

INTERNET TECHNOLOGIES & SERVICES LAB

Computer Science & Engineering

M.Tech - 1st Year 2nd Semester



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LAB MANUALS

Author : Rajinikanth B | Regulation: R13 | Year 2016

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WEB SERVICES

LAB MANUAL

OBJECTIVE

- Write syntactically correct HTTP messages and describe the semantics of common HTTP methods
- and header fields
- Discuss differences between URIs, URNs, and URLs, and demonstrate a detailed understanding of
- http-scheme URLs, both relative and absolute
- Describe the actions, including those related to the cache, performed by a browser in the process of
- visiting a Web address
- Install a web server and perform basic administrative procedures, such as tuning communication
- parameters, denying access to certain domains, and interpreting an access log
- hyperlinks, images, lists, tables, and forms
- Use CSS to implement a variety of presentation effects in HTML and XML documents, including
- explicit positioning of elements
- Demonstrate techniques for improving the accessibility of an HTML document

LIST OF PROGRAMS

1. 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
2. Validate the Registration, user login, user profile and payment by credit card pages using javaScript
3. Create and save an XML document at the server, which contains 10 users information. Write a program, which takes User Id as an input and returns the user details by taking the user information from the XML document.
4. Install TOMCAT web server. Convert the static web pages of assignments 2 into dynamic web Pages using Servlets and cookies. Hint: Users information (user id, password, credit card number) would be stored in web.xml. Each user should have a separate Shopping Cart.
5. Redo the previous task using JSP by converting the static web pages of assignments 2 into dynamic web pages. Create a database with user information and books information. The books catalogue should be dynamically loaded from the database. Follow the MVC architecture while doing the website.
6. Implement the “Hello World!” program using JSP Struts Framework.

1. 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

```
<html>
  <head>
    <title> Welcome to AMAZON Ebook's website</title>
  </head>
  <frameset rows="108,*" >
    <frame name=top src="top.html" noresize frameborder=0 scrolling=no />
    <frameset cols="80,*">
      <frame name=left noresize scrolling=no frameborder=0 src="left.html">
      <frame name=right noresize frameborder=0 src="right.html">
    </frameset>
  </frameset>
</html>
```

Top.html

```
<html>
  <head>
    <title> Welcome to AMAZON website</title>
    <style type="text/css">
      td{
        cursor:pointer; color: #000066; font-weight:bolder; border:#665599 1 solid ;
      }
      marquee{ background: #556677; color:#f5f5f5}
    </style>
  </head>
  <body bgcolor=#D6E9EF>
    <table width=100% align="center" cellpadding="0" cellspacing="2">
      <tr>
        <th width=20%></th>
        <th colspan=4> <h2><marquee scrollamount=2 scrolldelay=10 behavior=alternate>
          WORLD BEST ONLINE EBOOKS WEBSITE
        </marquee></h2></th></tr>
        <tbody align=center bgcolor=#Ffdfdf>
          <tr>
            <a href="right.html" target="right"><td width=20%>Home</td></a>
            <a href="login.html" target="right"><td width=20%>Login</td></a>
```

```

        <a href="registration.html" target=right><td width=20%>Registration</td></a>
        <a href="Catalogue.html" target=right><td width=20%>Catalogue</td></a>
        <a href="cart.html" target=right><td width=20%>Cart</td></a>
    </tr> </tbody>
</table> <hr/>
</body>
</html>

```

left.html

```

<html>
    <body bgcolor=#D6E9EF>
        <table align=center>
            <tbody align=center>
                <tr><td><a href="cse.html" target="right">CSE</a></td>
                <tr><td><a href="ece.html" target="right">ECE</a></td>
                <tr><td><a href="eee.html" target="right">EEE</a></td>
            </tbody>
        </table>
    </body>
</html>

```

Style.css

```

h3{
    color: #006699;
    font-family: Geneva, Arial, Helvetica, sans-serif;
}
p{color: #003366;}
td{color: #003366;}
th{color:#FFFFFF;}
body{background-color:#F6F6F0;}

```

right.html

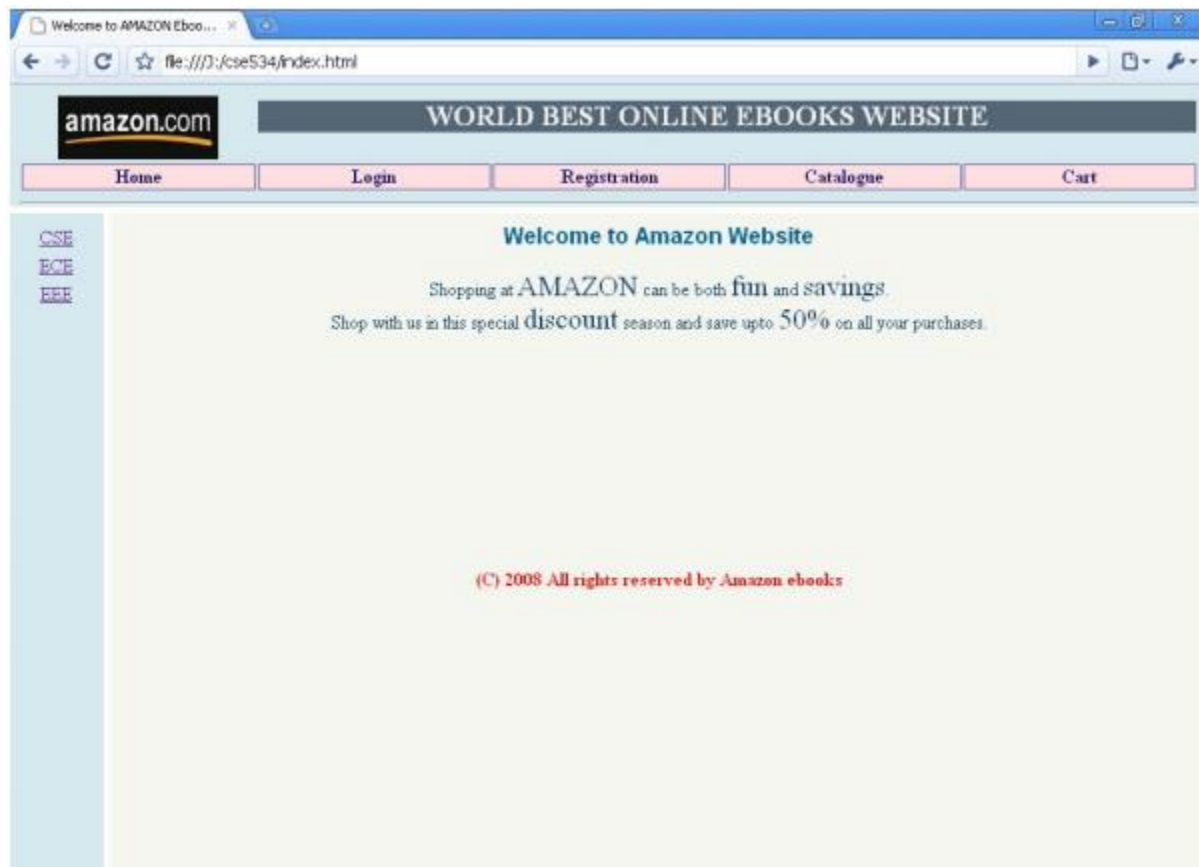
```

<html>
    <head>
        <link rel="stylesheet" href="style.css" type="text/css">
    </head>
    <body>
        <center>
            <h3>Welcome to Amazon Website</h3>
            <p>Shopping at <font size=5>AMAZON</font> can be both <font size=5>fun</font>
            and <font size=5>savings</font>.</br>Shop with us in this special <font
            size=5>discount</font> season and save upto <font size=5>50%</font> on all your

```

purchases.</br></p>

<h4>
 (C) 2008 All rights reserved by Amazon ebooks
 </body>
 </html>

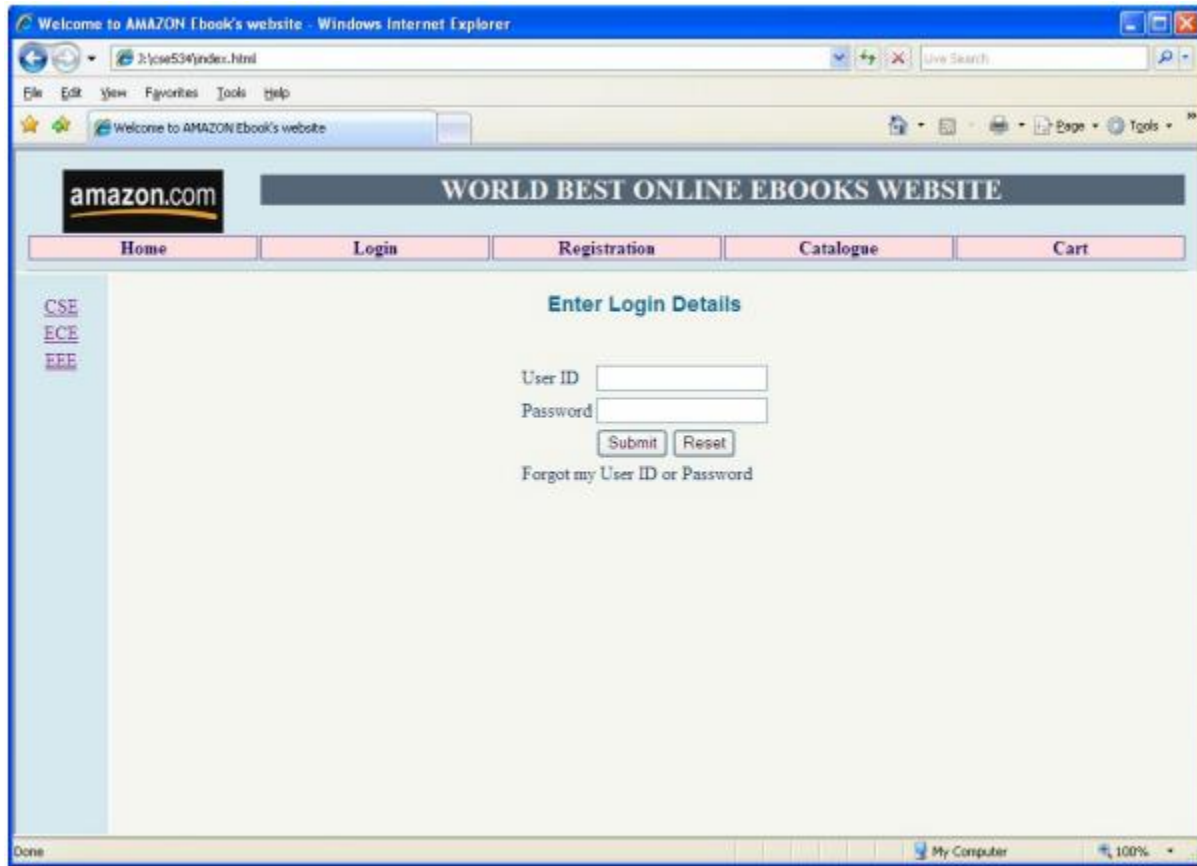


Login.html

```

<html>
  <head>
    <title> Welcome to AMAZON website</title>
    <link rel="stylesheet" href="style.css" type="text/css">
  </head>
  <body >
    <center>
      <h3> Enter Login Details</h3> <br/>
      <form name="f1" onsubmit="return form1_validation()">
        <table align="center" >
          <tr>
            <td> User ID</td>
            <td> <input type="text" name="username"></td>
          </tr>
          <tr>
            <td> Password</td>
            <td> <input type="password" name="password"></td>
          </tr>
          <tr><td></td>
            <td><input type="submit" value="submit">
              <input type="reset" value="reset"></td>
          </tr>
          <tr>
            <td colspan=2>Forgot my User ID or Password</td>
          </tr>
        </table>
      </body>
</html>

```



Registration.html

```

<html>
  <head>
    <title> Welcome to AMAZON website</title>
    <link rel="stylesheet" href="style.css" type="text/css">
    <script type="text/javascript" src="validation.js">
    </script>
  </head>
  <body>
    <center>
      <h3>Registration Form </h3>
      <br/>
      <form name="f1" onsubmit="return form1_validation()">
        <table cellpadding="1" align="center" >
          <tr> <td> Name:*</td>
          <td> <input type="text" name="username"></td></tr>
          <tr> <td>Password:*</td>
          <td> <input type="password" name="password"></td></tr>
          <tr> <td>Email ID:*</td>
          <td> <input type="text" name="email"></td></tr>
          <tr> <td>Phone Number:*</td>
          <td> <input type="text" name="phno"></td></tr>
          <tr> <td valign="top">Gender:*</td>
          <td> <input type="radio" name="radio" value="1">Male<br>
          <input type="radio" name="radio" value="2">Female</td></tr>
          <tr> <td>Date of Birth:*</td>
          <td> dd: <select name=dd >
            <option> </option>
          <script type="text/javascript">
            for(i=1;i<=31;i++)
              document.write("<option value=i>"+"i+"</option>");
          </script> </select>
          mm: <select name=mm>
            <option> </option>
          <script type="text/javascript">
            for(i=1;i<=12;i++)
              document.write("<option value=i>"+"i+"</option>");
          </script> </select>
          yyyy: <select name=yyyy>
            <option> </option>

```



```

<script type="text/javascript">
for(i=1880;i<=2008;i++)
document.write("<option value=i>" + i + "</option>");
</script> </select>
</td></tr>
<tr> <td valign="top">Language Known:*</td>
<td> <input type="checkbox" name="checkbox" value="English">English<b <input
type="checkbox" name="checkbox" value="Telugu">Telugu<br>
<input type="checkbox" name="checkbox" value="Hindi">Hindi<br>
<input type="checkbox" name="checkbox" value="Tamil">Tamil
</td></tr>
<tr> <td valign="top">Address:*</td>
<td><textarea name="address"></textarea></td>
<tr><td></td><td><input type="submit" value="submit" hspace="10">
<input type="reset" value="reset"></td></tr>
<tr> <td colspan=2 >*<font color="#FF0000">fields are mandatory</font>
</td>
</tr>
</table>
</center>
</body>
</html>

```

Welcome to AMAZON Ebook's website - Windows Internet Explorer

2:\cse534\index.html

Welcome to AMAZON Ebook's website

amazon.com

WORLD BEST ONLINE EBOOKS WEBSITE

Home Login Registration Catalogue Cart

[CSE](#)
[ECE](#)
[EEE](#)

Registration Form

Name:*

Choose a Password:*

Reenter Password:*

Email ID:*

Phone Number:*

Gender:*
☐ Male
☐ Female

Date of Birth:* dd: mm: yyyy:

Language Known:*
☐ English
☐ Telugu
☐ Hindi
☐ Tamil

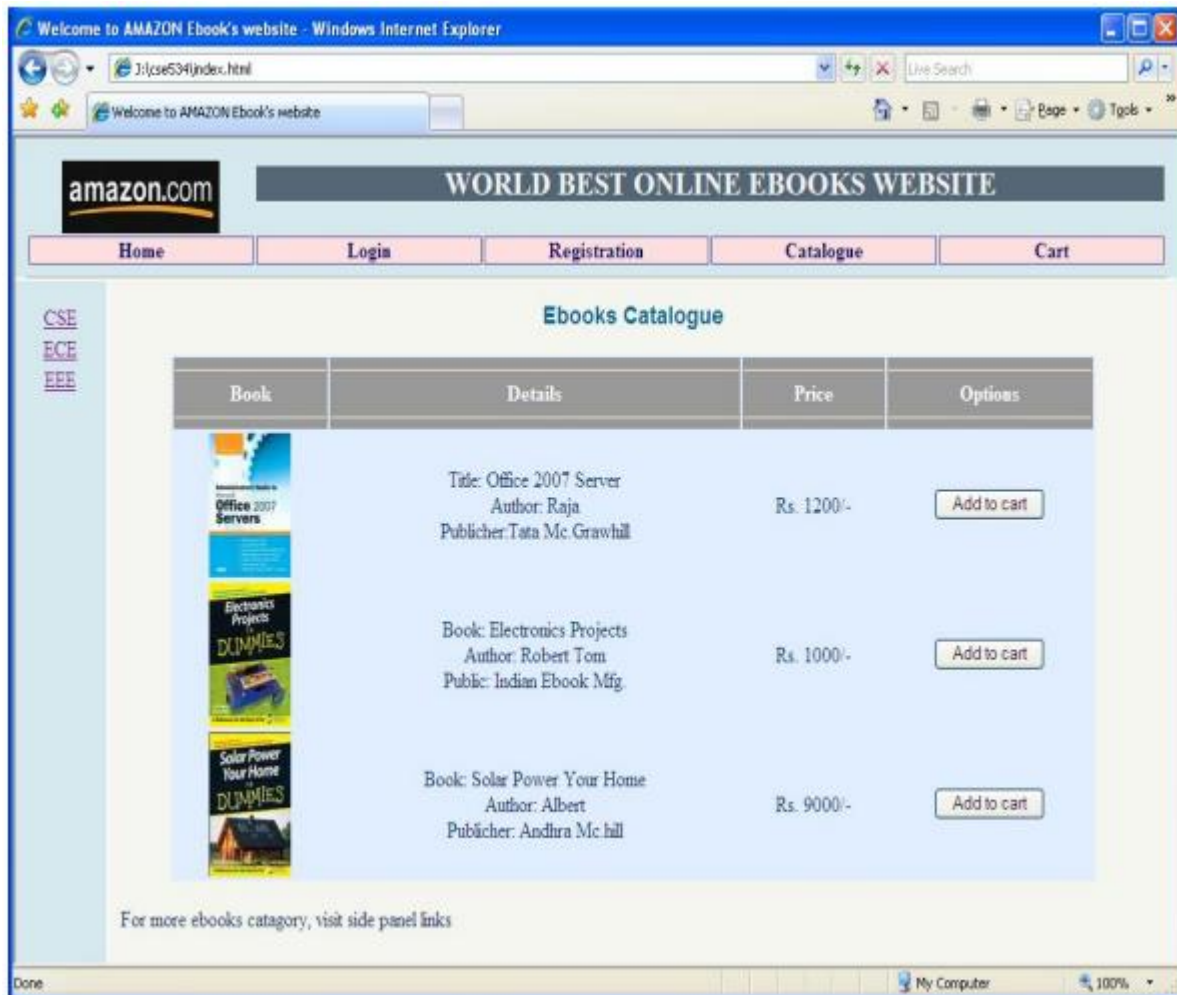
Address:*

* fields are mandatory

My Computer 100%

Catalogue.html

```
<html>
  <head>
    <link rel="stylesheet" href="style.css" type="text/css">
  </head>
  <body>
    <center>
      <h3>Ebooks Catalogue</h3>
      <table width=90% align="center" bgcolor="#E1EEFF">
        <tbody bgcolor="#999999">
          <tr> <th><hr>Book <hr></th>
          <th><hr>Details<hr></th>
          <th><hr>Price<hr></th>
          <th><hr>Options<hr></th> </tr>
        </tbody>
        <tbody align="center">
          <tr> <td></td>
            <td> Title: Office 2007 Server<br/> Author: Raja<br/>
              Publicher:Tata Mc.Grawhill</td>
            <td>Rs. 1200/-</td>
            <td> <input type="button" value="Add to cart"></td> </tr>
          <tr> <td></td>
            <td>Book: Electronics Projects <br/>Author: Robert Tom
              <br>
              Public: Indian Ebook Mfg. <br><td align="center">Rs. 1000/-</td>
            <td align="center"> <input type="button" value="Add to cart"></td> </tr>
          <tr> <td align="center"></td>
            <td>Book: Solar Power Your Home <br/>Author: Albert<br>
              Publicher: Andhra Mc.hill<br> <td align="center">Rs. 9000/-</td>
            <td align="center"> <input type="button" value="Add to cart"></td> </tr>
        </tbody>
      </table>
    </center>
    <p>For more ebooks catagory, visit side panel links</p>
  </body>
</html>
```

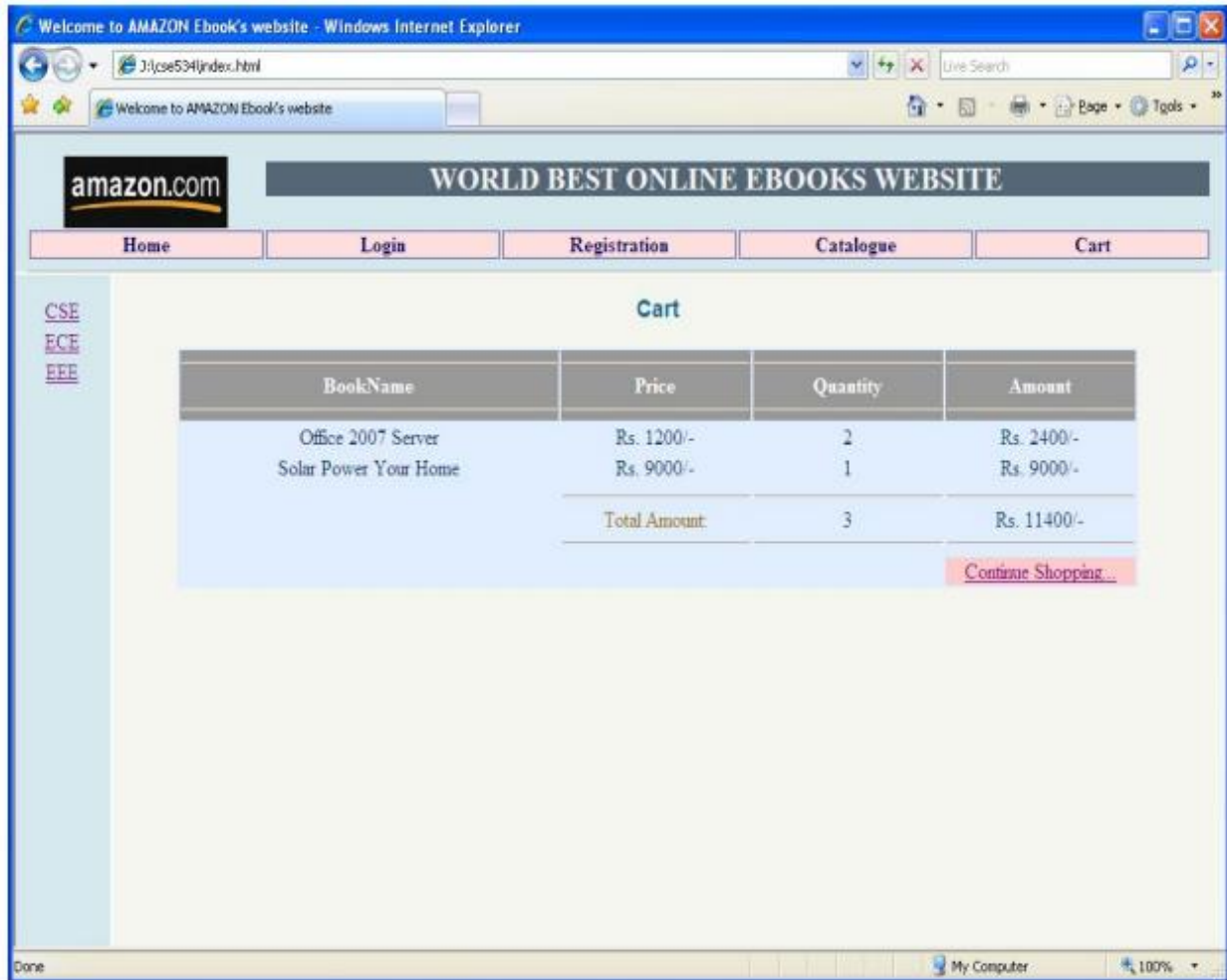


Cart.html

```

<html>
  <head>
    <link rel="stylesheet" href="style.css" type="text/css">
  </head>
  <body>
    <center>
      <h3>Cart</h3>
      <table width=90% align="center" bgcolor="#E1EEFF">
        <tbody bgcolor="#999999">
          <tr> <th width=40%><hr>BookName<hr></th>
          <th width=20%><hr>Price<hr></th>
          <th width=20%><hr>Quantity<hr></th>
          <th width=20%><hr>Amount<hr></th> </tr>
        </tbody>
        <tbody align=center>
          <tr> <td>Office 2007 Server </td>
          <td>Rs. 1200/-</td>
          <td>2</td>
          <td>Rs. 2400/-</td></tr>
          <tr> <td>Solar Power Your Home</td>
          <td>Rs. 9000/-</td>
          <td>1</td>
          <td>Rs. 9000/-</td></tr>
          <tr> <td> </td>
          <td><hr><font color="#996600">Total Amount:</font><hr></td>
          <td><hr>3<hr></td>
          <td><hr>Rs. 11400/-<hr></td> </tr>
          <tr> <td></td> <td></td> <td></td>
          <td bgcolor="#FFCCCC"><a href="catalogue.html">Continue
          Shopping...</a></td>
        </tbody>
      </table>
    </body>
</html>

```



CSE.html

```

<html>
  <head>
    <link rel="stylesheet" href="style.css" type="text/css">
  </head>
  <body>
    <center>
      <h3>Computer Science & Engineering Catalogue </h3>
      <table width=90% align="center" bgcolor="#E1EEFF">
        <tbody bgcolor="#999999">
          <th width=25% >BOOK</th>
          <th width="35%">DETAILS</th>
          <th width="20%">PRICE</th>
          <th width="20%">OPTION</th></tbody>
          <tbody align="center">
            <tr>
              <td align="center"></td>
              <td align="center"> Title: Office 2007 Server<br> Author: B.R.Prathap <br>
Publisher:Tata Mc.Grawhill</td>
              <td align="center">Rs. 1200/-</td>
              <td align="center"> <input type="button" value="Add to cart"></td>
            </tr>
            <tr>
              <td align="center"></td>
              <td align="center"> Title: Electronics Projects<br>Author: Prathap r<br>
Publisher:Tata Mc.Grawhill</td>
              <td align="center">Rs. 1000/-</td>
              <td align="center"> <input type="button" value="Add to cart"></td>
            </tr>
            <tr>
              <td align="center"></td>
              <td align="center"> Title: Solar Power Your Home<br>Author: Jhanaki
Ramaya Sir <br>Publisher:Tata Mc.Grawhill</td>
              <td align="center">Rs. 9000/-</td>
              <td align="center"> <input type="button" value="Add to cart"></td>
            </tr>
          </tbody>
        </table></center></body> </html>

```

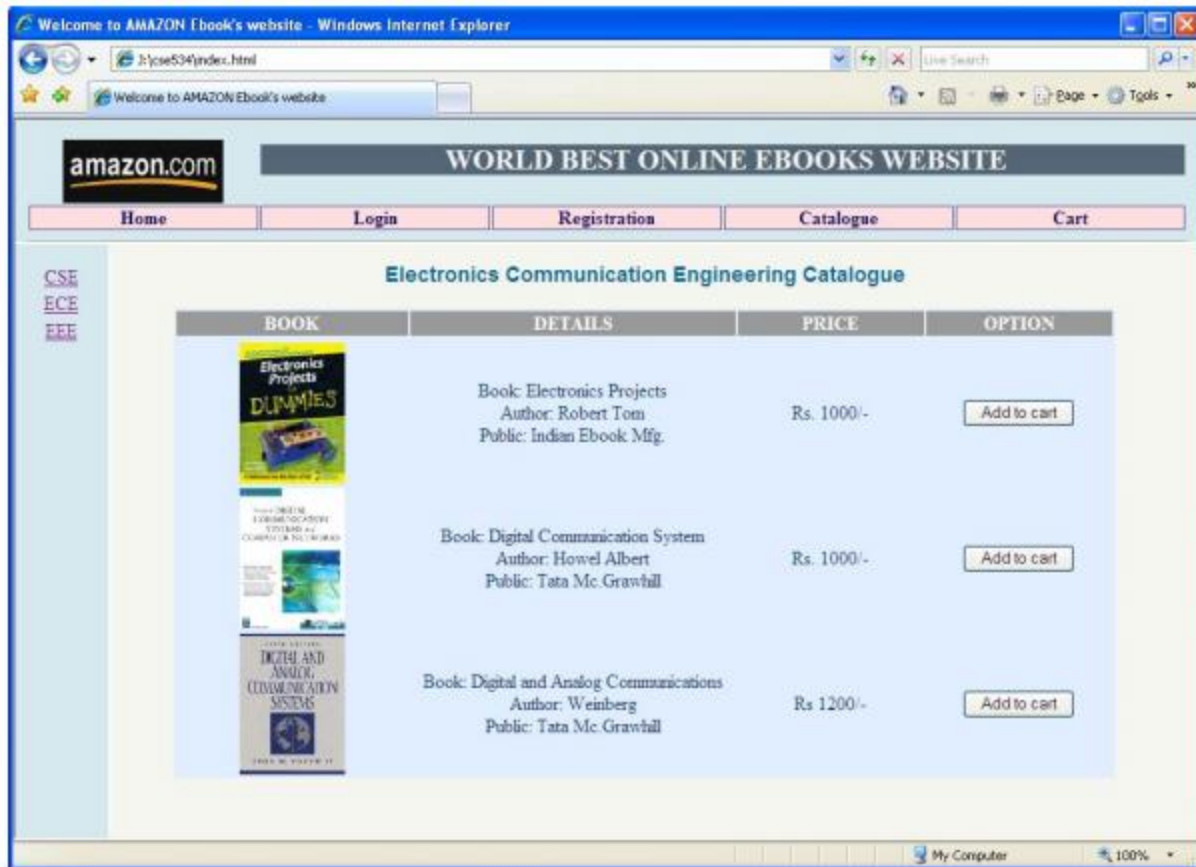


ECE.html

```

<html>
  <head>
    <link rel="stylesheet" href="style.css" type="text/css">
  </head>
  <body bgcolor=#ffffa0>
    <center>
      <h3>Electronics Communication Engineering Catalogue </h3>
      <table width=90% align="center" bgcolor="#E1EEFF">
        <tr> <th width=25% >BOOK</th>
        <th width="35%">DETAILS</th><th width="20%">PRICE</th>
        <th width="20%">OPTION</th> </tr> </tbody>
        <tr> <tbody align=center>
          <td></td>
          <td>Book: Electronics Projects <br> Author: Robert Tom <br>
Public: Indian Ebook Mfg. <br> </td>
          <td align="center">Rs. 1000/-</td>
          <td><input type="button" name="Add to cart" value="Add to
cart"></td></tr>
        <tr>
          <td></img></td>
          <td>Book: Digital Communication System <br> Author: Howel
Albert <br> Public: Tata Mc.Grawhill<br> </td>
          <td align="center">Rs. 1000/-</td>
          <td><input type="button" name="Add to cart" value="Add to
cart"></td></tr>
        <tr>
          <td></img></td>
          <td>Book: Digital and Analog Communications<br>Author:
Weinberg<br>
Public: Tata Mc.Grawhill<br> </td>
          <td align="center">Rs 1200/-</td>
          <td><input type="button" name="Add to cart" value="Add to
cart"></td></tr>
        </table>
      </center>
    </body></html>

```

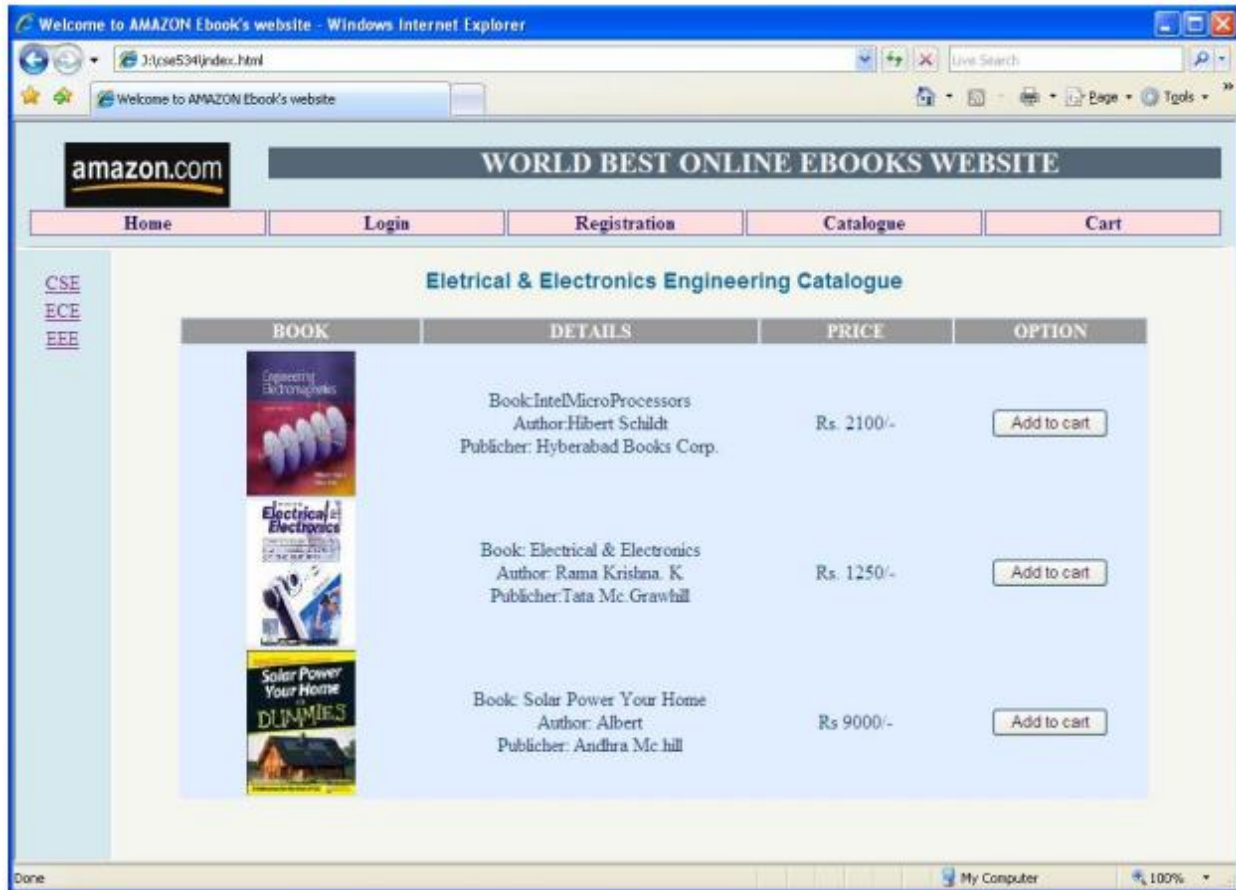


EEE.html

```

<html>
  <head>
    <link rel="stylesheet" href="style.css" type="text/css">
  </head>
  <body bgcolor=#ffffa0>
    <center>
      <h3>Eletrical & Electronics Engineering Catalogue</h3>
      <table width=90% align="center" bgcolor="#E1EEFF">
        <tbody bgcolor="#999999">
          <tr> <th width=25% >BOOK</th>
            <th width="35%">DETAILS</th>
            <th width="20%">PRICE</th>
            <th width="20%">OPTION</th></tr>
          </tbody>
          <tr> <tbody align=center>
            <td></img></td>
            <td>Book: IntelMicroProcessors<br>Author: Hibert Schildt<br>
              Publicher: Hyberabad Books Corp. <br>
            <td align="center">Rs. 2100/-</td>
            <td><input type="button" name="Add to cart" value="Add to
              cart"></td></tr>
          <tr> <td></img></td>
            <td>Book: Electrical & Electronics <br> Author: Rama Krishna.
              K <br>
              Publicher: Tata Mc.Grawhill<br> </td>
            <td align="center">Rs. 1250/-</td>
            <td><input type="button" name="Add to cart" value="Add to
              cart"></td></tr>
          <tr> <td></img></td>
            <td>Book: Solar Power Your Home <br>Author: Albert<br>
              Publicher: Andhra Mc.hill<br> </td>
            <td align="center">Rs 9000/-</td>
            <td><input type="button" name="Add to cart" value="Add to
              cart"></td></tr>
          </tbody>
        </table>
      </center>
    </body></html>

```



2. Validate the registration, user login, user profile and payment by credit card pages using JavaScript.

Validation.js

```

function form1_validation()
{
//Username Validation
if(f1.username.value=="")
{
alert("You must enter a User Name");
f1.username.focus();
return false;
}
if(f1.username.value.length<3)
{
alert("User Name must consist of atleast 3 character");
f1.username.focus();
return false;
}
var checkStr=f1.username.value;
for(i=0;i<checkStr.length;i++)
if(!(checkStr.charCodeAt(i)>=65&&checkStr.charCodeAt(i)<=91)
&& !(checkStr.charCodeAt(i)>=97 && checkStr.charCodeAt(i)<=122))
{
alert("Please enter valid User Name");
f1.username.focus();
return false;
}
//Password Validation
if(f1.password.value.length<6)
{
alert("Please enter Password not less than 6");
f1.password.focus();
return false;
}
if(!(f1.password.value==f1.password1.value))
{
alert("Please re-enter corrert Password");
f1.password1.focus();
return false;
}
//email validation

```

```

flag=true;
if(f1.email.value=="")
flag=false;
var Str=f1.email.value;
if(allValidChars(Str))
for(i=0;i<Str.length;i++)
if(Str.charAt(i)=="@")
{
if((Str.substr(i+1,9)=="yahoo.com")||(Str.substr(i+1,9)=="gmail.com"))
{
flag=true;
break;
}
}
else
flag=false;
if(!(flag))
{
alert("Please enter a valid Email ID");
f1.email.focus();
return false;
}
//phone number validation
flag=true;
if(f1.phno.value.length!=10)
flag=false;
var phno=f1.phno.value;
for(i=0;i<phno.length;i++)
if(!(phno.charCodeAt(i)>=48&&phno.charCodeAt(i)<=57))
flag=false;
if(!flag)
{
alert("Please enter valid Phone Number");
f1.phno.focus();
return false;
}
//gender validation
flag=false;
for(i=0;i<f1.radio.length;i++)
if(f1.radio[i].checked)

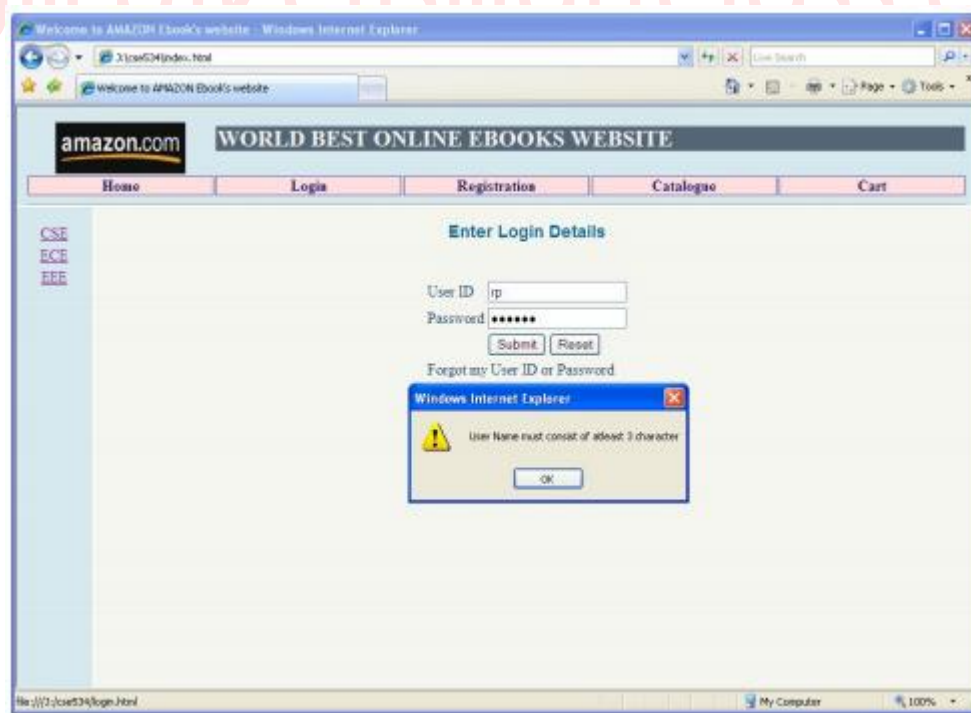
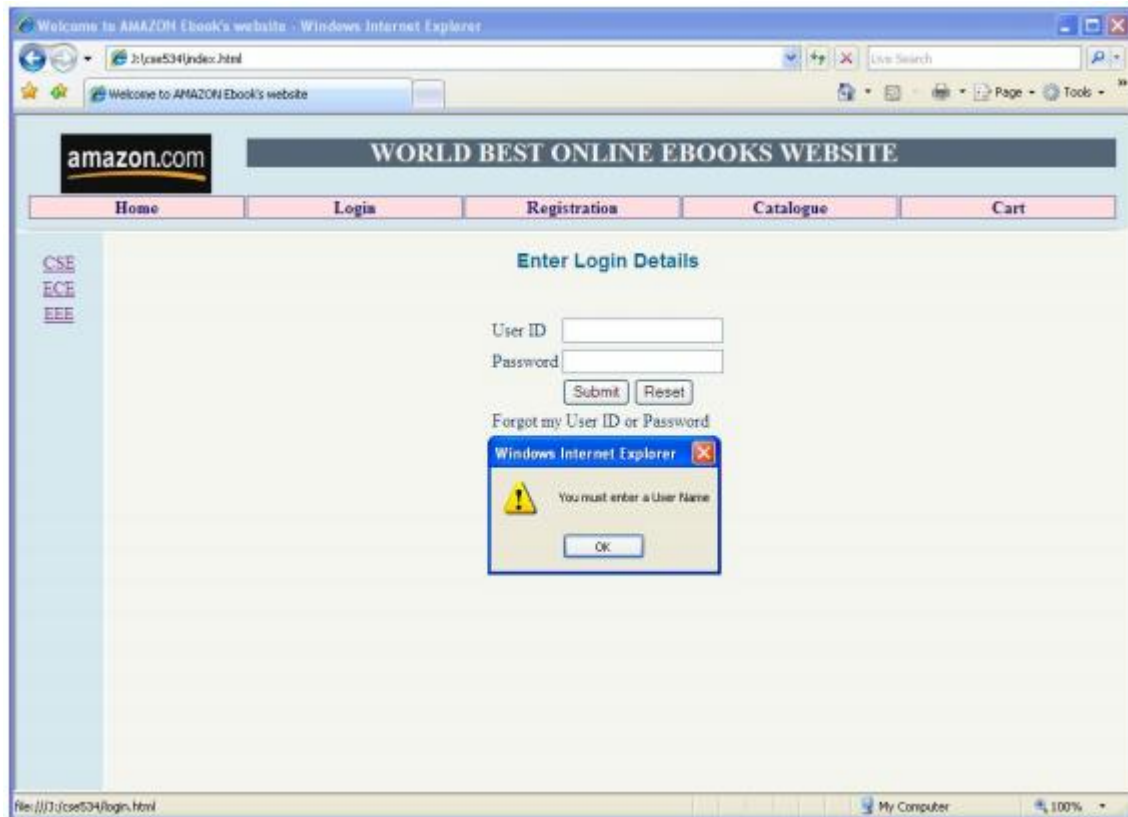
```

```

flag=true;
if(!(flag))
{
alert("Please choose a Gender");
return false;
}
//Date of birth validation
if((f1.dd.selectedIndex<=0)||(f1.mm.selectedIndex<=0)||(f1.yyyy.selectedIndex<=0))
{
alert("Please choose a Date of Birth");
f1.phno.focus();
return false;
}
//checkbox validation
flag=false;
for (i = 0; i < f1.checkbox.length; i++)
{
if (f1.checkbox[i].checked)
flag = true;
}
if(!(flag))
{
alert("Please select at least one of the \"Language\" options.");
return false;
}
//address validation
if(f1.address.value.length<25)
{
alert("Please enter a Correct Address");
return false;
}
}
function allValidChars(email)
{
var validchars = "abcdefghijklmnopqrstuvwxyz0123456789@.-_";
for (i=0; i < email.length; i++)
{
var letter = email.charAt(i).toLowerCase();
if (validchars.indexOf(letter) == -1)
return false;
}
}

```

```
} return true;
}
Login.html
<html>
<head>
<title> Welcome to AMAZON website</title>
<link rel="stylesheet" href="style.css" type="text/css">
<script type="text/javascript" src="validation.js"></script>
</head>
<body >
<center>
<h3> Enter Login Details</h3>
<br/>
<form name="f1" onsubmit="return form1_validation()">
<table align="center" >
<tr> <td> User ID</td>
<td> <input type="text" name="username"></td> </tr>
<tr> <td> Password</td>
<td> <input type="password" name="password"></td> </tr>
<tr> <td></td>
<td><input type="submit" value="Submit"></td>
<input type="reset" value="Reset"></td> </tr>
<tr> <td colspan=2>Forgot my User ID or Password</td>
</tr>
</table>
</html>
```





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Registration.html

```

<html>
<head>
<title> Welcome to AMAZON website</title>
<link rel="stylesheet" href="style.css" type="text/css">
<script type="text/javascript" src="validation.js"></script> </head>
<body>
<center><h3> Registration Form </h3> <br/>
<form name="f1" onsubmit="return form1_validation()">
<table cellpadding="1" align="center" >
<tr>
<td> <input type="text" name="username"></td> </tr>
<tr> <td>Password:*</td>
<td> <input type="password" name="password"></td> </tr>
<tr> <td>Email ID:*</td>
<td> <input type="text" name="email"></td> </tr>
<tr> <td>Phone Number:*</td>
<td> <input type="text" name="phno"></td> </tr>
<tr> <td valign="top">Gender:*</td>
<td> <input type="radio" name="radio" value="1">Male<br>
<input type="radio" name="radio" value="2">Female</td> </tr>
<tr> <td>Date of Birth:*</td>
<td> dd: <select name=dd > <option> </option>
<script type="text/javascript">
for(i=1;i<=31;i++)
document.write("<option value=i>"+i+"</option>");
</script> </select>
mm: <select name=mm> <option> </option>
<script type="text/javascript">
for(i=1;i<=12;i++)
document.write("<option value=i>"+i+"</option>");
</script> </select>
yyyy: <select name=yyyy> <option> </option>
<script type="text/javascript">
for(i=1880;i<=2008;i++)
document.write("<option value=i>"+i+"</option>");
</script> </select> </td> </tr>
<tr> <td valign="top">Language Known:*</td>
<td> <input type="checkbox" name="checkbox" value="English">English<br>
<input type="checkbox" name="checkbox" value="Telugu">Telugu<br>

```

```

<input type="checkbox" name="checkbox" value="Hindi">Hindi<br>
<input type="checkbox" name="checkbox" value="Tamil">Tamil</td> </tr>
<tr> <td valign="top">Address:*</td>
<td><textarea name="address"></textarea></td>
<tr><td></td><td><input type="submit" value="submit" hspace="10">
<input type="reset" value="reset"></td> </tr>
<tr> <td colspan=2 >*<font color="#FF0000">fields are
mandatory</font></td></tr>
</table> </center>
</body>
</html>

```

The screenshot shows a web browser window titled 'Welcome to AMAZON Ebook's website - Windows Internet Explorer'. The address bar shows '3:\jose534\index.html'. The website header includes the 'amazon.com' logo and the text 'WORLD BEST ONLINE EBOOKS WEBSITE'. A navigation bar contains links: Home, Login, Registration, Catalogue, and Cart. On the left, there are links for CSE, ECE, and EEE. The main content area is titled 'Registration Form' and contains the following fields:

- Name:*
- Password:*
- Reenter Password:*
- Email ID:*
- Phone Number:*
- Gender:*
- Date of Birth:*
- Language Known:*
- Address:*

Below the fields are 'submit' and 'reset' buttons. A red asterisk at the bottom indicates '* fields are mandatory'. A small error dialog box from 'Windows Internet Explorer' is open, displaying a yellow warning icon and the message 'You must enter a User Name' with an 'OK' button.

Welcome to AMAZON Ebook's website - Windows Internet Explorer

3\cse534\index.html

Welcome to AMAZON Ebook's website

amazon.com

WORLD BEST ONLINE EBOOKS WEBSITE

Home Login Registration Catalogue Cart

CSE
ECE
EEE

Registration Form

Name:*

Password:*

Reenter Password:*

Email ID:*

Phone Number:*

Gender:*
☐ Male
☐ Female

Date of Birth:* dd: mm: yyyy:

Language Known:*
☐ English
☐ Telugu
☐ Hindi
☐ Tamil

Address:*

* fields are mandatory

Windows Internet Explorer

Use: Name must consist of atleast 3 character

OK

File: (F) 3\cse534\registration.html My Computer 100%

Welcome to AMAZON Ebook's website - Windows Internet Explorer

3\cse534\index.html

Welcome to AMAZON Ebook's website

amazon.com

WORLD BEST ONLINE EBOOKS WEBSITE

Home Login Registration Catalogue Cart

CSE
ECE
EEE

Registration Form

Name:*

Password:*

Reenter Password:*

Email ID:*

Phone Number:*

Gender:*
☐ Male
☐ Female

Date of Birth:* dd: mm: yyyy:

Language Known:*
☐ English
☐ Telugu
☐ Hindi
☐ Tamil

Address:*

* fields are mandatory

Windows Internet Explorer

Please enter valid User Name

OK

File: (F) 3\cse534\registration.html My Computer 100%

Welcome to AMAZON Ebook's website - Windows Internet Explorer

2:\cse534\index.html

Welcome to AMAZON Ebook's website

amazon.com

WORLD BEST ONLINE EBOOKS WEBSITE

Home Login Registration Catalogue Cart

CSE
ECE
EEE

Registration Form

Name.*

Password.*

Email ID.*

Phone Number.*

Gender.*
☐ Male
☐ Female

Date of Birth.* dd: mm: yyyy:

Language Known.*
☐ English
☐ Telugu
☐ Hindi
☐ Tamil

Address.*

* Fields are mandatory

Windows Internet Explorer

Please enter Password not less than 6

OK

File:///2:/cse534/registration.html My Computer 100%

Welcome to AMAZON Ebook's website - Windows Internet Explorer

2:\cse534\index.html

Welcome to AMAZON Ebook's website

amazon.com

WORLD BEST ONLINE EBOOKS WEBSITE

Home Login Registration Catalogue Cart

CSE
ECE
EEE

Registration Form

Name.*

Password.*

Reenter Password.*

Email ID.*

Phone Number.*

Gender.*
☐ Male
☐ Female

Date of Birth.* dd: mm: yyyy:

Language Known.*
☐ English
☐ Telugu
☐ Hindi
☐ Tamil

Address.*

* Fields are mandatory

Windows Internet Explorer

Please enter Password not less than 6

OK

File:///2:/cse534/registration.html My Computer 100%

Welcome to AMAZON Ebook's website - Windows Internet Explorer

2:\cse534\index.html

Welcome to AMAZON Ebook's website

amazon.com

WORLD BEST ONLINE EBOOKS WEBSITE

Home Login Registration Catalogue Cart

CSE
ECE
EEE

Registration Form

Name.* rajapapiah

Password.* *****

Reenter Password.*

Email ID.*

Phone Number.*

Gender.*
☐ Male
☐ Female

Date of Birth.* dd: mm: yyyy:

Language Known.*
☐ English
☐ Telugu
☐ Hindi
☐ Tamil

Address.*

submit reset

* fields are mandatory

Windows Internet Explorer

Please re-enter correct Password

OK

File:///2:\cse534\registration.html My Computer 100%

Welcome to AMAZON Ebook's website - Windows Internet Explorer

2:\cse534\index.html

Welcome to AMAZON Ebook's website

amazon.com

WORLD BEST ONLINE EBOOKS WEBSITE

Home Login Registration Catalogue Cart

CSE
ECE
EEE

Registration Form

Name.* rajapapiah

Password.* *****

Reenter Password.* *****

Email ID.* rja

Phone Number.*

Gender.*
☐ Male
☐ Female

Date of Birth.* dd: mm: yyyy:

Language Known.*
☐ English
☐ Telugu
☐ Hindi
☐ Tamil

Address.*

submit reset

* fields are mandatory

Windows Internet Explorer

Please enter a valid Email ID

OK

File:///2:\cse534\registration.html My Computer 100%

3. Create and save an XML document at the server, which contains 10 users information. Write a program which takes User Id as input and returns the user details by taking the user information from the XML document

student.dtd:

```
<!ELEMENT student(rollnum,name,parntname,branch,year,addr,email,phno)>
<!ELEMENT roll_no(#PCDATA)>
<!ELEMENT name(first_name,last_name)>
<!ELEMENT first_name(#PCDATA)>
<!ELEMENT last_name(#PCDATA)>
<!ELEMENT father_name(fname,mname,lname)>
<!ELEMENT first_name(#PCDATA)>
<!ELEMENT last_name(#PCDATA)>
<!ELEMENT branch(#PCDATA)>
<!ELEMENT year(#PCDATA)>
<!ELEMENT address(door_no,street,city)>
<!ELEMENT door_no(#PCDATA)>
<!ELEMENT street(#PCDATA)>
<!ELEMENT city(#PCDATA)>
<!ELEMENT email(#PCDATA)>
<!ELEMENT phno(#PCDATA)>
```

student.xsd:

```
<xs:schema>
  <xs:element name="student">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="roll_no" type="xs:string"/>
        <xs:element name="name">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="first_name" type="xs:string"/>
              <xs:element name="last_name" type="xs:string"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="father-name">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="first_name" type="xs:string"/>
              <xs:element name="last_name" type="xs:string"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

```

</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="branch" type="xs:string"/>
<xs:element name="year" type="xs:integer"/>
<xs:element name="addr">
<xs:complexType>
<xs:sequence>
<xs:element name="door-no" type="xs:string"/>
<xs:element name="street" type="xs:string"/>
<xs:element name="city" type="xs:string"/>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="email" type="xs:string"/>
<xs:element name="phno" type="xs:integer"/>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:schema>

```

student.xml:

```

<?xml version="1.0" ?>
- <student xmlns:xsi="xmlschema-instance" xsi:SchemaLocation="student.xsd">
    <roll_no>08A01D2501</roll_no>
    - <name>
        <first_name>A</first_name>
        <Last_name>Aruna</Last_name>
    </name>
    - <father_name>
        <first_name>Venkateswara</first_name>
        <Last_name>Rao</Last_name>
    </father_name>
    <branch>computer engineering</branch>
    <year>1ST Year</year>
    - <address>
        <door-no>32-15/1-44</door-no>
        <street>B.R.Nagar-1</street>
        <city>Gurgaon</city>
    </address>

```

```

<email>iaaruna@yahoo.com</email>
<phno>9949643372</phno>
<roll_no>08A01D2501</roll_no>
- <name>
    <first_name>Prathap</first_name>
    <Last_name>Rudra</Last_name>
</name>
- <father_name>
    <first_name>Venkateswara </first_name>
    <Last_name>B</Last_name>
</father_name>
<branch> computer engineering (mtech) </branch>
<year>1st Year</year>
- <address>
    <door-no>door no 603/n</door-no>
    <street>Recoloney</street>
    <city>Delhi</city>
</address>
<email>brprathap@gmail.com</email>
<phno>9866145423</phno>
<roll_no>08A01D2503</roll_no>
- <name>
    <first_name>Ramesh</first_name>
    <Last_name>Kumar</Last_name>
</name>
- <father_name>
    <first_name>Venkateswara</first_name>
    <Last_name>Rao</Last_name>
</father_name>
<branch> computer engineering(mtech) </branch>
<year>1st Year</year>
- <address>
    <door-no>32-15/1-44</door-no>
    <street>B.R.Nagar-1</street>
    <city>Gurgaon</city>
</address>
<email>itrameshch@gmail.com</email>
<phno>9985150379</phno>
<roll_no>08A01D2504</roll_no>
- <name>

```

```

        <first_name>kishore</first_name>
        <Last_name>Galla</Last_name>
    </name>
    - <father_name>
        <first_name>Venkateswara</first_name>
        <Last_name>Rao</Last_name>
    </father_name>
    <branch> Computer engineering (mtech) </branch>
    <year>1st Year</year>
    - <address>
        <door-no>32-15/1-44</door-no>
        <street>B.R.Nagar-1</street>
        <city>Gurgaon</city>
    </address>
    <email>galla_kishore@yahoo.com</email>
    <phno>990837394</phno>
    <roll_no>08A01D2505</roll_no>
    - <name>
        <first_name>Madhu</first_name>
        <Last_name>Garlapati</Last_name>
    </name>
    - <father_name>
        <first_name>Venkateswara</first_name>
        <Last_name>Rao</Last_name>
    </father_name>
    <branch> commputer engineering (mtech) </branch>
    <year>1st Year</year>
    - <address>
        <door-no>32-15/1-44</door-no>
        <street>B.R.Nagar-1</street>
        <city>Gurgaon</city>
    </address>
    <email>madhubabu.garlapati@gmail.com</email>
    <phno>9908005778</phno>
</student>

```

4. Install TOMCAT web server. Convert the static web pages of assignments 2 into dynamic web Pages using Servlets and cookies. Hint: Users information (user id, password, credit card number) would be stored in web.xml. Each user should have a separate Shopping Cart.

Step 1

Download and Install Tomcat

1. Go to <http://tomcat.apache.org/download-70.cgi> then go to the Binary Distribution/Core/ and download the "zip" package (for example "apache-tomcat-7.0.40.zip", about 8MB).
2. Now **unzip** the downloaded file into a directory of our choice. Don't unzip onto the desktop (since its path is hard to locate). I suggest using "[e:\myserver](#)". Tomcat will be unzipped into the directory "[e:\myserver\tomcat-7.0.40](#)".

Step 2

Check the installed directory to ensure it contains the following sub-directories:

- bin folder
- logs folder
- webapps folder
- work folder
- temp folder
- conf folder
- lib folder

Step 3

Now, we need to create an Environment Variable JAVA_HOME.

We need to create an environment variable called "JAVA_HOME" and set it to our JDK installed directory.

1. To create the JAVA_HOME environment variable in Windows XP/Vista/7 we need to push the "Start" button then select "Control Panel" / "System" / "Advanced system settings". Then switch to the "Advanced" tab and select "Environment Variables" / "System Variables" then select "New" (or "Edit" for modification). In "Variable Name", enter "JAVA_HOME". In "Variable Value", enter your JDK installed directory (e.g., "c:\Program Files\Java\jdk1.7.0_{xx}").
2. For ensuring that it is set correctly, we need to start a command shell (to refresh the environment) and issue:
set JAVA_HOME

JAVA_HOME=c:\Program Files\Java\jdk1.7.0_{xx} <== Check that this is OUR JDK installed directory

3. Sometimes we need to set JRE_HOME also. So for creating JRE_HOME we need to use the same procedure. Push the "Start" button then select "Control Panel" / "System" / "Advanced system settings". Then switch to the "Advanced" tab and select "Environment Variables" / "System Variables" then select "New" (or "Edit" for modification). In "Variable Name", enter "JRE_HOME". In "Variable Value", enter your JRE installed directory (e.g., "C:\Program Files\Java\jre7\").

Step 4

Configure Tomcat Server

The configuration files of the Apache Tomcat Server are located in the "conf" sub-directory of our Tomcat installed directory, for example "[E:\myserver\tomcat7.0.40\conf](#)". There are 4 configuration XML files:

1. context.xml file
2. tomcat-users.xml file
3. server.xml file
4. web.xml file

Before proceeding, make a BACKUP of the configuration files.

Step 4(a) "conf\web.xml"; Enabling a Directory Listing

Open the configuration file "web.xml". We shall enable the directory listing by changing "listings" from "false" to "true" for the "default" servlet.

<param-value>**true**</param-value> like:

```

96      <servlet>
97          <servlet-name>default</servlet-name>
98          <servlet-class>
          org.apache.catalina.servlets.DefaultServlet
        </servlet-class>
99          <init-param>
100             <param-name>debug</param-name>
101             <param-value>0</param-value>
102          </init-param>
103          <init-param>
104             <param-name>listings</param-name>
105             <param-value>true</param-value>
106          </init-param>
107          <load-on-startup>1</load-on-startup>
108      </servlet>
109

```

Step 4(b) "conf\server.xml file"; set the TCP Port Number

Open the file "server.xml" in a text editor.

The default port number of Tomcat is 8080. Now we need to change the TCP port number for Tomcat, since the same port number can be used by other servers like SQL Server. We may choose any number between 1024 and 65535. We shall choose 9999 in this article.

Locate the following lines, and change port="8080" to port="9999". Like:

<Connector port="9999" protocol="HTTP/1.1" Like

```

69      -->
70      <Connector port="9999" protocol="HTTP/1.1"
71          connectionTimeout="20000"
72          redirectPort="8443" />
73      <!-- A "Connector" using the shared thread
74      pool-->
75      <!--
76      <Connector executor="tomcatThreadPool"

```

Step 4(c) "conf\context.xml"; Enabling Automatic Reload

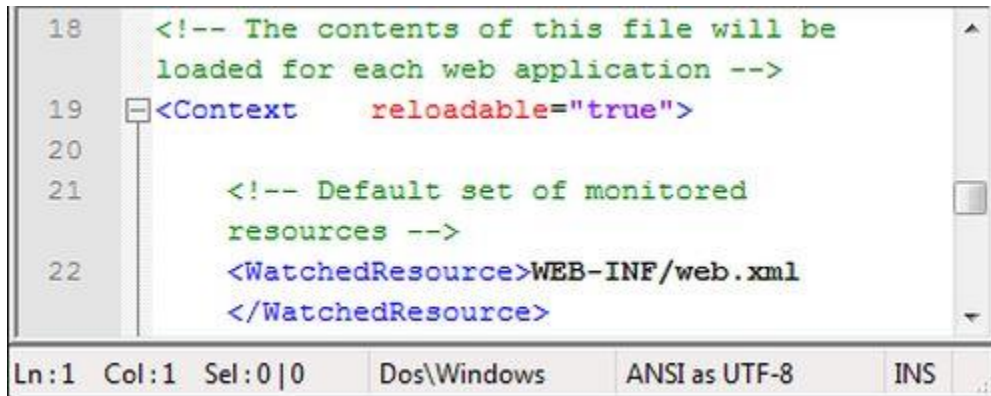
In that we set reloadable="true" to the <Context> element to enable automatic reload after code changes.

Add reloadable="true" as in the following:

```
<Context reloadable="true">
```

.....

```
</Context> Like
```



```

18  <!-- The contents of this file will be
19  loaded for each web application -->
20  <Context reloadable="true">
21      <!-- Default set of monitored
22      resources -->
        <WatchedResource>WEB-INF/web.xml
        </WatchedResource>

```

Ln:1 Col:1 Sel:0|0 Dos\Windows ANSI as UTF-8 INS

Step 4(d) (Optional) "conf\tomcat-users.xml"

It is used to manage Tomcat by adding the highlighted lines, inside the <tomcat-users> elements.

In that we can add a password and username as an optional step.

Step 5

Now, start the tomcat server

Executable programs and scripts are kept in the "bin" sub-directory of the Tomcat installed directory, e.g., "<E:\myserver\tomcat7.0.40\bin>".

Step 5(a) Start Server

Launch a command shell. Set the current directory to "<TOMCAT_HOME>\bin" like E:\myserver\tomcat7.0.40\bin, and run "startup.bat" as follows:

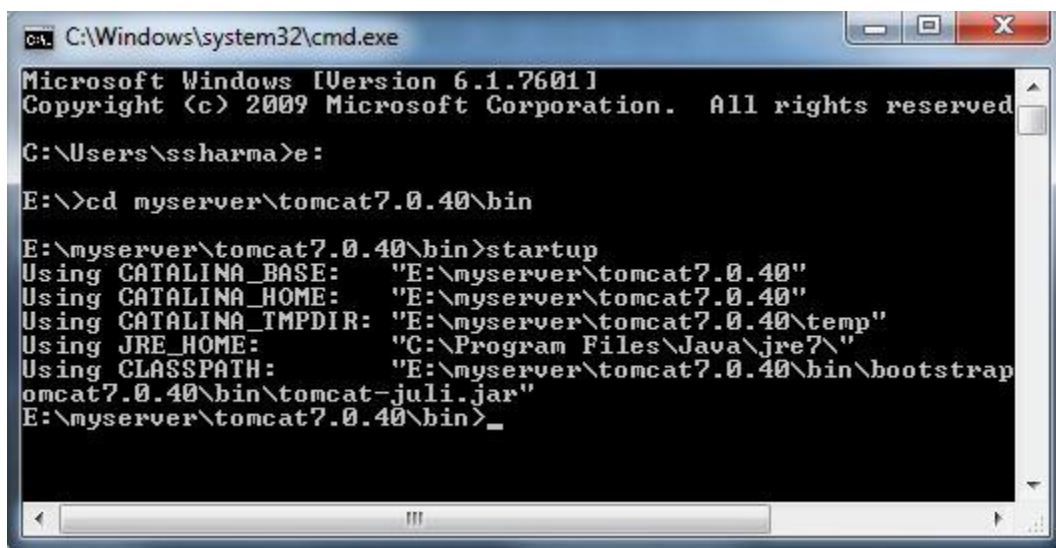


```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved

C:\Users\ssharma>e:
E:\>cd myserver\tomcat7.0.40\bin
E:\myserver\tomcat7.0.40\bin>startup_
```

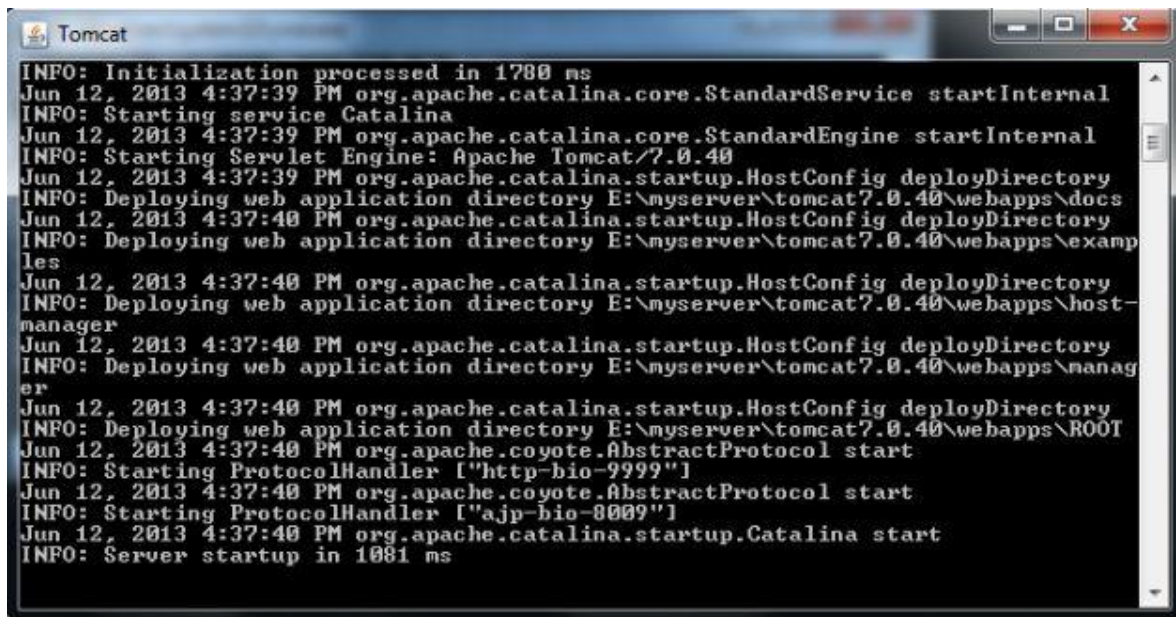
After that a new Tomcat console window appears. Read the messages on the console. Look out for the Tomcat's port number (double check that Tomcat is running on port 9999).....

We saw a figure like:



```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved

C:\Users\ssharma>e:
E:\>cd myserver\tomcat7.0.40\bin
E:\myserver\tomcat7.0.40\bin>startup
Using CATALINA_BASE:   "E:\myserver\tomcat7.0.40"
Using CATALINA_HOME:   "E:\myserver\tomcat7.0.40"
Using CATALINA_TMPDIR: "E:\myserver\tomcat7.0.40\temp"
Using JRE_HOME:        "C:\Program Files\Java\jre7\"
Using CLASSPATH:       "E:\myserver\tomcat7.0.40\bin\bootstrap
omcat7.0.40\bin\tomcat-juli.jar"
E:\myserver\tomcat7.0.40\bin>_
```



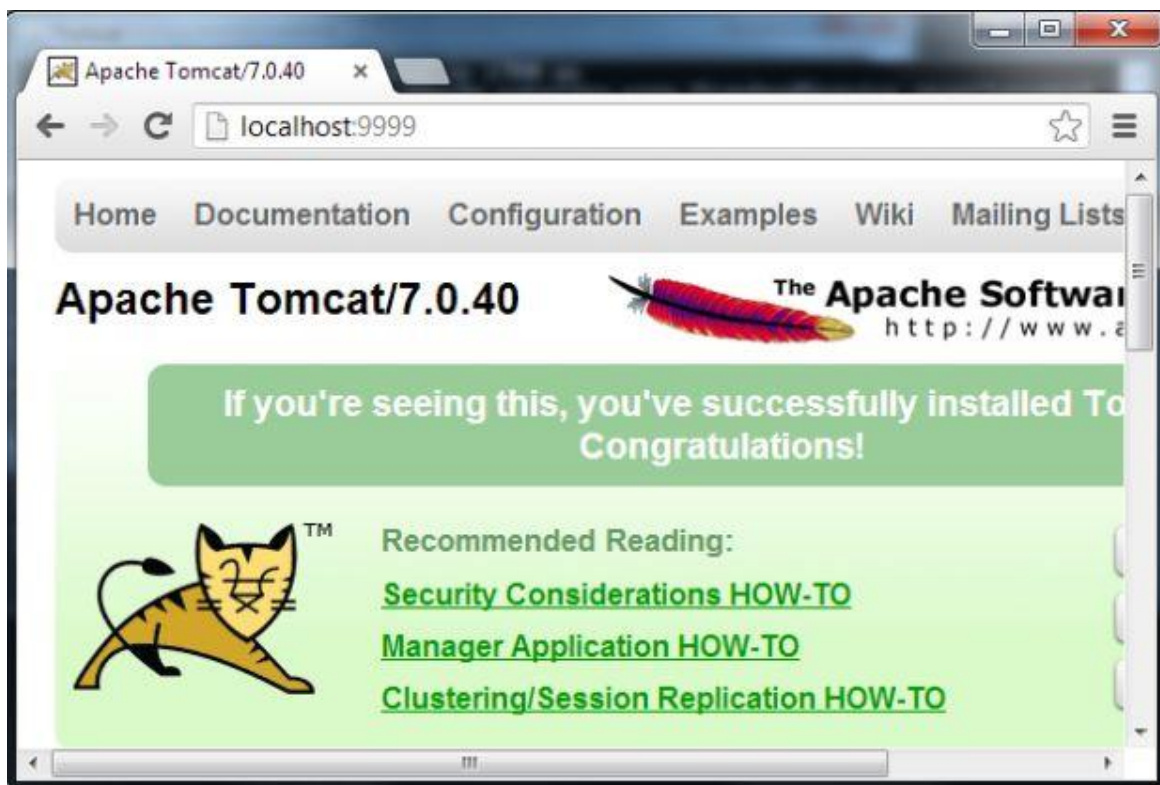
```

Tomcat
INFO: Initialization processed in 1788 ms
Jun 12, 2013 4:37:39 PM org.apache.catalina.core.StandardService startInternal
INFO: Starting service Catalina
Jun 12, 2013 4:37:39 PM org.apache.catalina.core.StandardEngine startInternal
INFO: Starting Servlet Engine: Apache Tomcat/7.0.40
Jun 12, 2013 4:37:39 PM org.apache.catalina.startup.HostConfig deployDirectory
INFO: Deploying web application directory E:\myserver\tomcat7.0.40\webapps\docs
Jun 12, 2013 4:37:40 PM org.apache.catalina.startup.HostConfig deployDirectory
INFO: Deploying web application directory E:\myserver\tomcat7.0.40\webapps\examples
Jun 12, 2013 4:37:40 PM org.apache.catalina.startup.HostConfig deployDirectory
INFO: Deploying web application directory E:\myserver\tomcat7.0.40\webapps\host-manager
Jun 12, 2013 4:37:40 PM org.apache.catalina.startup.HostConfig deployDirectory
INFO: Deploying web application directory E:\myserver\tomcat7.0.40\webapps\manager
Jun 12, 2013 4:37:40 PM org.apache.catalina.startup.HostConfig deployDirectory
INFO: Deploying web application directory E:\myserver\tomcat7.0.40\webapps\ROOT
Jun 12, 2013 4:37:40 PM org.apache.coyote.AbstractProtocol start
INFO: Starting ProtocolHandler ["http-bio-9999"]
Jun 12, 2013 4:37:40 PM org.apache.coyote.AbstractProtocol start
INFO: Starting ProtocolHandler ["ajp-bio-8009"]
Jun 12, 2013 4:37:40 PM org.apache.catalina.startup.Catalina start
INFO: Server startup in 1081 ms

```

Step 5(b) Access the Server

Open a browser then enter the URL "<http://localhost:9999>" to access the Tomcat server's welcome page. If we get this type of page then it means we are done.



Now try the URL <http://localhost:9999/examples> to view JSP and servlet examples.

Step 5(c) How to Shutdown Server

We can stop the server using one of the following:

1. Press ctrl-c on the Tomcat console; or
2. Run "<TOMCAT_HOME>\bin\shutdown.bat" script:
// Change the current directory to Tomcat's "bin"
> e: // Change the current drive
e:\> cd E:\myserver\tomcat7.0.40\bin // Change Directory to YOUR Tomcat's "bin" directory
// Shutdown the server
E:\myserver\tomcat7.0.40\bin> shutdown

Web.xml

```

<?xml version="1.0" encoding="iso-8859-1"?>
<!DOCTYPE web-app PUBLIC "-//Sun Microsystems, Inc.//DTD Web Application 2.3//EN"
"http://java.sun.com/dtd/web-app_2_3.dtd">
<web-app>
  <display-name>Servlet 2.4 Examples</display-name>
  <description> Servlet 2.4 Examples. </description>
  <servlet>
    <servlet-name>reg</servlet-name>
    <servlet-class>reg</servlet-class>
  </servlet>
  <servlet>
    <servlet-name>login</servlet-name>
    <servlet-class>login</servlet-class>
  </servlet>
  <servlet>
    <servlet-name>profile</servlet-name>
    <servlet-class>profile</servlet-class>
  </servlet>
  <servlet>
    <servlet-name>catalog</servlet-name>
    <servlet-class>catalog</servlet-class>
    <servlet-mapping>
      <servlet-name>order</servlet-name>
      <url-pattern>
    </servlet>
  <servlet>
    <servlet-name>order</servlet-name>
    <servlet-class>order</servlet-class>
  </servlet>
  <url-pattern>order</url-pattern>
  </servlet-mapping>
  <servlet-mapping>
    <servlet-name>catalog</servlet-name>
    <url-pattern>catalog</url-pattern>
  </servlet-mapping>
  <servlet-mapping>
    <servlet-name>profile</servlet-name>
    <url-pattern>profile</url-pattern>
  </servlet-mapping>
  <servlet-mapping>
    <servlet-name>login</servlet-name>
    <url-pattern>login</url-pattern>
  </servlet-mapping>
  <servlet-mapping> <servlet-name>reg</servlet-name> <url-pattern>reg</url-pattern>
</servlet-mapping></web-app>

```


Login.java

```

import java.sql.*;
import java.io.*;
import java.util.*;
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 bgcolor=\"pink\"");
        String id=req.getParameter("id");
        String pwd=req.getParameter("pwd");
        try {
            Driver d=new oracle.jdbc.driver.OracleDriver();
            DriverManager.registerDriver(d);
            Connection con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger");
            Statement stmt=con.createStatement();
            String sqlstmt="select id,password 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) {
                pw.println("SORRY INVALID ID TRY AGAIN ID<br><br>");
                pw.println("<a href=\"/tr/login.html\">press LOGIN to RETRY</a>");
            }
            else {
                pw.println("VALID LOGIN ID<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><br><br>");
            }
            pw.println("</body></html>");
        }
        catch(Exception e) { resp.sendError(500,e.toString());
        }
    }
}

```


Reg.html

```

import java.sql.*;
import java.io.*;
import java.util.*;
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 bgcolor=\"pink\"");
        String name=req.getParameter("name");
        String addr=req.getParameter("addr");
        String phno=req.getParameter("phno");
        String id=req.getParameter("id");
        String pwd=req.getParameter("pwd");
        int no=Integer.parseInt(phno);
        try {
            Driver d=new oracle.jdbc.driver.OracleDriver();
            DriverManager.registerDriver(d);
            Connection con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger");
            Statement stmt=con.createStatement();
            String sqlstmt="select id,password from login";
            ResultSet rs=stmt.executeQuery(sqlstmt);
            int flag=0;
            while(rs.next()) {
                if(id.equal(rs.getString(1))&&pwd.equals(rs.getString(2))) {
                    flag=1;
                } }
            if(flag==1) {
                pw.println("SORRY INVALID ID ALREADY EXISTS TRY AGAIN WITH NEW
ID<br><br>");
                pw.println("<a href=\"/tr/reg.html\">press REGISTER to RETRY</a>");
            }
            else {
                Statement stmt1=con.createStatement();
                stmt1.executeUpdate("insertintologin
values(\"+names\",\"+addr+\",\"+no+\",\"+id+\",\"+pwd+)\");
                pw.println("YOUR DETAILS ARE ENTERED<br><br>");
                pw.println("<a href=\"/tr/login.html\">press LOGIN to login</a>");
            }
            pw.println("</body></html>");
        }
        catch(Exception e) { resp.sendError(500,e.toString());
        } } }

```

Catlog.java

```

import java.sql.*;
import java.io.*;
import java.util.*;
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 bgcolor=\"pink\"");
        String title=req.getParameter("title");
        try {
            Driver d=new oracle.jdbc.driver.OracleDriver();
            DriverManager.registerDriver(d);
            Connection con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger");
            Statement stmt=con.createStatement();
            String sqlstmt="select id,password from login";
            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("SORRY INVALID TITLE TRY AGAIN <br><br>");
                pw.println("<a href=\"/tr/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 java.util.*;
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 bgcolor=\"pink\"");
        String id=req.getParamenter("id");
        try {
            Driver d=new oracle.jdbc.driver.OracleDriver();
            DriverManager.registerDriver(d);
            Connection con=DriverManager.getConnection("jdbc:oracle:thin:
                @localhost:1521:orcl","scott","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("SORRY INVALID ID TRY AGAIN ID<br><br>");
                pw.println("<a href=\"/tr/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 java.util.*;
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 bgcolor=\"pink\"");
        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");
        int count=Integer.parseInt(count1);
        try {
            Driver d=new oracle.jdbc.driver.OracleDriver();
            DriverManager.registerDriver(d);
            Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger")
;
            Statement stmt=con.createStatement();
            String sqlstmt="select id,password from login";
            ResultSet rs=stmt.executeQuery(sqlstmt);
            int flag=0,amount,x;
            while(rs.next()) {
                if(id.equals(rs.getString(1))&&pwd.equals(rs.getString(2))) {
                    flag=1;
                }
            }
            if(flag==0) {
                pw.println("SORRY INVALID ID TRY AGAIN ID<br><br>");
                pw.println("<a href=\"\"/tr/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));

```

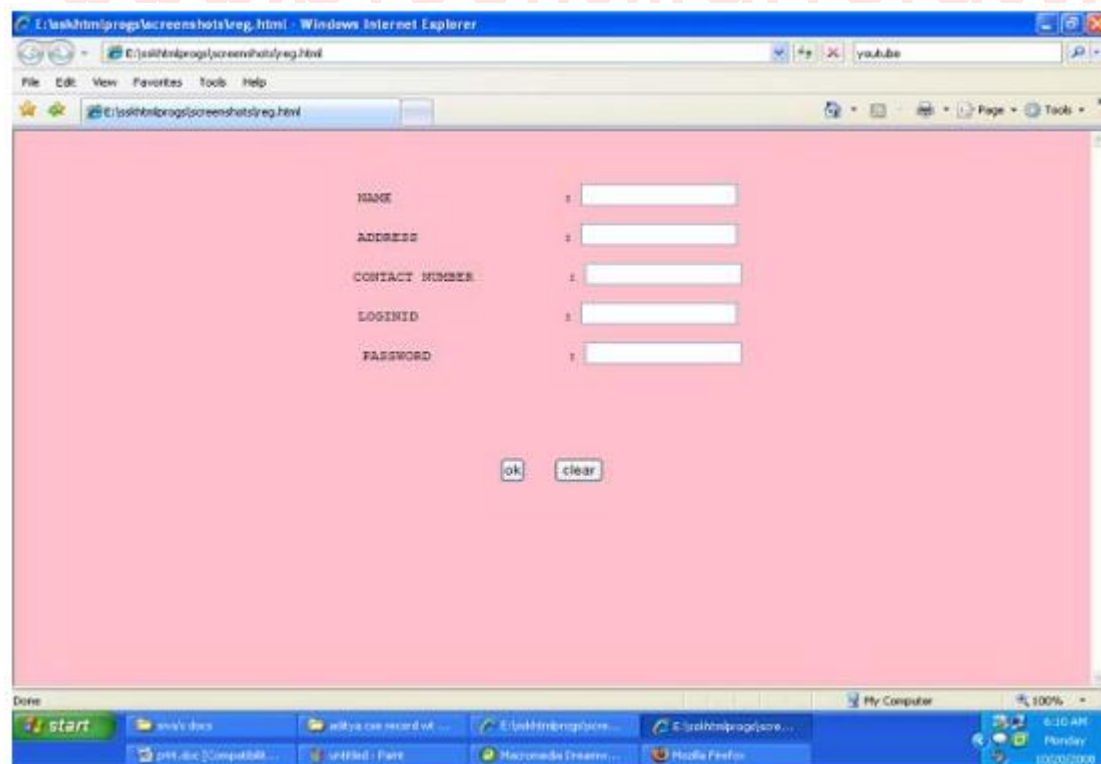
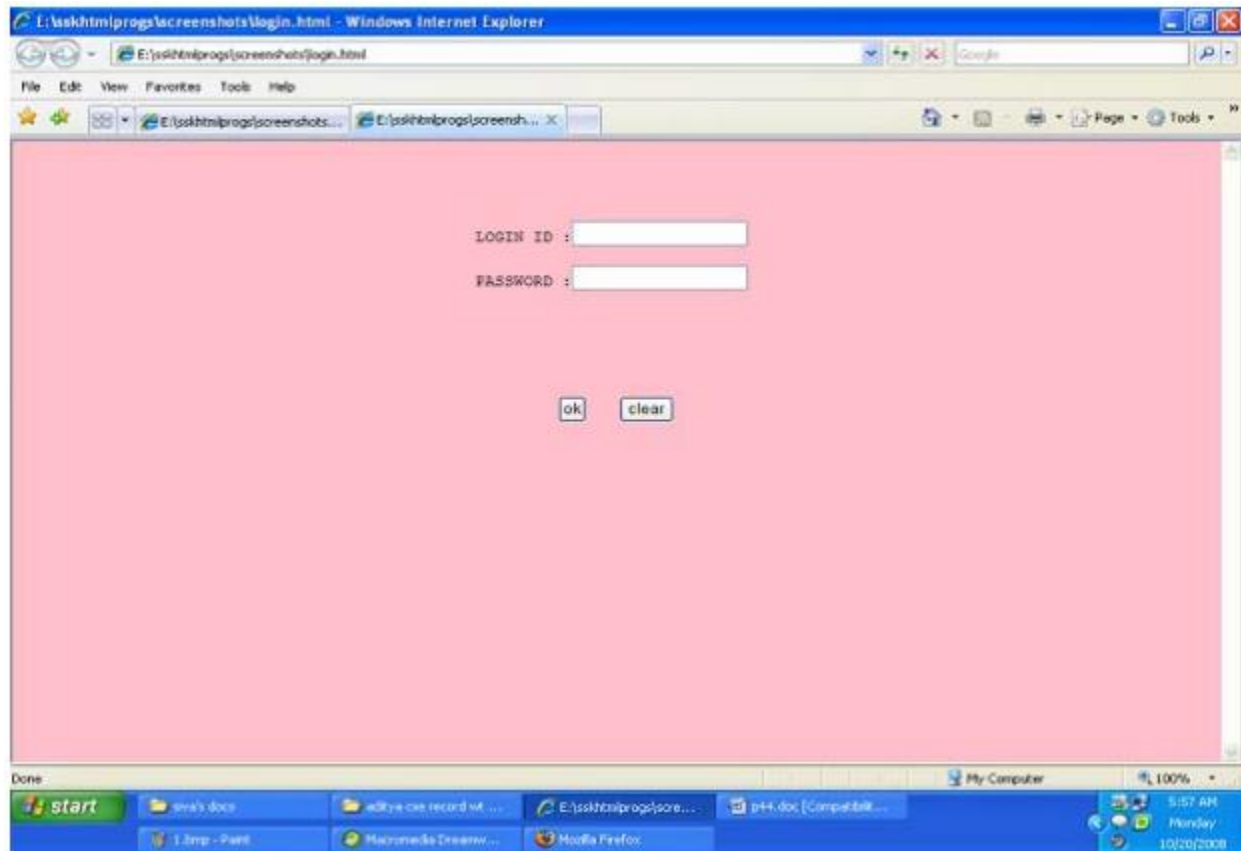
```

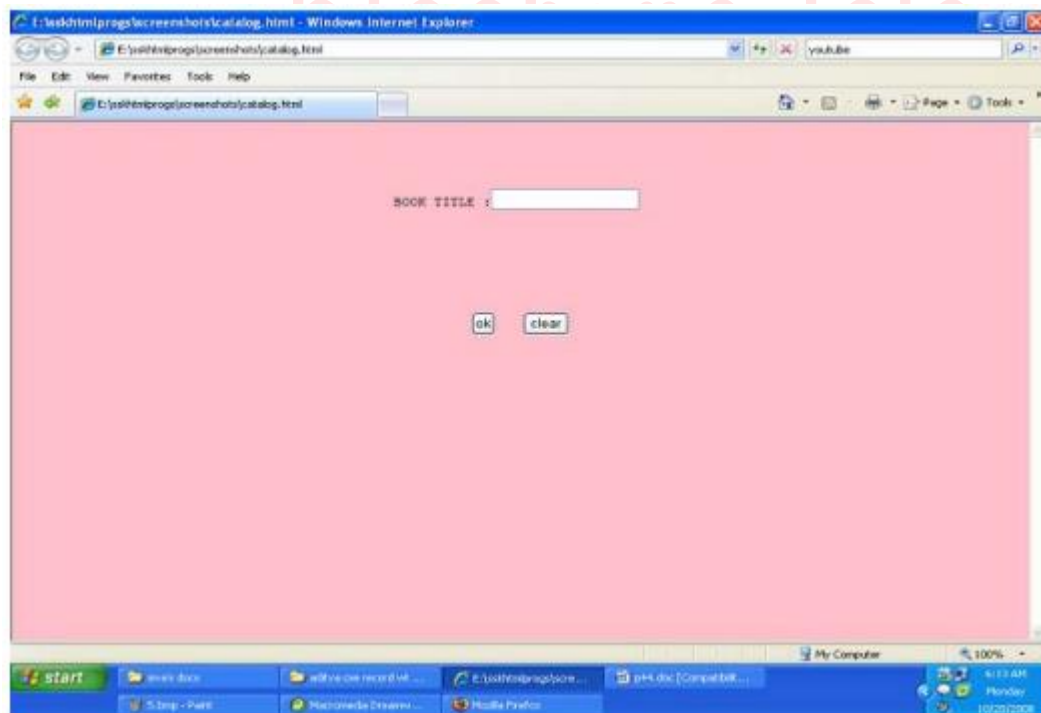
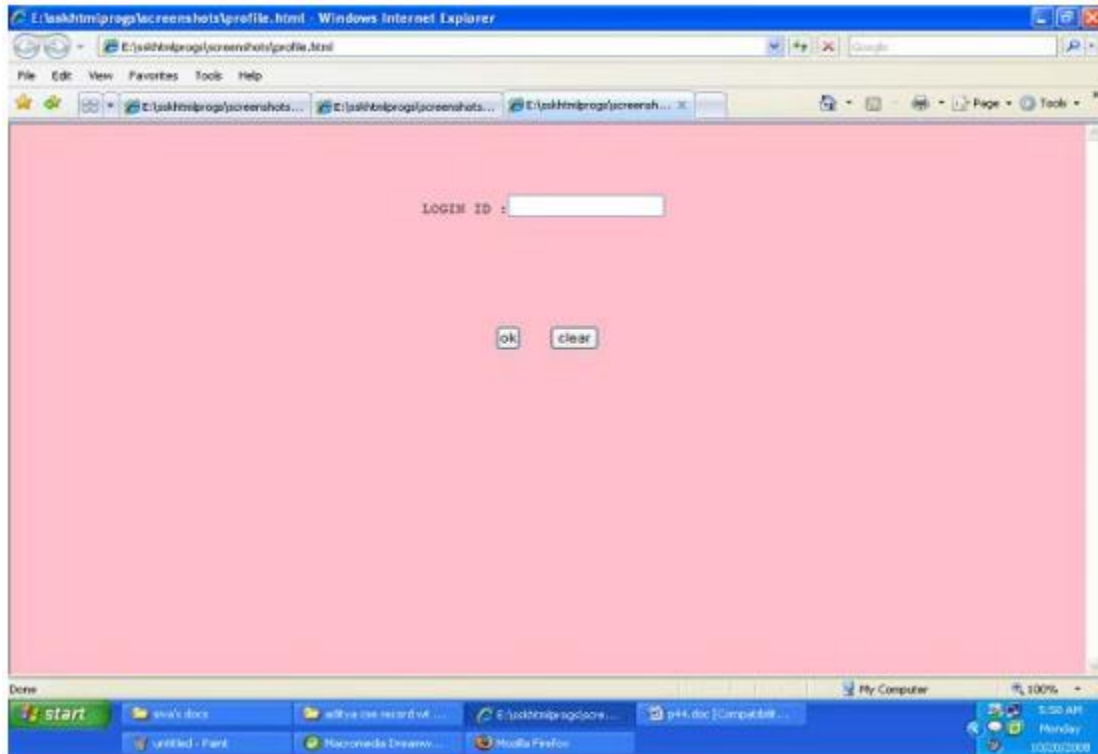
amount=count*x;
pw.println("AMOUNT :"+amount+"<br><br><br><br>");
Statement stmt1=con.createStatement();
stmt1.executeUpdate("insertintodetails
values('"+id+"','"+title+"'+amount+'','"+cno+"')");
pw.println("YOUR ORDER has taken<br>");
}
if(flag1==0) {
pw.println("SORRY INVALID ID TRY AGAIN ID<br><br>");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

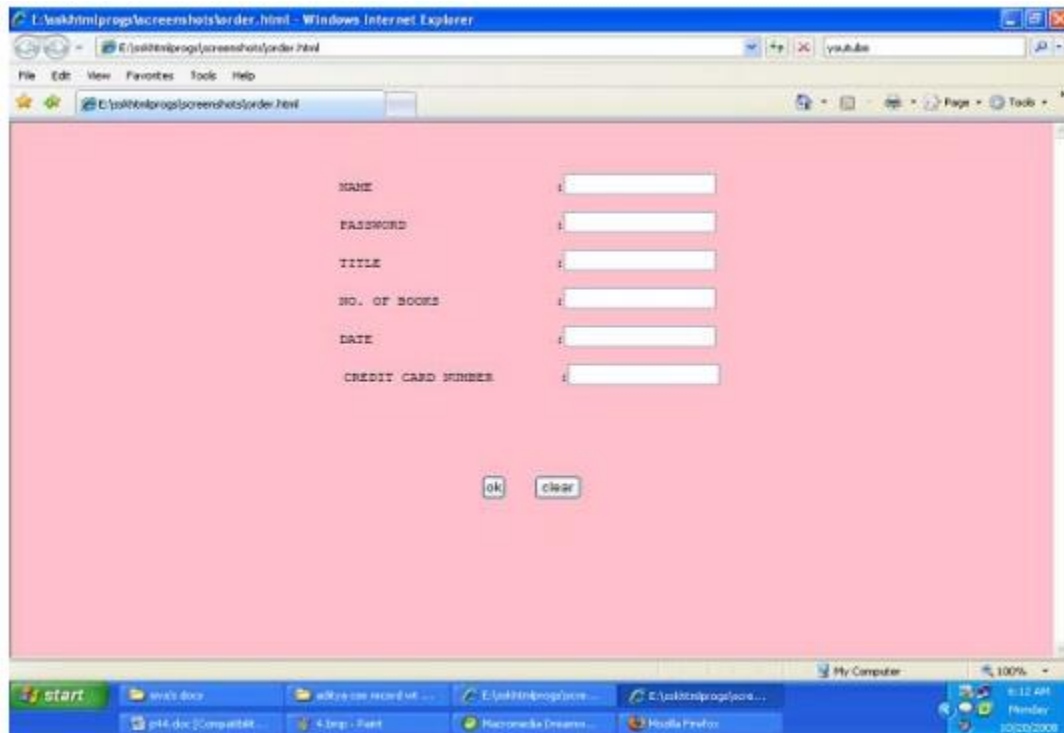
}
}
pw.println("</body></html>");
con.close();
}
catch(Exception e) {
resp.sendError(500,e.toString());
}
}
}

```









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5. Redo the previous task using JSP by converting the static web pages of assignments 2 into dynamic webpages. Create a database with user information and books information and books information. The books catalogue should be dynamically loaded from the database. Follow the MVC architecture while doing the website.

1) Create your own directory under tomcat/webapps (e.g. tr1)

2) Copy the html files in tr1

3) Copy the jsp files also into tr1

4) Start tomcat give the following command

Catalina.bat run

At install-dir/bin

5) at I.E give url as <http://localhost:8081/tr1/main.html>

Main.html:

```
<html>
<body bgcolor="pink">
<br><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="/tr/login.html">LOGIN</a>
href="/tr/login.html">REGISTRATION</a></div></pre>
</body></html>
```


Profile.html:

```

<html>
  <body bgcolor="pink"><br><br>
  <form name="myform" method="post" action="/tr1/profile.jsp">
    <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"
onCick="validate()">())>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;<input type="reset"
value="clear">
    </div>
  </form>
</body>
</html>

```

Catalog.html:

```

<html>
  <body bgcolor="pink"><br><br><br>
  <form method="post" action="/tr1/catalog.jsp">
    <div align="center"><pre>
      BOOK TITLE : <input type="text" name="title"><br>
    </pre><br><br>
    </div>
    <br><br>
    <div align="center">
      <input type="submit" value="ok"
name="button1">&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;<input type="reset" value="clear"   name="butt
on2">
    </div>
  </form>
</body>
</html>

```


Login.jsp:

```

%@page import="java.sql.*"%
%@page import="java.io.*"%
<%

    out.println("<html><body bgcolor=\"pink\">");
    String id=request.getParameter("id");
    String pwd=request.getParameter("pwd");
    Driver d=new oracle.jdbc.driver.OracleDriver();
    DriverManager.registerDriver(d);
    Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger");
    Statement stmt=con.createStatement();
    String sqlstmt="select id,password from login where id="+id+" and password="+pwd+"";
    ResultSet rs=stmt.executeQuery(sqlstmt);
    int flag=0;
    while(rs.next())
    {
        flag=1;
    }
    if(flag==0)
    {
        out.println("SORRY INVALID ID TRY AGAIN ID<br><br>");
        out.println(" <a href=\"/tr1/login.html\">press LOGIN to RETRY</a>");
    }
    else
    {
        out.println("VALID LOGIN ID<br><br>");
        out.println("<h3><ul>");
        out.println("<li><a href=\"profile.html\"><fontcolor=\"black\">USER
PROFILE</font></a></li><br><br>");
        out.println("<li><a href=\"catalog.html\"><fontcolor=\"black\">BOOKS
CATALOG</font></a></li><br><br>");
        out.println("<li><a href=\"order.html\"><fontcolor=\"black\">ORDER
CONFIRMATION</font></a></li><br><br>");
        out.println("</ul>");
    }
    out.println("<body></html>");
%>

```

Reg.jsp:

```

% @page import="java.sql.*"%
% @page import="java.io.*"%
<%
out.println("<html><body bgcolor=\"pink\">");
String name=request.getParameter("name");
String addr=request.getParameter("addr");
String phno=request.getParameter("phno");
String id=request.getParameter("id");
String pwd=request.getParameter("pwd");
int no=Integer.parseInt(phno);
Driver d=new oracle.jdbc.driver.OracleDriver();
DriverManager.registerDriver(d);
Connection con=
DriverManager.getConnection ("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger");
Statement stmt=con.createStatement();
String sqlstmt="select id from login";
ResultSet rs=stmt.executeQuery(sqlstmt);
int flag=0;
while(rs.next())
{
    if(id.equals(rs.getString(1)))
    {
        flag=1;
    }
}
if(flag==1)
{
    out.println("SORRY LOGIN ID ALREADY EXISTS TRY AGAIN WITH NEW ID
<br><br>");
    out.println("<a href=\""/tr1/reg.html\">press REGISTER to RETRY</a>");
}
else
{
    Statement stmt1=con.createStatement ();
    stmt1.executeUpdate ("insert into login values (" +name+"","+addr+"","+no+"","+id+"","+pwd+)");
    out.println ("YOU DETAILS ARE ENTERED <br><br>");
    out.println ("<a href =\""/tr1/login.html\">press LOGIN to login</a>");
}
    out.println ("</body></html>");%>

```

Profile.jsp:

```

<%@page import="java.sql.*"%>
<%@page import="java.io.*"%>
<%
    out.println("<html><body bgcolor=\"pink\">");
    String id=request.getParameter("id");
    Driver d=new oracle.jdbc.driver.OracleDriver();
    DriverManager.regiserDriver(d);
Connection con=
DriverManager.getConnection ("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger");
    Statement stmt=con.createStatement ();
    String sqlstmt="select * from login where id="+id+"";
    ResultSet rs=stmt.executeQuery (sqlstmt);
    int flag=0;
    while(rs.next())
    {
        out.println("<div align=\"center\">");
        out.println("NAME      :"+rs.getString(1)+"<br>");
        out.println("ADDRESS   :"+rs.getString(2)+"<br>");
        out.println("PHONE NO  :"+rs.getString(3)+"<br>");
        out.println("</div>");
        flag=1;
    }
    if(flag==0)
    {
        out.println("SORRY INVALID ID TRY AGAIN ID <br><br>");
        out.println("<a href=\"/tr1/profile.html\">press HERE to RETRY </a>");
    }
    out.println("</body></html>");
%>

```

Catalog.jsp:

```

<%@page import="java.sql.*"%>
<%@page import="java.io.*"%>
<%
    out.println("<html><body bgcolor=\"pink\">");
    String title=request.getParameter("title");
    Driver d=new oracle.jdbc.driver.OracleDriver();
    DriverManager.regiserDriver(d);
    Connection con=
    DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger");
    Statement stmt=con.createStatement();
    String sqlstmt="select * from book where title="+title+"";
    ResultSet rs=stmt.executeQuery(sqlstmt);
    int flag=0;
    while(rs.next())
    {
        out.println("<div align=\"center\">");
        out.println("TITLE      :"+rs.getString(1)+"<br>");
        out.println("AUTHOR   :"+rs.getString(2)+"<br>");
        out.println("VERSION:"+rs.getString(3)+"<br>");
        out.println("PUBLISHER :"+rs.getString(4)+"<br>");
        out.println("COST    :"+rs.getString(5)+"<br>");
        out.println("</div>");
        flag=1;
    }
    if(flag==0)
    {
        out.println("SORRY INVALID ID TRY AGAIN ID <br><br>");
        out.println("<a href=\"/tr1/catalog.html\">press HERE to RETRY </a>");
    }
    out.println("</body></html>");
%>

```


Order.jsp:

```

<%@page import="java.sql.*"%>
<%@page import="java.io.*"%>
<%
    out.println("<html><body bgcolor=\"pink\">");
    String id=request.getParameter("id");
    String pwd=request.getParameter("pwd");
    String title=request.getParameter("title");
    String count1=request.getParameter("no");
    String date=request.getParameter("date");
    String cno=request.getParameter("cno");
    int count=Integer.parseInt(count1);
    Driver d=new oracle.jdbc.driver.OracleDriver();
    DriverManager.registerDriver(d);
    Connection con=
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger");
    Statement stmt=con.createStatement();
    String sqlstmt="select id, password from login";
    ResultSet rs=stmt.executeQuery(sqlstmt);
    int flag=0,amount,x;
    while(rs.next())
    {
        if(id.equals(rs.getString(1))&& pwd.equals(rs.getString(2)))
        {
            flag=1;
        }
    }
    if(flag==0)
    {
        out.println("SORRY INVALID ID TRY AGAIN ID <br><br>");
        out.println("<a href=\"/tr1/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())
        {

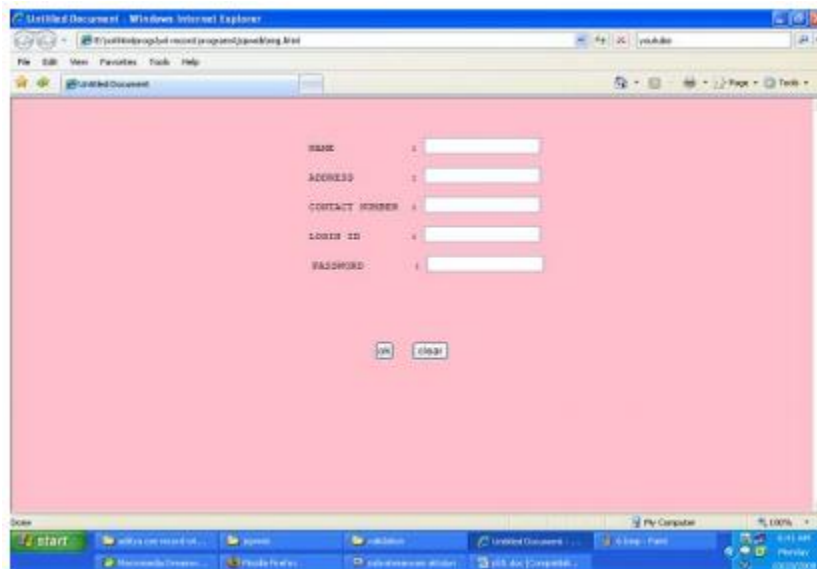
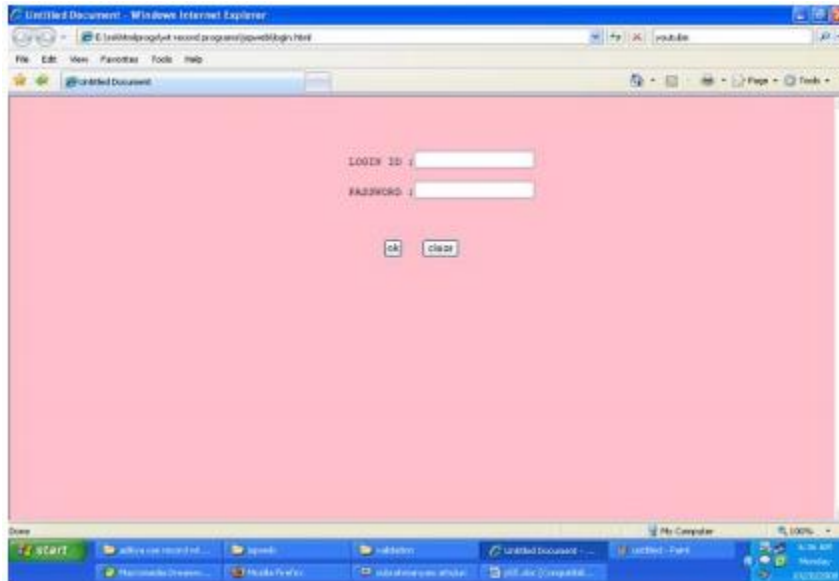
```

```

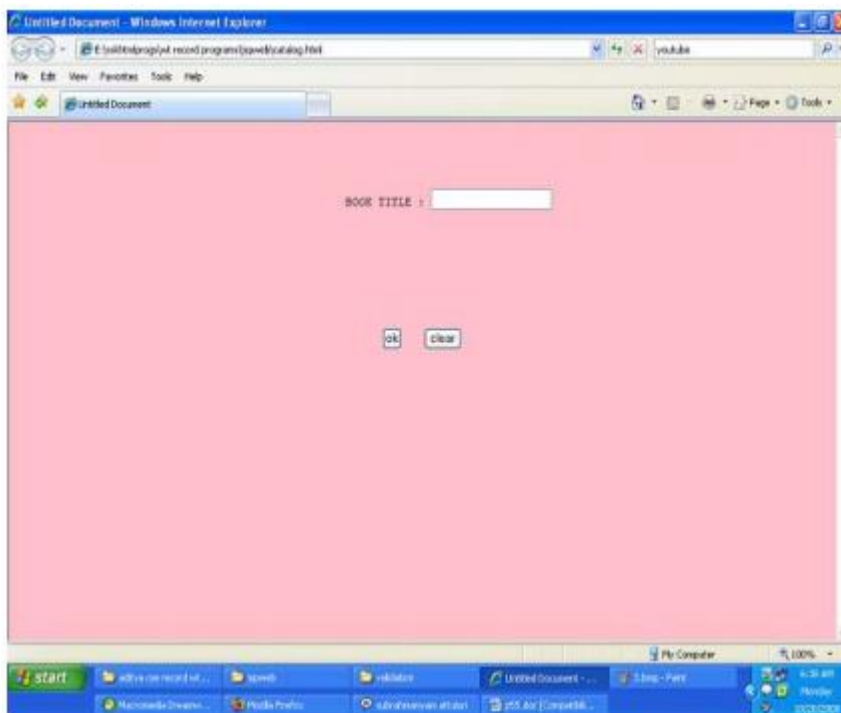
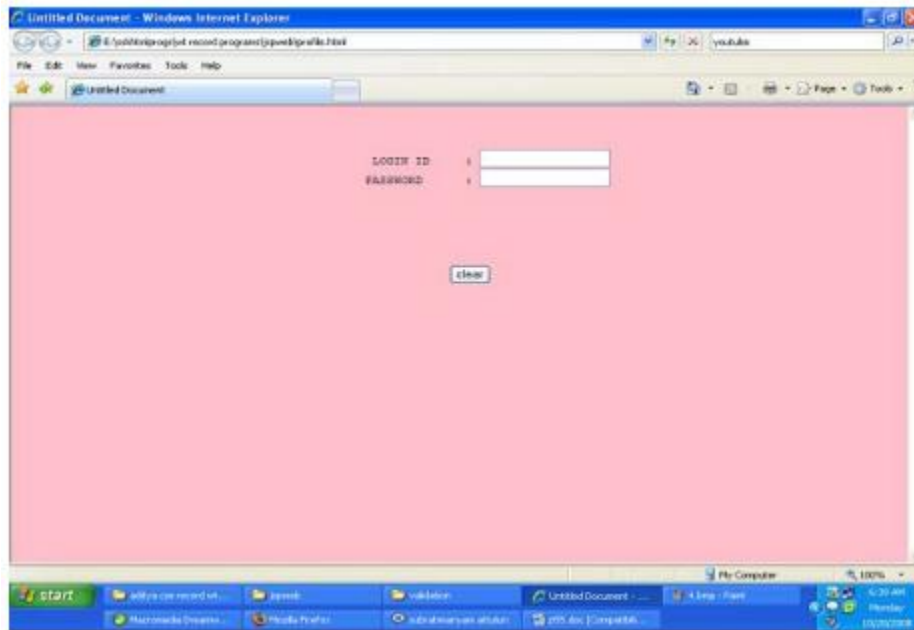
flag1=1;
x=Integer.parseInt(rs1.getString(1));
amount=count*x;
out.println("AMOUNT  :"+amount+"<br><br><br><br>");
Statement stmt1=con.createStatement ();
stmt1.executeUpdate ("insert into details ("+"id+"","+"title+"","+"amount+"","+"date+"","+"cno+""));
out.println ("YOU ORDER HAS TAKEN<br>");
}
if(flag1==0)
{
    out.println("SORRY INVALID BOOK TRY AGAIN <br><br>");
    out.println("<a href='\"/tr1/order.html\"'>press HERE to RETRY </a>");
}
}
    out.println ("</body></html>");%>

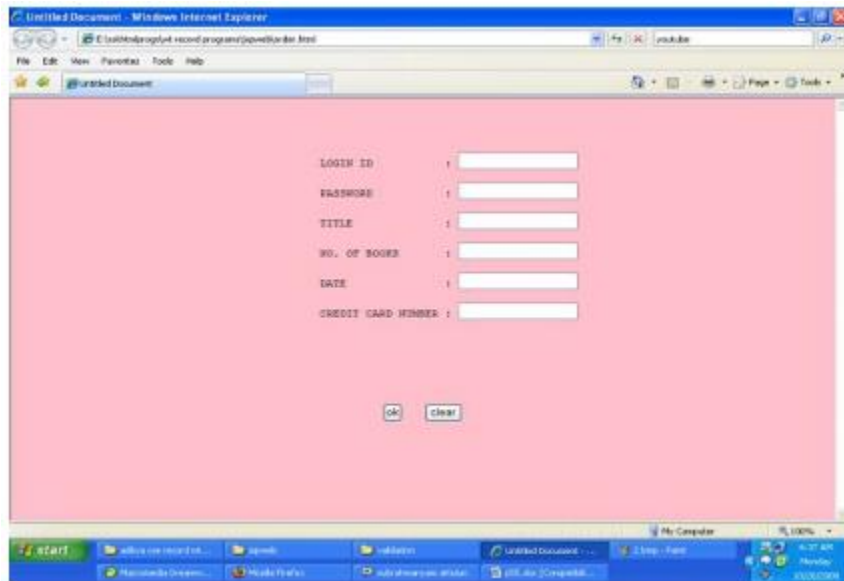
```





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6. Implement the "Hello World!" program using JSP Struts Framework

Step 1:

In tomcat install directory
 Open tomcat/webapps
 Create a subdirectory(ts)
 Copy the struts-blank.war file
 At that directory path in cmd give the command as
 Jar xvf struts-blank.war

Step 2:

create a directory (work in e:\) and copy struts.jar,servelet-appi.jar into work d directory. Then set the classpath as set classpath=struts.jar;servlet-api.jar;
 then copy the ActionOne.class file to webapps/ts/WEB-INF/classes

ActionOne.java:

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import org.apache.struts.action.*;
public class ActionOne extends Action
{
    public ActionForward execute(ActionMapping mapping, ActionForm form, HttpServletRequest request, HttpServletResponse response) throws Exception
    {
        System.out.println("---Action executed---");
        PrintWriter pw=response.getWriter();
        pw.println("HELLO WORLD!");
        return null;
    }
}
```

Step 3:

Struts-Config.xml file

```
<?xml version="1.0" encoding="UTF-8"?>
<struts-config>
    <action-mappings>
        <action path="/xxx" type="ActionOne"/>
    </action-mappings>
</struts-config>
```

Step 4:**Web.xml**

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<web-app>
    <servlet>
        <servlet-name>action</servlet-name>
        <servlet-class>org.apache.struts.action.ActionServlet</servlet-class>
        <init-param>
            <param-name>config</param-name>
            <param-value>/WEB-INF/struts-config.xml</param-value>
        </init-param>
        <init-param>
            <param-name>debug</param-name>
            <param-value>2</param-value>
        </init-param>
        <load-on-startup>2</load-on-startup>
    </servlet>
    <!--Standard Action Servlet Mapping -->
    <servlet-mapping>
        <servlet-name>action</servlet-name>
        <url-pattern>*.do</url-pattern>
    </servlet-mapping>
    <!-- The Usual Welcome File List -->
    <welcome-file-list>
        <welcome-file>index.jsp</welcome-file>
    </welcome-file-list>
    <!-- Struts Tag Library Descriptors -->
    <taglib>
        <taglib-uri>/tags/struts-bean</taglib-uri>
        <taglib-location>/WEB-INF/struts-html.tld</taglib-location>
    </taglib>
    <taglib>
        <taglib-uri>/tags/struts-logic</taglib-uri>
        <taglib-location>/WEB-INF/struts-logic.tld</taglib-location>
    </taglib>
    <taglib>
        <taglib-uri>/tags/struts-nested</taglib-uri>
        <taglib-location>/WEB-INF/struts-nested.tld</taglib-location>
    </taglib>
    <taglib>

```

```
        <taglib-uri>/tags/struts-tiles</taglib-uri>  
        <taglib-location>/WEB-INF/struts-tiles.tld</taglib-location>  
    </taglib>  
</web-app>
```

Step 5:

Then in I.E give the url as <http://localhost:8080/ts/xxx.do>

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