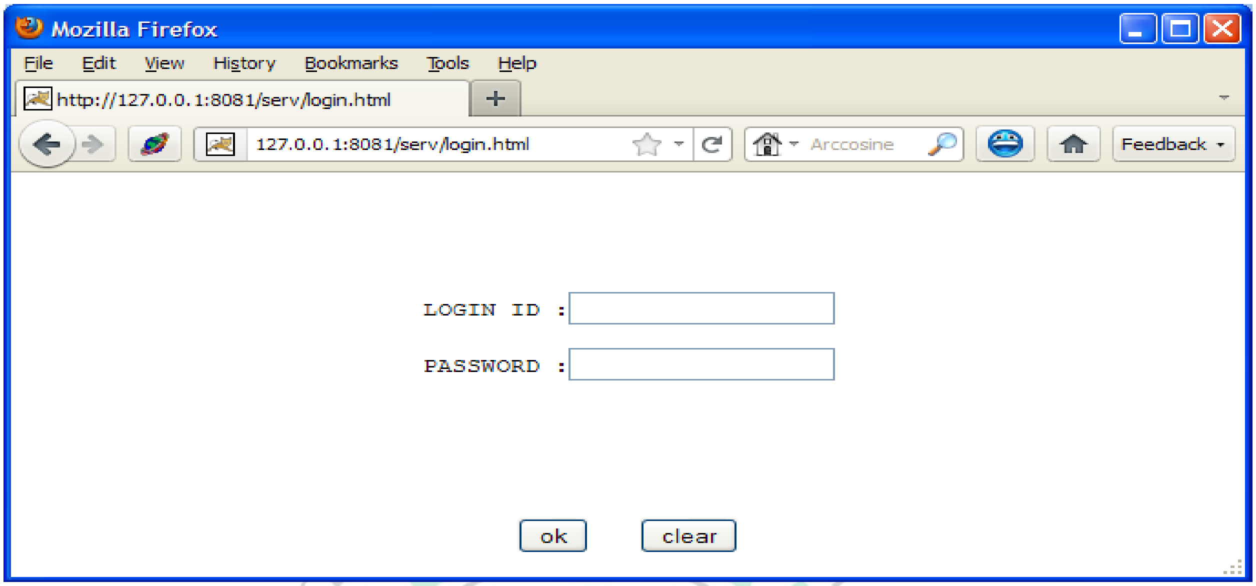
Registration:


Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://127.0.0.1:8081/serv/reg.html
127.0.0.1:8081/serv/reg.html
Arccosine
Feedback

NAME	:
ADDRESS	:
CONTACT NUMBER	:
LOGINID	:
PASSWORD	:

ok clear

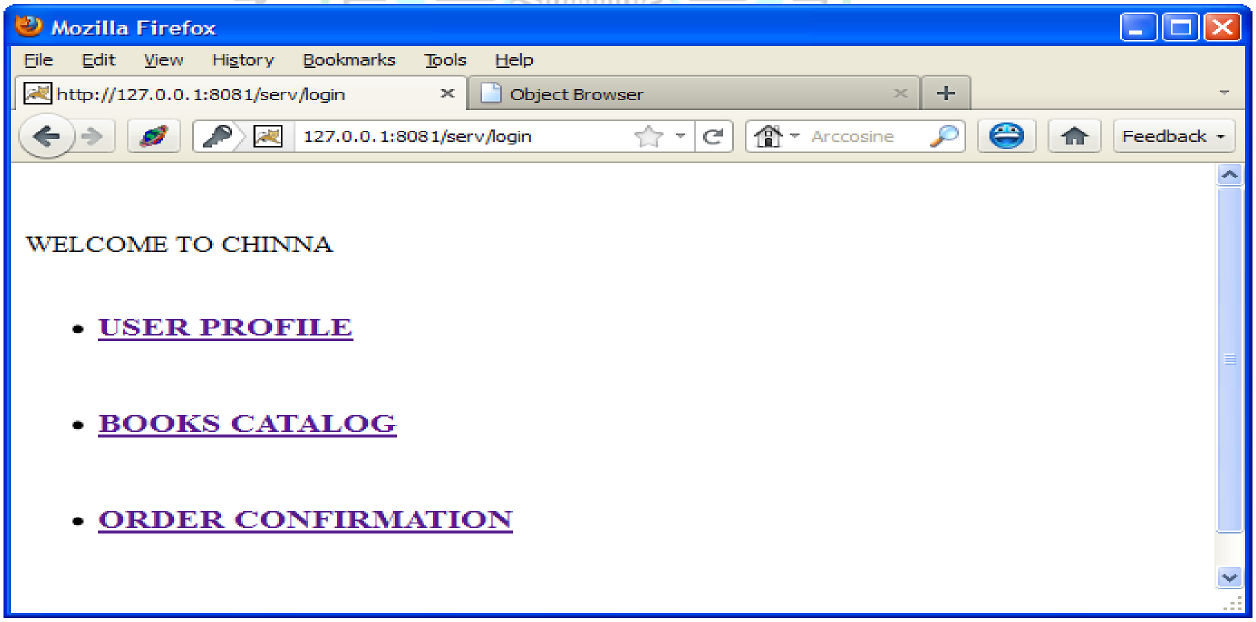
Login Page:


Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://127.0.0.1:8081/serv/login.html
127.0.0.1:8081/serv/login.html
Arccosine
Feedback
ok
clear

LOGIN ID :

PASSWORD :

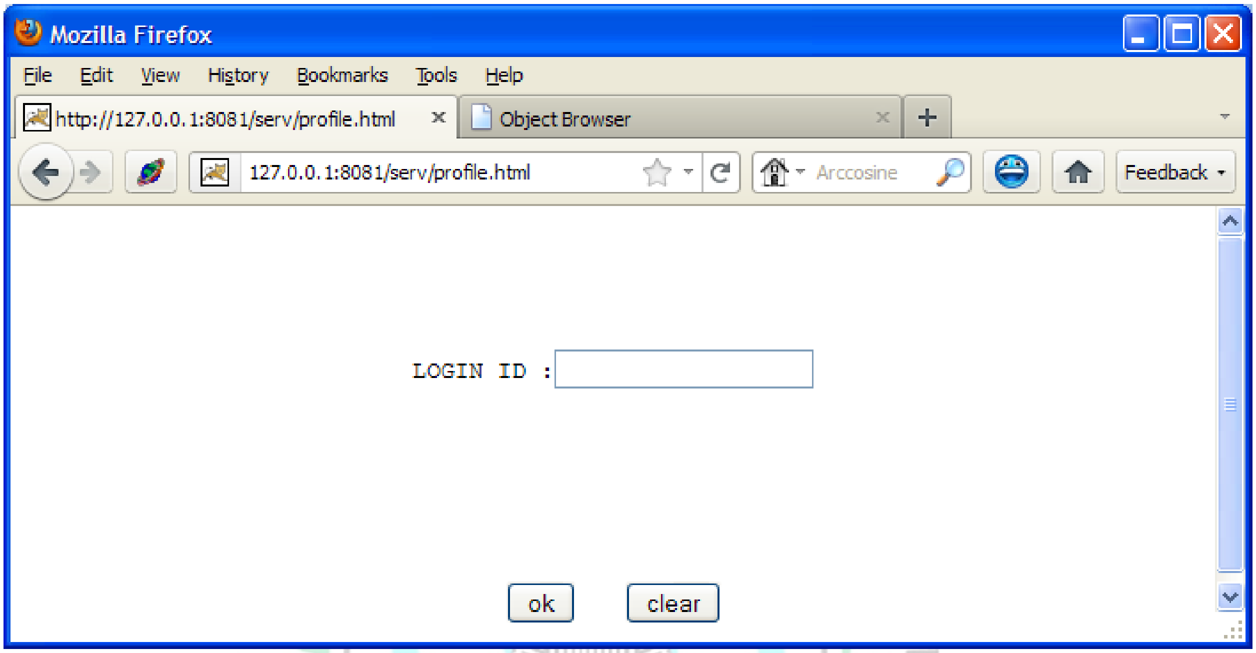
Login Servlet page:


Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://127.0.0.1:8081/serv/login
Object Browser
127.0.0.1:8081/serv/login
Arccosine
Feedback

WELCOME TO CHINNA

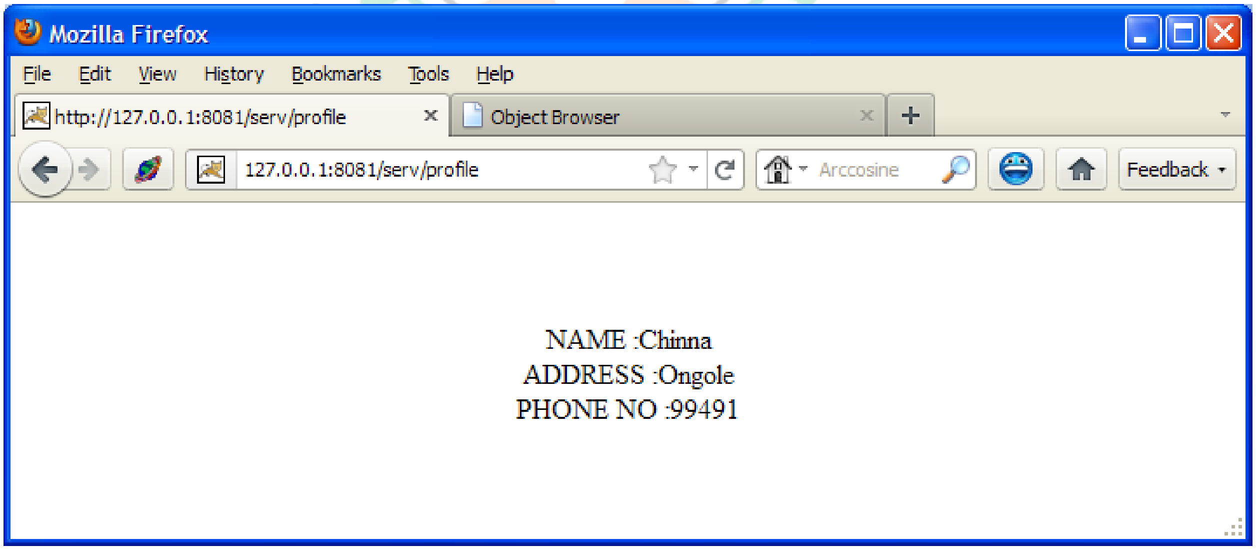
- USER PROFILE
- BOOKS CATALOG
- ORDER CONFIRMATION

Profile page:


Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://127.0.0.1:8081/serv/profile.html
Object Browser
127.0.0.1:8081/serv/profile.html
Arccosine
Feedback
ok
clear

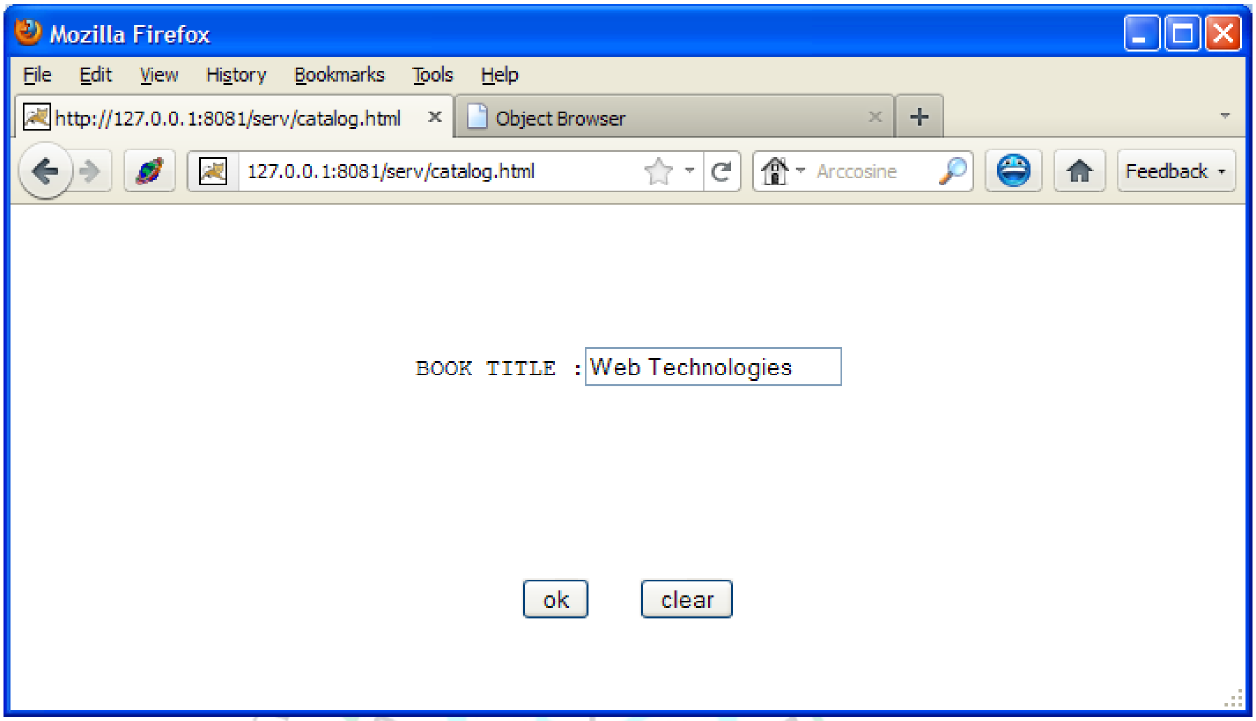
LOGIN ID :

Profile Servlet page:


Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://127.0.0.1:8081/serv/profile
Object Browser
127.0.0.1:8081/serv/profile
Arccosine
Feedback

NAME :Chinna
ADDRESS :Ongole
PHONE NO :99491

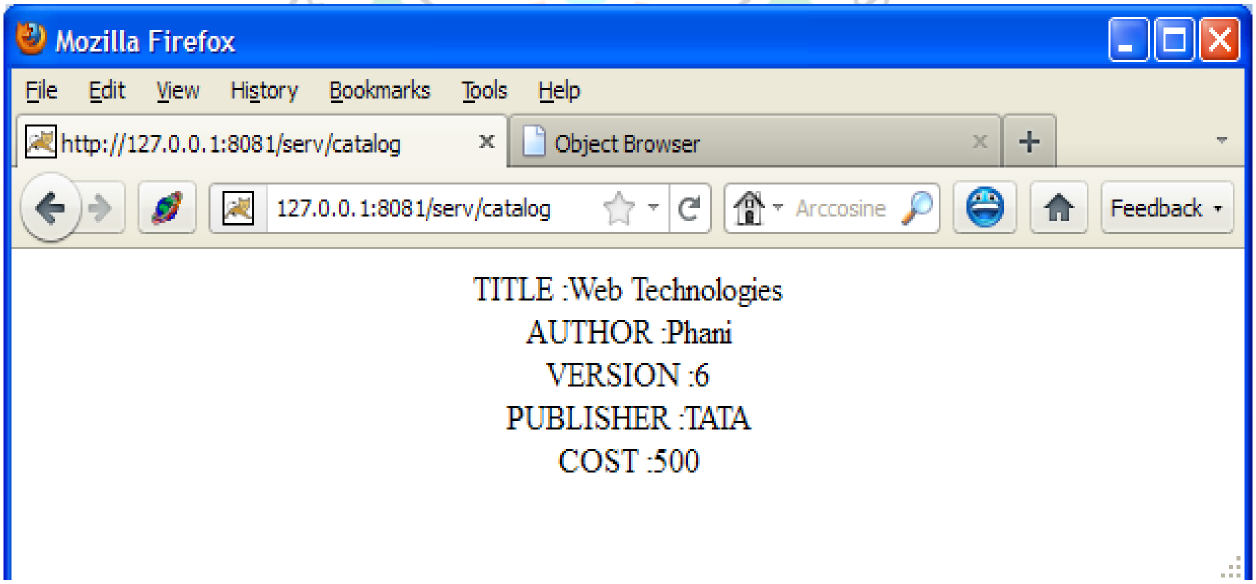
Catalog page:


Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://127.0.0.1:8081/serv/catalog.html
Object Browser
127.0.0.1:8081/serv/catalog.html
Arccosine
Feedback

BOOK TITLE : Web Technologies

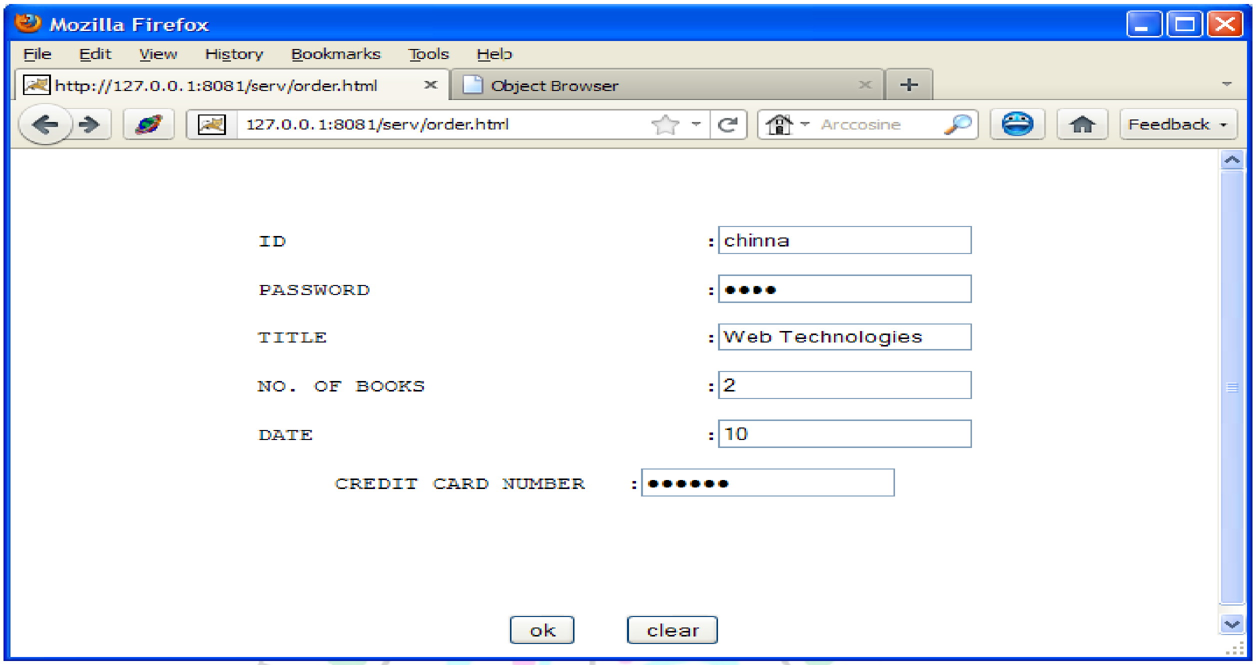
ok clear

Catalog Servlet page:


Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://127.0.0.1:8081/serv/catalog
Object Browser
127.0.0.1:8081/serv/catalog
Arccosine
Feedback

```
TITLE :Web Technologies
AUTHOR :Phani
VERSION :6
PUBLISHER :TATA
COST :500
```

Order page:


Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://127.0.0.1:8081/serv/order.html
Object Browser
127.0.0.1:8081/serv/order.html
Arccosine
Feedback

ID : chinna

PASSWORD : ●●●●

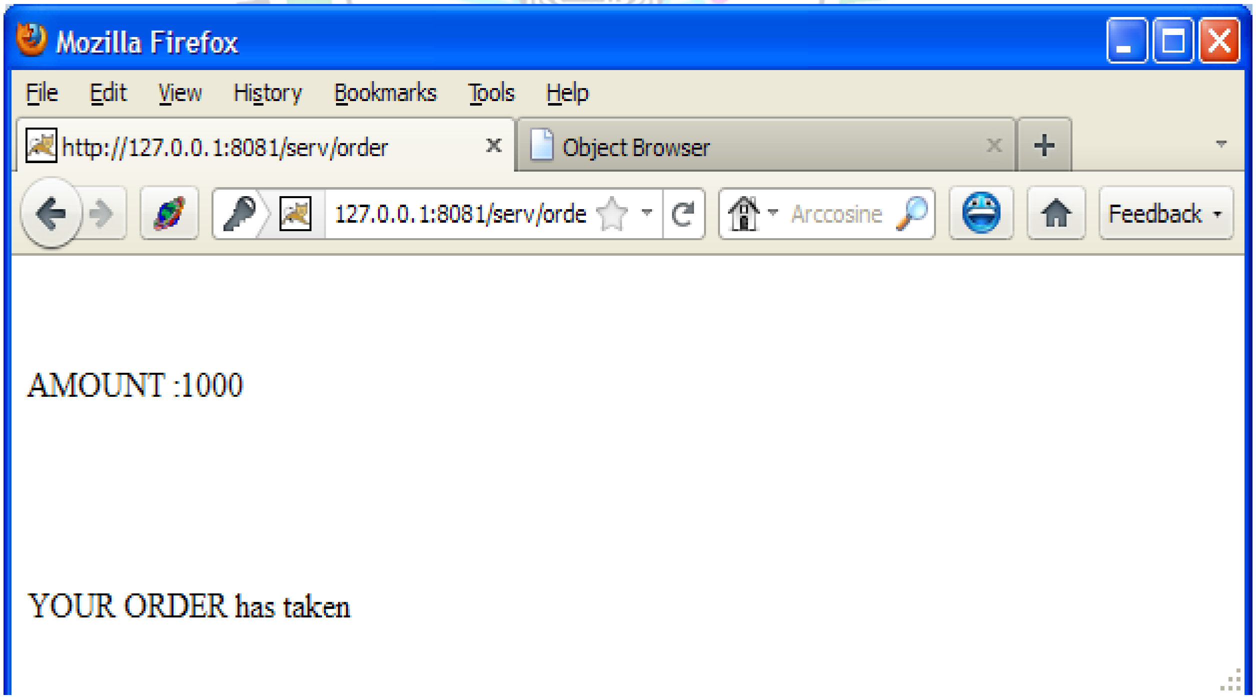
TITLE : Web Technologies

NO. OF BOOKS : 2

DATE : 10

CREDIT CARD NUMBER : ●●●●●●

Order Servlet page:


Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://127.0.0.1:8081/serv/order
Object Browser
127.0.0.1:8081/serv/orde
Arccosine
Feedback

AMOUNT :1000

YOUR ORDER has taken

Week-10:

Write a JSP which does the following job:
Insert the details of the 3 or 4 users who register with the web site (week9) by using registration form. Authenticate the user when he submits the login form using the user name and password from the database.

Main.html:

```
<html>
<body>
<br /><br /><br /><br /><br />
<h1 align="center"><U>ONLINE BOOK STORAGE</U></h1><br /><br /><br />
<h2 align="center"><pre>
<b>Welcome to online book storage.
Press LOGIN if you are having id
otherwise press REGISTRATION
</b></pre></h2>
<br /><br /><pre>
<div align="center"><a href="login.html">LOGIN</a> <a href="reg.html">
REGISTRATION</a></div></pre>
</body>
</html>
```

Login.html:

```
<html>
<body><br /><br /><br />
<form name="myform" method="post" action="login.jsp">
<div align="center"><pre>
LOGIN ID :<input type="text" name="id" /><br />
PASSWORD :<input type="password" name="pwd" /></pre><br /><br />
</div>
<br /><br />
<div align="center">
<input type="submit" value="ok" onclick="validate()" />
&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;<input type="reset" value="clear" />
</div>
</form>
</body>
</html>
```

Reg.html:

```
<html>
<body><br /><br />
<form name="myform" method="post" action="reg.jsp">
<table align="center" >

   <tr>
      <td>NAME</td>
      <td>:<input type="text" name="name" /></td>
   </tr>
   <tr>
      <td>ADDRESS</td>
      <td>:<input type="text" name="addr" /></td>
   </tr>
   <tr>
      <td>CONTACT NUMBER</td>
      <td>:<input type="text" name="phno" /></td>
   </tr>
   <tr>
      <td>LOGINID</td>
      <td>:<input type="text" name="id" /></td>
   </tr>
   <tr>
      <td>PASSWORD</td>
      <td>:<input type="password" name="pwd" /></td>
   </tr>
</table>
<br /><br />
<div align="center">
<input type="submit" value="ok" onclick="validate()" />
&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;<input type="reset" value="clear" />
</div>
</form>
</body>
</html>
```

Reg.jsp:

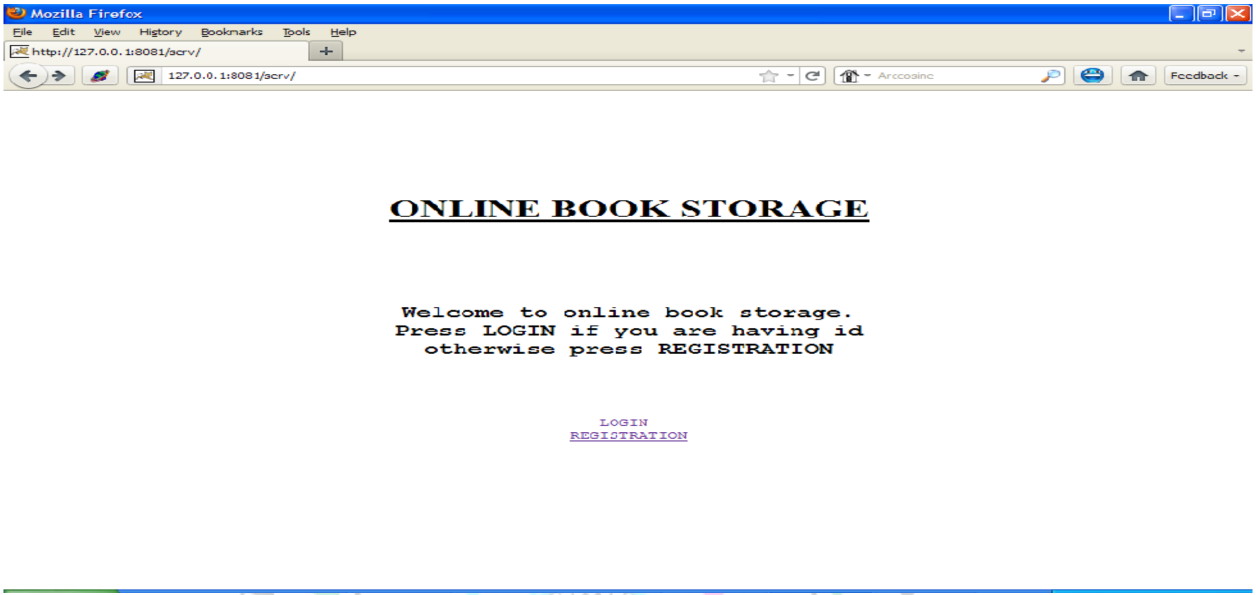
```
<%@page import="java.sql.*"%>
  <%@page import="java.io.*"%>
   <%           response.setContentType("text/html");
                out.println("<html><body>");
                String name=request.getParameter("name");
                String addr=request.getParameter("addr");
                String phno=request.getParameter("phno");
                String id1=request.getParameter("id");
                String pwd1=request.getParameter("pwd");
                 int no=Integer.parseInt(phno);
                Class.forName("oracle.jdbc.driver.OracleDriver");
Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:XE","system","tiger");
                Statement stmt=con.createStatement();
                String sqlstmt="select id,pwd from login";
                ResultSet rs=stmt.executeQuery(sqlstmt);
                int flag=0;
                while(rs.next())
                        {  if(id1.equals(rs.getString(1))&&pwd1.equals(rs.getString(2)))
                                {       flag=1;
                                }
                        }
                        if(flag==1)
{   out.println("<br><br>SORRY INVALID ID ALREADY EXITS TRY AGAIN WITH NEW
ID<br><br>");
out.println("<a href=\"reg.html\">press REGISTER to RETRY</a>");
                        }
                        else
                        {   Statement stmt1=con.createStatement();
stmt1.executeUpdate("insert into login
values('"+name+"','"+addr+"','"+phno+"','"+id1+"','"+pwd1+"');");
out.println("<br><br>YOUR DETAILS ARE ENTERED<br><br>");
out.println("<a href=\"login.html\">press LOGIN to login</a>");
                        }
                        out.println("</body></html>");
                con.close();
    %>
```

Login.jsp:

```
<%@page import="java.sql.*"%>
     <%@page import="java.io.*"%>
      <html>
             <body>
                     <% String id=request.getParameter("id");
                     String pwd=request.getParameter("pwd");
                     Class.forName("oracle.jdbc.driver.OracleDriver");
Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:XE","system","tiger");
                     Statement stmt=con.createStatement();
                     String sqlstmt="select id,pwd from login";
                     ResultSet rs=stmt.executeQuery(sqlstmt);
                     int flag=0;
                     while(rs.next())
                               {
                                         if(id.equals(rs.getString(1))&&pwd.equals(rs.getString(2)))
                                         {
                                                   flag=1;
                                         }
                               }
                               if(flag==0)
                               {
                               out.println("<br><br>SORRY INVALID ID TRY AGAIN ID<br><br>");
                               out.println("<a href=\"login.html\">press LOGIN to RETRY</a>");
                               }
                               else
                               {         out.println("<br><br>VALID LOGIN ID<br><br>");
                                         out.println("WELCOME <br>To<br>”+id);
                               }
                               con.close();
                                 %>
                               </body>
                               </html>
```

OUTPUT:

Main.html:

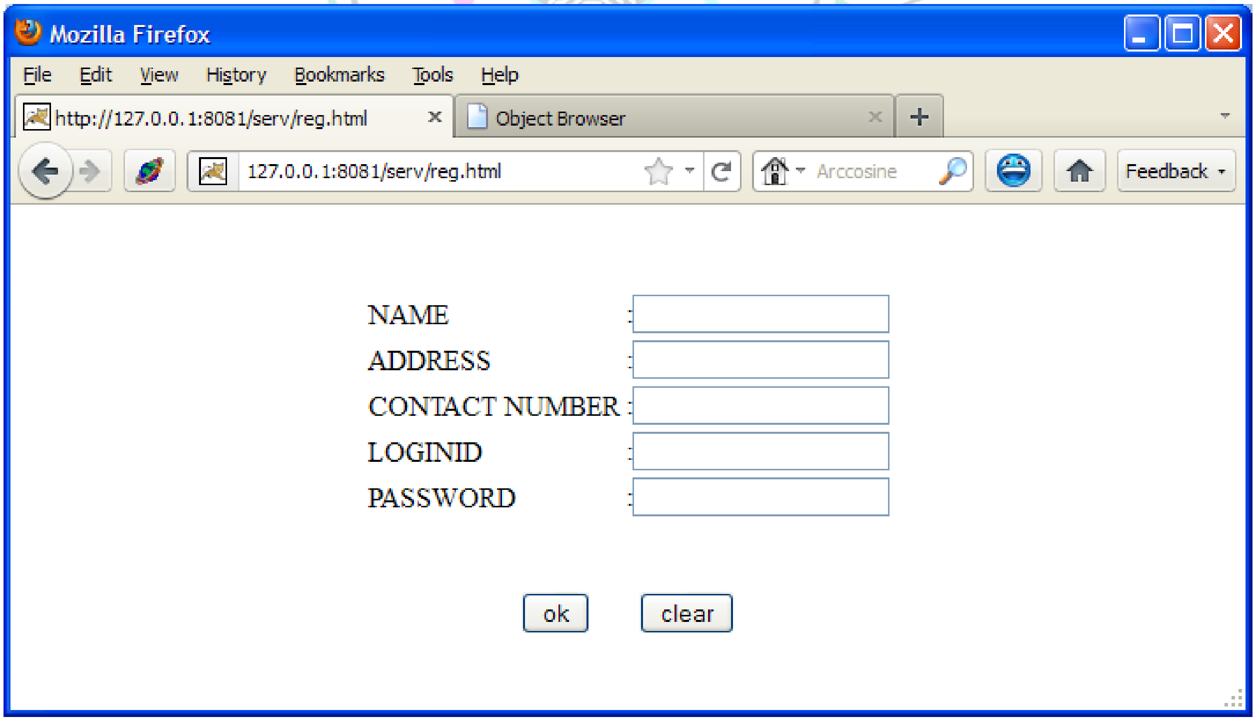

Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://127.0.0.1:8081/serv/
127.0.0.1:8081/serv/
Arccosine
Feedback

ONLINE BOOK STORAGE

Welcome to online book storage.
Press LOGIN if you are having id
otherwise press REGISTRATION

LOGIN
REGISTRATION

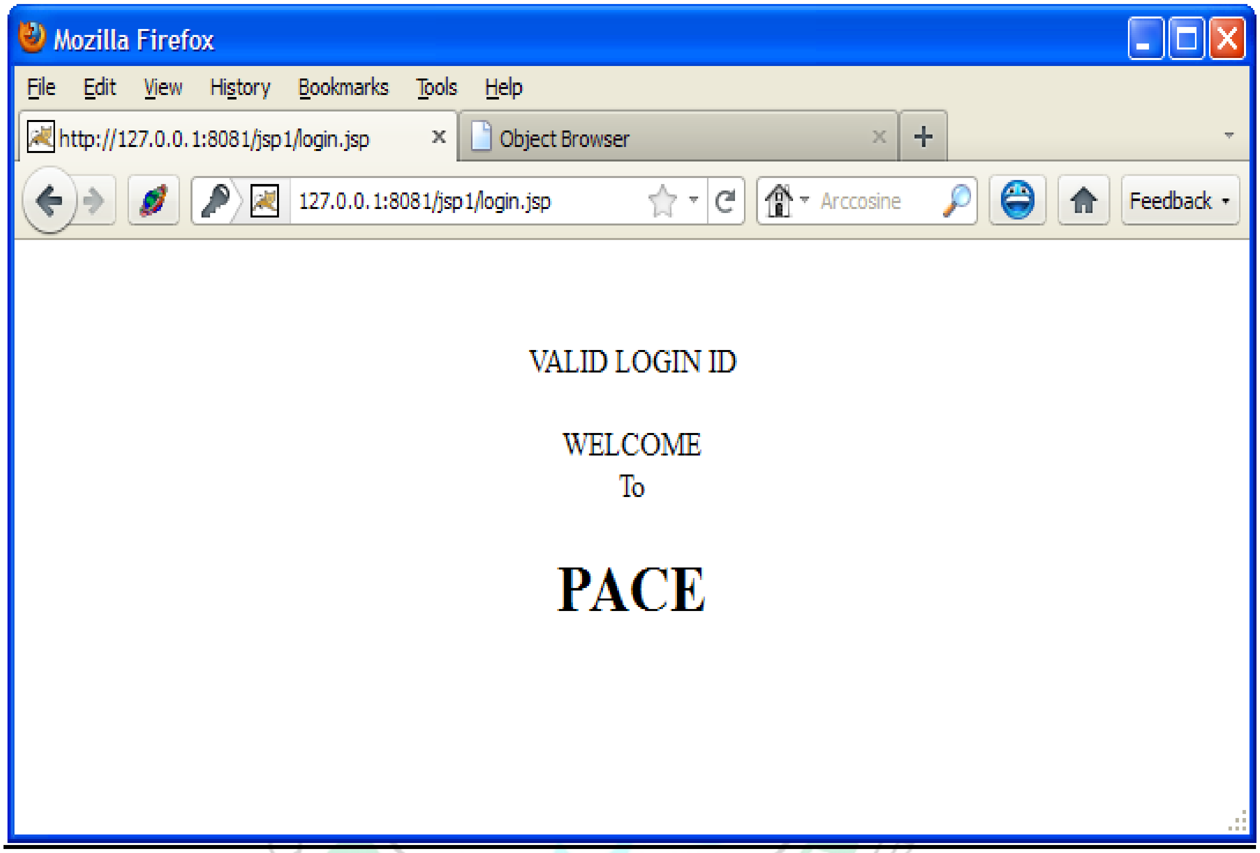
Registration page:


Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://127.0.0.1:8081/serv/reg.html
Object Browser
127.0.0.1:8081/serv/reg.html
Arccosine
Feedback

NAME :
ADDRESS :
CONTACT NUMBER :
LOGINID :
PASSWORD :

ok clear

Login page:


Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://127.0.0.1:8081/jsp1/login.jsp
Object Browser
127.0.0.1:8081/jsp1/login.jsp
Arccosine
Feedback

VALID LOGIN ID

WELCOME
To

PACE