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|--|--|------------------------------------|
|  | Uttarakhand Open University, Haldwani School of Computer Science & IT | LABORATORY MANUAL |
| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

LIST OF EXPERIMENT

| S.No | EXPERIMENT | EXPERIMENT NUMBER | ISSUE DATE | PAGE NO |
|-------------|---|--------------------------|-------------------|----------------|
| 1 | Development of static pages using HTML of an online Departmental Store. The website should be user friendly with Home page, Registration and user login, User profile page , Items catalog,etc. | EXP-01 | 02-Sep-2009 | |
| 2 | Add validations to the above static pages of registration, user login, user profile and payment by credit card using Java Script. | EXP-02 | 02-Sep-2009 | |
| 3 | Creation of a XML document of 20 students of III IT. Write a program that takes students' roll number as an input and returns the students students' information from the XML document. | EXP-03 | 02-Sep-2009 | |
| 4 | Create an XML document and display it with the help of CSS OR XSL | EXP-04 | 02-Sep-2009 | |
| 5 | Creation of a JavaBean which gives the converted value of Temperature (in degree celcius) into equivalent Fahrenheit | EXP-05 | 02-Sep-2009 | |
| 6 | Creation of a simple Bean with a label – which is a “count” of number of clicks. | EXP-06 | 02-Sep-2009 | |
| 7 | Installation of TOMCAT web server. Convert the static web pages of assignments 2 into dynamic web pages using servlets and cookies | EXP-07 | 02-Sep-2009 | |
| 8 | Do the assignment 7 using JSP by converting the static web pages of assignment 2 into dynamic web pages. | EXP-08 | 02-Sep-2009 | |
| 9 | Implementation of “Hello World!” using JSP Struts Framework. | EXP-09 | 02-Sep-2009 | |

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|--|--|------------------------------------|
|  | Uttarakhand Open University, Haldwani School of Computer Science & IT | LABORATORY MANUAL |
| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

EXP-01-Static website using HTML

Development of static pages using HTML of an online Departmental Store. The website should be user friendly and should have the following pages: **Home page, Registration and user login, User profile page, etc.**

HOME PAGE:

```

<html>
<head>
<title>India's No.1 Shopping Site</title></head>
<link rel=stylesheet href=style.css>
<body bgcolor=gray>
<div id=st1><table><tr>
<td ><input class=i type=button value=HOME name=btn1
onclick="document.location.href='home.html'"></td><td><input class=i type=button
value="SIGN UP" name=btn2
onclick="document.location.href='sign_up.html'"></td><td><input class=i type=button
value="SIGN IN" name=btn3
onclick="document.location.href='sign_in.html'"></td><td><input class=i type=button
value=CATALOG name=btn4 onclick="document.location.href='catlog.html'" ></td><td><input
class=j type=text width=10 name=search></td><td><input class=i type=button
value=SEARCH name=btn_ser></td>
</tr></table>
<div id=st2>
<table class=t1 width=400 height=30>
<tr><td><a class=a1>Our Services<a></td></tr>
<tr><td>1.24*7 Shooping</td></tr>
<tr><td>2.Payment By Credit Card</td></tr>
<tr><td>3.Special Offer for ICICI Bank's Customer</td></tr>
</table>
<table class=t1 width=400 height=30 >
<tr><td><a class=a1>Our Policy<a></td></tr>
<tr><td>1.Customer Satisfaction</td></tr>
<tr><td>2.Reliable Services</td></tr>
<tr><td>3.Secure Online Transaction</td></tr>
</table>
</div> </div>
</body> </head>


```

Registration and user Login

```

<html>
<head>
<title>India's No.1 Shopping Site</title>


```

| | | |
|--|--|------------------------------------|
|  | Uttarakhand Open University, Haldwani School of Computer Science & IT | LABORATORY MANUAL |
| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

```

</head>
<link rel=stylesheet href=style.css>
<body bgcolor=gray>
<div id=st1>
<table><tr>
<td ><input class=i type=button value=HOME name=btn1
onclick="document.location.href='home.html'"></td><td><input class=i type=button
value="SIGN UP" name=btn2
onclick="document.location.href='sign_up.html'"></td><td><input class=i
type=button value="SIGN IN" name=btn3
onclick="document.location.href='sign_in.html'"></td><td><input class=i type=button
value=CATALOG name=btn4 onclick="document.location.href='catlog.html'"
></td><td><input class=j type=text width=10 name=search></td><td><input
class=i type=button value=SEARCH name=btn_ser></td>
</tr></table>
<div id=st2>
<table class=t1 width=400 height=30 >
<tr><td>REGISTRATION</td></tr>
<tr><td>First Name</td><td><input type=text name=txt1></td></tr>
<tr><td>Last Name</td><td><input type=text name=txt2></td></tr>
<tr><td>E-mail ID</td><td><input type=text name=txt3></td></tr>
<tr><td>Login ID</td><td><input type=text name=lg_id></td></tr>
<tr><td>Password</td><td><input type=password name=txt4></td></tr>
<tr><td>Retype Password</td><td><input type=password name=txt5></td></tr>
<tr><td>Address</td><td><TEXTAREA value="" cols=20
row=20></TEXTAREA></td></tr>
<tr><td>City</td><td><input type=text name=txt6></td></tr>
<tr><td>State</td><td><select name=sel><option>Andhra
Pradesh</option><option>Arunachal
Prades</option><option>Bihar</option><option>Chandigarh</option><option>Delhi
</option><option>Uttarpradesh</option><option>Uttarakhand</option></select></td></tr>

```

| | | |
|--|--|------------------------------------|
|  | Uttarakhand Open University, Haldwani School of Computer Science & IT | LABORATORY MANUAL |
| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

```

<tr><td>Pin Code</td><td><input type=text name=txt7></td></tr>
<tr><td>Phone Number</td><td><input type=text name=txt8></td></tr>
<tr><td><input type=submit value=Register></td><td><input type=reset
value=Reset></td></tr>
</table>
</div>
</div>
</body>
</head>

```


User Profile:

```


<html>
<head>
<title>India's No.1 Shopping Site</title></head>
<link rel=stylesheet href=style.css>
<body bgcolor=gray>
<div id=st1><table><tr>
<td ><input class=i type=button value=HOME name=btn1
onclick="document.location.href='home.html'"></td><td><input class=i type=button
value="SIGN UP" name=btn2
onclick="document.location.href='sign_up.html'"></td><td><input class=i
type=button value="SIGN IN" name=btn3
onclick="document.location.href='sign_in.html'"></td><td><input class=i type=button
value=CATALOG name=btn4 onclick="document.location.href='catlog.html'"
></td><td><input class=j type=text width=10 name=search></td><td><input
class=i type=button value=SEARCH name=btn_ser></td>
</tr></table>
<table id=tab2>
<tr><th class=l>Items</th>
<tr><td>Apparel</td><td>T Shirts</td><td>Jewellery</td></tr>
<tr><td>Bags & Luggage</td><td>Books</td><td>Cameras</td></tr>
<tr><td>Consumer Durables</td><td>Movies</td><td>Gift Vouchers</td></tr>
<tr><td>Health & Personal Care</td><td>Home & Decor</td><td>Home
Entertainment</td></tr>

<tr><td>Kitchenware</td><td>Laptops</td><td>Memory & Storage</td></tr>
<tr><td>Mobiles</td><td>Toys and Games</td><td>Watches</td></tr>
<tr><td>iPod & MP3 Players</td></tr>
</table><center><a class=order href="order_conf.html">Order Now</a></center>

```

| | | |
|--|---|----------------------|
|  | Uttarakhand Open University, Haldwani School of Computer Science & IT | LABORATORY MANUAL |
| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

</div></body>
</head>

| | | |
|--|--|------------------------------------|
|  | Uttarakhand Open University, Haldwani School of Computer Science & IT | LABORATORY MANUAL |
| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

EXP-02-Adding Validation using JavaScript


Add validations to the above static pages of registration, user login and user profile using Java Script.

User Login

```

<html>
<head>
<title>India's No.1 Shopping Site</title><script language=javascript>
function chk1(rt)      {
if(rt=="")           {
alert("Please Enter Related information");
}                    }
function chk2(rt,rt1) {
if(rt!=rt1)         {
alert("Please Enter Correct password");
}                    }
function chk3(rt)    {
if(rt=="")          {
alert("Please Enter E-mail Id ");
}
else {
if(rt.indexOf("@")==-1)      {
alert("Please Enter E-Mail Id in Correct Format");
}
else {
if(rt.indexOf(".")===-1)    {
alert("Please Enter E-mail Id in Correct Format");
}                    }
}                    }
}                    }
</script>

```


| | | |
|--|--|------------------------------------|
|  | Uttarakhand Open University, Haldwani School of Computer Science & IT | LABORATORY MANUAL |
| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

```

</head>
<link rel=stylesheet href=style.css>
<body bgcolor=gray><div id=st1>
<table><tr><td ><input class=i type=button value=HOME name=btn1
onclick="document.location.href='home.html'"></td><td><input class=i type=button
value="SIGN UP" name=btn2
onclick="document.location.href='sign_up.html'"></td><td><input class=i type=button
value="SIGN IN" name=btn3
onclick="document.location.href='sign_in.html'"></td><td><input class=i type=button
value=CATALOG name=btn4 onclick="document.location.href='catlog.html'" ></td><td><input
class=j type=text width=10 name=search></td><td><input class=i type=button
value=SEARCH name=btn_ser></td>
</tr></table>
<div id=st2><table class=t1 width=400 height=30 ><form name=frm1>
<tr><td>REGISTRATION</td></tr>
<tr><td>First Name</td><td><input type=text name=txt1
onBlur="chk1(txt1.value)"></td></tr>
<tr><td>Last Name</td><td><input type=text name=txt2
onBlur="chk1(txt2.value)"></td></tr>
<tr><td>E-mail ID</td><td><input type=text name=txt3
onBlur="chk3(txt3.value)"></td></tr>
<tr><td>Login ID</td><td><input type=text name=lg_id
onBlur="chk1(lg_id.value)"></td></tr>
<tr><td>Password</td><td><input type=password name=txt4
onBlur="chk1(txt4.value)"></td></tr>
<tr><td>Retype Password</td><td><input type=password name=txt5
onBlur="chk1(txt5.value)"></td></tr>
<tr><td>Address</td><td><TEXTAREA value="" cols=20 row=20></TEXTAREA></td></tr>
<tr><td>City</td><td><input type=text name=txt6 onBlur="chk1(txt6.value)"></td></tr>
<tr><td>State</td><td><select name=sel><option>Andhra
Pradesh</option><option>ArunachalPradesh</option><option>Bihar</option><option>Chandi
garh</option><option>Delhi</option><option>Uttarpradesh</option><option>Uttarakhand</
option></select></td></tr>
<tr><td>Pin Code</td><td><input type=text name=txt7
onBlur="chk1(txt7.value)"></td></tr>
<tr><td>Phone Number</td><td><input type=text name=txt8
onBlur="chk1(txt1.value)"></td></tr>
<tr><td><input type=button value=Register name=sub_btn onclick=""></td><td><input
type=reset value=Reset></td></tr>
</form>

</table></div>
</div></body>
</head>

```


| | | |
|--|--|------------------------------------|
|  | Uttarakhand Open University, Haldwani School of Computer Science & IT | LABORATORY MANUAL |
| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

User Profile:

```

<html>
<head>
<title>India's No.1 Shopping Site</title>
</head>
<link rel=stylesheet href=style.css>
<body bgcolor=gray>
<div id=st1>
<table><tr>
<td ><input class=i type=button value=HOME name=btn1
onclick="document.location.href='home.html'"></td><td><input class=i type=button
value="SIGN UP" name=btn2
onclick="document.location.href='sign_up.html'"></td><td><input class=i type=button
value="SIGN IN" name=btn3
onclick="document.location.href='sign_in.html'"></td><td><input class=i type=button
value=CATALOG name=btn4 onclick="document.location.href='catlog.html'" ></td><td><input
class=j type=text width=10 name=search></td><td><input class=i type=button
value=SEARCH name=btn_ser></td>
</tr></table>
<table id=tab2>
<tr><th class=l>Items</th>
<tr><td>Apparel</td><td>T Shirts</td><td>Jewellery</td></tr>
<tr><td>Bags & Luggage</td><td>Books</td><td>Cameras</td></tr>
<tr><td>Consumer Durables</td><td>Movies</td><td>Gift Vouchers</td></tr>
<tr><td>Health & Personal Care</td><td>Home & Decor</td><td>Home
Entertainment</td></tr>
<tr><td>Kitchenware</td><td>Laptops</td><td>Memory & Storage</td></tr>
<tr><td>Mobiles</td><td>Toys and Games</td><td>Watches</td></tr>
<tr><td>iPod & MP3 Players</td></tr>
</table>
<center><a class=order href="order_conf.html">Order Now</a></center>
</div>
</body></head>

```


| | | |
|--|--|------------------------------------|
|  | Uttarakhand Open University, Haldwani School of Computer Science & IT | LABORATORY MANUAL |
| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

EXP-03-Working with XML

Create a XML document of 20 students of III IT. Add their roll numbers, marks obtained in 5 subjects, total and percentage and save this XML document at the server. Write a program that takes students' roll number as an input and returns the students marks, total and percentage by taking the students' information from the XML document.


Student.xml

```

<?xml version="1.0" ?>
<students>
<Student>
<rlno>01</rlno>
<name>Ankit Chandra Prasad</name>
<Automata>50</Automata>
<oops>80</oops>
<dbms>70</dbms>
<dis>60</dis>
<se>55</se>
</Student>
<Student>
<rlno>02</rlno>
<name>Ankit Raturi</name>
<Automata>54</Automata>
<oops>50</oops>
<dbms>80</dbms>
<dis>60</dis>
<se>59</se>
</Student>

<Student>
<rlno>03</rlno>
<name>Ankit Bhardwaj</name>
<Automata>74</Automata>

```

| | | |
|--|--|------------------------------------|
|  | Uttarakhand Open University, Haldwani School of Computer Science & IT | LABORATORY MANUAL |
| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

```

<oops>70</oops>
<dbms>70</dbms>
<dis>56</dis>
<se>69</se>
  </Student>
= <Student>
  <rlno>05</rlno>
  <name>Ashish Bhatt</name>
  <Automata>64</Automata>
  <oops>76</oops>
  <dbms>76</dbms>
  <dis>66</dis>
  <se>60</se>
  </Student>
= <Student>
  <rlno>09</rlno>
  <name>Atul Negi</name>
  <Automata>79</Automata>
  <oops>76</oops>
  <dbms>86</dbms>
  <dis>83</dis>
  <se>96</se>
  </Student>


```

Displaying the student Information:

```

<html>
<head>
<title>Result OF IIIT STUDENT</title>
<script language=javascript>
var xmlDoc = new ActiveXObject("Microsoft.XMLDOM")
xmlDoc.async="false"
xmlDoc.load("str1.xml")
function find_rec(chk)      {


```

| | | |
|--|--|------------------------------------|
|  | Uttarakhand Open University, Haldwani School of Computer Science & IT | LABORATORY MANUAL |
| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

```

for(i=0;i<xmlDoc.getElementsByTagName("Student").length;i++)      {
if(parseInt(xmlDoc.getElementsByTagName("rln").item(i).text)==parseInt(chk))  {
var det=xmlDoc.getElementsByTagName("Student").item(i).text
document.write(det)
var total
    =parseInt(xmlDoc.getElementsByTagName("Automata").item(i).text)+parseInt(xmlDoc.
    getElementsByTagName("oops").item(i).text)+parseInt(xmlDoc.getElementsByTagName
    ("dbms").item(i).text)+parseInt(xmlDoc.getElementsByTagName("dis").item(i).text)+par
    seInt(xmlDoc.getElementsByTagName("se").item(i).text);
document.writeln("<br>"+"The Total is"+total);
document.writeln("<br>"+"The Percentage is"+(parseInt(total)/500)*100);
}
}
</script></head>
<body><table>
<tr><td>Enter Roll Number</td><td><input type=text name=txt1 ></td></tr>
<tr><td><input type=button value=Find name=b1
    onclick=find_rec(txt1.value)></td></tr>
</table></body>
</html>

```

| | | |
|--|---|----------------------|
|  | Uttarakhand Open University, Haldwani School of Computer Science & IT | LABORATORY MANUAL |
| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |


EXP-04- Displaying an XML document using CSS or XSL.

Catalog.xml

```

<?xml version="1.0" encoding="ISO-8859-1" ?>
- <CATALOG>
- <CD>
- <TITLE>Empire Burlesque</TITLE>
  <ARTIST>Bob Dylan</ARTIST>
  <COUNTRY>USA</COUNTRY>
  <COMPANY>Columbia</COMPANY>
  <PRICE>10.90</PRICE>
  <YEAR>1985</YEAR>
  </CD>
- <CD>
- <TITLE>Hide your heart</TITLE>
  <ARTIST>Bonnie Tyler</ARTIST>
  <COUNTRY>UK</COUNTRY>
  <COMPANY>CBS Records</COMPANY>
  <PRICE>9.90</PRICE>
  <YEAR>1988</YEAR>
  </CD>
- <CD>
- <TITLE>Greatest Hits</TITLE>
  <ARTIST>Dolly Parton</ARTIST>
  <COUNTRY>USA</COUNTRY>
  <COMPANY>RCA</COMPANY>
  <PRICE>9.90</PRICE>
  <YEAR>1982</YEAR>
  </CD>
- <CD>
- <TITLE>Still got the blues</TITLE>
  <ARTIST>Gary Moore</ARTIST>
  <COUNTRY>UK</COUNTRY>
  <COMPANY>Virgin records</COMPANY>
  <PRICE>10.20</PRICE>
  <YEAR>1990</YEAR> </CD>

```

| | | |
|--|--|------------------------------------|
|  | Uttarakhand Open University, Haldwani School of Computer Science & IT | LABORATORY MANUAL |
| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

```

- <CD>
  <TITLE>Eros</TITLE>
  <ARTIST>Eros Ramazzotti</ARTIST>
  <COUNTRY>EU</COUNTRY>
  <COMPANY>BMG</COMPANY>
  <PRICE>9.90</PRICE>
  <YEAR>1997</YEAR>
  </CD>
- <CD>
  <TITLE>One night only</TITLE>
  <ARTIST>Bee Gees</ARTIST>
  <COUNTRY>UK</COUNTRY>
  <COMPANY>Polydor</COMPANY>
  <PRICE>10.90</PRICE>
  <YEAR>1998</YEAR>
  </CD>
- <CD>
  <TITLE>Sylvias Mother</TITLE>
  <ARTIST>Dr.Hook</ARTIST>
  <COUNTRY>UK</COUNTRY>
  <COMPANY>CBS</COMPANY>
  <PRICE>8.10</PRICE>
  <YEAR>1973</YEAR>
  </CD>
</CATALOG>


```

Display.css

```

CATALOG
{
background-color: #ffffff;
width: 100%;
}

```

| | | |
|--|---|----------------------|
|  | Uttarakhand Open University, Haldwani School of Computer Science & IT | LABORATORY MANUAL |
| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

```

CD
{
display: block;
margin-bottom: 30pt;
margin-left: 0;
}
TITLE
{
color: #FF0000;
font-size: 20pt;
}
ARTIST
{
color: #0000FF;

font-size: 20pt;
}
COUNTRY, PRICE, YEAR, COMPANY
{
display: block;
color: #000000;
margin-left: 20pt;
}


```

Menu.xml

```

<?xml version="1.0" encoding="ISO-8859-1" ?>
- <breakfast_menu>
- <food>
- <name>Belgian Waffles</name>
  <price>$5.95</price>
  <description>two of our famous Belgian Waffles with plenty of real
    maple syrup</description>
  <calories>650</calories>
- </food>

```

| | | |
|--|---|----------------------|
|  | Uttarakhand Open University, Haldwani School of Computer Science & IT | LABORATORY MANUAL |
| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

```

- <food>
  <name>Strawberry Belgian Waffles</name>
  <price>$7.95</price>
  <description>light Belgian waffles covered with strawberries and
    whipped cream</description>
  <calories>900</calories>
  </food>
- <food>
  <name>Homestyle Breakfast</name>
  <price>$6.95</price>
  <description>two eggs, bacon or sausage, toast, and our ever-popular
    hash browns</description>
  <calories>950</calories>
  </food>
  </breakfast_menu>


```

Display.xsl

```

<?xml version="1.0" encoding="ISO-8859-1" ?>
- <html xsl:version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns="http://www.w3.org/1999/xhtml">
- <body style="font-family:Arial;font-size:12pt;background-
  color:#EEEEEE">
- <xsl:for-each select="breakfast_menu/food">
- <div style="background-color:teal;color:white;padding:4px">
- <span style="font-weight:bold">
  <xsl:value-of select="name" />
  </span>
  <xsl:value-of select="price" />
  </div>
- <div style="margin-left:20px;margin-bottom:1em;font-size:10pt">


```

| | | |
|--|---|----------------------|
|  | Uttarakhand Open University, Haldwani School of Computer Science & IT | LABORATORY MANUAL |
| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

```

<xsl:value-of select="description" />
= <span style="font-style:italic">
<xsl:value-of select="calories" />
(calories per serving)
</span>
</div>
</xsl:for-each>
</body>
</html>

```


| | | |
|--|---|----------------------|
|  | Uttarakhand Open University, Haldwani School of Computer Science & IT | LABORATORY MANUAL |
| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

EXP-05- Java beans for a “count” of number of clicks.


Count.java

```

package form;
public class CounterBean implements java.io.Serializable{

int coun = 0;
public CounterBean() {
}
public int getCoun() {
coun++;
return this.coun;
}
public void setCoun(int coun) {
this.coun = coun;
}
}

```

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|--|---|----------------------|
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| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

EXP-06- Java beans for the temperature Conversion

Convtemp.jsp

```

<%@ page language="java" %>
<jsp:useBean id="tem" scope="session" class="form.tempConv" />
<HTML>
<HEAD><TITLE>Use Bean Temperature converter Example</TITLE>
</HEAD>
<BODY>
<form action="" method=get>
<input type=text name=txt1>
<jsp:setProperty name="tem" property="coun" value="72" />
<table><tr><td>
The Converted value of 72F is: <b>
<%= tem.getCoun() %> </b>C</td></tr>
</table>
</BODY></HTML>


```

tempConv.java

```

package form;
public class tempConv implements java.io.Serializable{
int far=0,cel=0;
public tempConv() {
}
public int getCoun() {
cel=far-60;
return cel;
}
public void setCoun(int far) {
this.far = far;
}
}

```

| | | |
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| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

EXP-07- Convnecting to the Tomacat Server and run the JSP page

Installing TOMCAT

Akarta Tomcat, an Open Source Servlet and JSP container, provides a simple (and free) environment for developing and testing Web applications. Tomcat is the reference implementation for the Servlet API and JSP. It's not a high-performance Servlet engine, but it is a complete implementation of the Servlet API.


For developers accustomed to GUI-driven Windows applications, installing Tomcat can be frustrating. In this article, I'll give you a step-by-step procedure to install and configure Tomcat on the Windows platform.

Java Servlets provide a framework for creating Web applications. Servlets are Java classes that use the Servlet API to accept a Request object from the browser and produce a Response object. For those of you familiar with Microsoft's Active Server Pages (ASP) technology, Java Server Pages (JSP) are similar but they use compiled Java Servlets rather than an interpreted scripting language. Like ASP pages, JSP pages consist of code mixed with HTML. The JSP hosting engine, commonly referred to as a "JSP container," converts the pages to a Servlet, then compiles and executes them.

The Tomcat engine is a Java program. Before you can run Tomcat, you must have the [Java Development Kit \(JDK\) version 1.2](#) or later installed on your computer.


Here are more details on using the preconfigured Tomcat version for direct (manual) execution. You can also use Tomcat within [Eclipse](#) or [MyEclipse](#), or you can [customize the configuration](#).

1. **Unzip Tomcat.** Unzip [tomcat-6.0.16-preconfigured.zip](#) into the top level of the C drive. This should result in `C:\apache-tomcat-6.0.16\`. This version of Tomcat has the following settings already in place. For details

| | | |
|--|---|----------------------|
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| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

on customizing this configuration, please see [the detailed configuration guide](#).


- The port is changed from 8080 to 80. This lets you enter URLs of the form `http://localhost/...` instead of `http://localhost:8080/...`
 - When you download Tomcat from the Apache site, the port is 8080 in case you already have another server running on port 80.
 - Servlet reloading is enabled. This lets you deploy a modified servlet .class file without restarting the server.
 - When you download Tomcat from the Apache site, servlet reloading is disabled for performance reasons. You might want it disabled on a server used for a deployed application, but you *definitely* want it enabled during development.
 - The invoker servlet is enabled. This lets you drop a servlet .class file into `webapps/appName/WEB-INF/classes/packageName` and immediately run it with a URL of the form `http://localhost/appName/servlet/packageName.servletName`. That is, the invoker servlet saves you from editing web.xml to give a servlet-mapping to your servlet.
 - When you download Tomcat from the Apache site, the invoker servlet is disabled. You definitely want the invoker servlet disabled on a server used for a deployed application, but having it enabled on your development server is very convenient for quick testing.
 - Tomcat monitors `struts-config.xml` and `faces-config.xml`. Whenever either of these files changes, Tomcat reloads the Web application. This saves you from restarting the server when you change these files.
 - If you do not use Struts or JSF, this change will not be beneficial to you. But it does not hurt either way.
 - Directory listings are turned on. If you type a URL ending in `/` and there is no welcome file, Tomcat shows a directory listing.
 - Directory listings were on by default in previous Tomcat versions. They are not required but are convenient, especially during development.
2. **Set JAVA_HOME.** Set this environment variable to point at the top-level of your Java installation directory (e.g., `C:|Program`

| | | |
|--|---|----------------------|
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| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

Files\Java\jdk1.6.0_10.) For details, see [the sample autoexec.bat file](#) or [this section of the page on configuring your development environment](#).

3. **Set CLASSPATH.** Set this environment variable to include ".", *C:|Servlets+JSP*, and the servlet/JSP JAR files. For details, see [the sample autoexec.bat file](#) or [this section of the page on configuring your development environment](#).

For a very quick test, open *C:|Servlets+JSP*, double click on the shortcut to startup.bat, and open <http://localhost/> in your browser. If you see something about Tomcat, the setup was successful. But be sure to do the [more complete server tests](#) to verify that you have your development and deployment environment also set up properly.

| | | |
|--|---|----------------------|
|  | Uttarakhand Open University, Haldwani School of Computer Science & IT | LABORATORY MANUAL |
| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

EXP-08- Converting static web pages to JSP


Home.java

```

import javax.servlet.*;
import java.io.*;
import javax.servlet.http.*;
public class home extends HttpServlet
{
public void doGet(HttpServletRequest req, HttpServletResponse res) throws
ServletException,IOException
{
res.setContentType("text/html");
PrintWrcSEer pw= res.getWrcSEer();
pw.println("<html><head><tCSEle>India's No.1 Shopping
SCSEe</tCSEle></head>");
pw.println("<link rel=stylesheet href=style.css>");
pw.println("<body bgcolor=gray><div id=st1><table><tr><td ><input class=i
type=button value=HOME name=btn1
onclick=document.location.href='home.html'></td><td><input class=i
type=button value='SIGN UP' name=btn2
onclick=document.location.href='sign_up.html'></td><td><input class=i
type=button value='SIGN IN' name=btn3
onclick=document.location.href='sign_in.html'></td><td><input class=i
type=button value=CATALOG name=btn4
onclick=document.location.href='catlog.html' ></td><td><input class=j
type=text width=10 name=search></td><td><input class=i type=button
value=SEARCH name=btn_ser></td>");

pw.println("</tr></table><div id=st2><table class=t1 width=400
height=30>");
pw.println("<tr><td><a class=a1>Our Services<a></td></tr>");
pw.println("<tr><td>1.24*7 Shooping</td></tr>");
pw.println("<tr><td>2.Payment By CreDIT Card</td></tr>");
pw.println("<tr><td>3.Special Offer for ICICI Bank's Customer</td></tr>");
pw.println("</table>");
pw.println("<table class=t1 width=400 height=30 >");

```

| | | |
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| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

```

pw.println("<tr><td><a class=a1>Our
Policy<a></td></tr><tr><td>1.Customer Satisfaction</td></tr>");
pw.println("<tr><td>2.Reliable Services</td></tr>");
pw.println("<tr><td>3.Secure Online
Transaction</td></tr></table></div></div></body></head>");
}
}
}


```

Catalog. java

```

import javax.servlet.*;
import java.io.*;
import javax.servlet.http.*;
public class catlog extends HttpServlet
{
public void doGet(HttpServletRequest req, HttpServletResponse res) throws
ServletException,IOException {
res.setContentType("text/html");
PrintWrcSEer pw= res.getWrcSEer();
pw.println("<html><head><tCSEle>India's No.1 Shopping
SCSEe</tCSEle></head><link rel=stylesheet href=style.css>");
pw.println("<body bgcolor=gray><div id=st1><table><tr><td ><input
class=i type=button value=HOME name=btn1
onclick=document.location.href='home.html'></td><td><input class=i
type=button value='SIGN UP' name=btn2
onclick=document.location.href='sign_up.html'></td><td><input class=i
type=button value='SIGN IN' name=btn3
onclick=document.location.href='sign_in.html'></td><td><input class=i
type=button value=CATALOG name=btn4
onclick=document.location.href='catlog.html' ></td><td><input class=j
type=text width=10 name=search></td><td><input class=i type=button
value=SEARCH name=btn_ser></td>");
pw.println("</tr></table><table id=tab2><tr><th class=l>CSEems</th>");
pw.println("<tr><td>Apparel</td><td>T
Shirts</td><td>Jewellery</td></tr>");
pw.println("<tr><td>Bags &
Luggage</td><td>Books</td><td>Cameras</td></tr>");
pw.println("<tr><td>Consumer Durables</td><td>Movies</td><td>Gift
Vouchers</td></tr>");

```


| | | |
|--|--|------------------------------------|
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| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

```

pw.println("<tr><td>Health & Personal Care</td><td>Home &
Decor</td><td>Home Entertainment</td></tr>");
pw.println("<tr><td>KCSEchenware</td><td>Laptops</td><td>Memory &
Storage</td></tr>");
pw.println("<tr><td>Mobiles</td><td>Toys and
Games</td><td>Watches</td></tr>");
pw.println("<tr><td>iPod & MP3 Players</td></tr></table><center><a
class=order href='order_conf.html'>Order Now</a></center>");
pw.println("</div></body></head>");
}
}

```


Signin.java

```

import javax.servlet.*;
import java.io.*;
import javax.servlet.http.*;
public class signin extends HttpServlet
{
public void doGet(HttpServletRequest req, HttpServletResponse res) throws
ServletException,IOException
{
res.setContentType("text/html");
PrintWrcSEer pw= res.getWrcSEer();

pw.println("<html><head><tCSEle>India's No.1 Shopping SCSEe</tCSEle>");
pw.println("<script language=javascript>");
pw.println("function chk1(rt,rt1){if(rt==" && rt==" ){alert('Please Enter Id &
Password');}}");
pw.println("else{document.wrcSEe('WelCome '+rt);}}");
pw.println("</script></head><link rel=stylesheet href=style.css>");
pw.println("<body bgcolor=gray><div id=st1><table><tr><td ><input class=i
type=button value=HOME name=btn1
onclick=document.location.href='home.html'></td><td><input class=i
type=button value='SIGN UP' name=btn2
onclick=document.location.href='sign_up.html'></td><td><input class=i
type=button value='SIGN IN' name=btn3
onclick=document.location.href='sign_in.html'></td><td><input class=i


```


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|--|--|------------------------------------|
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| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

```

type=button value=CATALOG name=btn4
onclick=document.location.href='catlog.html' ></td><td><input class=j
type=text width=10 name=search></td><td><input class=i type=button
value=SEARCH name=btn_ser></td>>";
pw.println("</tr></table><div id=st4><table class=t1 width=400 height=30
><tr><td><a class=h>SIGN IN</a></td></tr>");
pw.println("<tr><td>User ID</td><td><input type=text
name=txt3></td></tr>");
pw.println("<tr><td>Password</td><td><input type=password
name=txt4></td></tr>");
pw.println("<tr><td><a href='#'><i>Forget Password?</i></a></td></tr>");
pw.println("<tr><td><input type=submCSE value=Enter
onclick=chk1(txt3.value,txt4.value)></td></tr>");
pw.println("</table></div></div></body></head>");
}
}

```

| | | |
|--|--|------------------------------------|
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| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

EXP-09- Hello world in Java Struts

Creating directory structure for the project


Step1: Extract struts 2 download and copy **struts2-blank-2.0.6.war**(If you are using latest version of struts 2 then version may be different for you) to your tomcats **webapps** directory. Rename **struts2-blank-2.0.6.war** to **struts2tutorial** and unzip it in the tomcats webapps directory. Now start the tomcat and type <http://localhost:8080/struts2tutorial/> into your browser.

Step 2: Now delete the content of **struts2tutorial\WEB-INF\src** and **struts2tutorial\WEB-INF\classes** directories, as we don't need these files that comes with struts 2 blank application.

Step 3: Create **build.xml** file in the **struts2tutorial\WEB-INF\src** and paste the following content in the **build.xml** file.

```
<project name="Struts 2 Tutorial" basedir=".." default="all">
  <!-- Project settings -->
  <property name="project.title" value="RoseIndia Struts 2 Tutorials"/>
  <property name="project.jar.file" value="struts2tutorial.jar"/>
  <path id="class.path">
    <fileset dir="lib">
      <include name="**/*.jar"/>
    </fileset>
    <fileset dir="libext">
      <include name="**/*.jar"/>
    </fileset>
  </path>
  <!-- Classpath for Project -->
  <path id="compile.classpath">
  <pathelement path ="lib/commons-beanutils.jar"/>

  <pathelement path ="lib/commons-digester.jar"/>
  <pathelement path ="lib/struts.jar"/>
  <pathelement path ="libext/servlet-api.jar"/>
  <pathelement path ="libext/catalina-ant.jar"/>
```

| | | |
|--|--|------------------------------------|
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| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

```

<path element path ="classes"/>
<path element path ="${classpath}"/>
</path>

```

```

<!-- Check timestamp on files -->
<target name="prepare">
<tstamp/>
<copy file="src/struts.xml" todir="src/classes"/>
</target>
<!-- Copy any resource or configuration files -->
<target name="resources">
<copy todir="src/classes" includeEmptyDirs="no">
<fileset dir="src/java">
<patternset>
<include name="**/*.conf"/>
<include name="**/*.properties"/>
<include name="**/*.xml"/>
</patternset>
</fileset>
</copy>
</target>

```

```


<!-- Normal build of application -->
<target name="compile" depends="prepare,resources">
<javac srcdir="src" destdir="src/classes"
debug="true" debuglevel="lines,vars,source">

```

```

<classpath refid="class.path"/>
</javac>
<jar
jarfile="lib/${project.jar.file}" basedir="src/classes"/>
</target>
<!-- Remove classes directory for clean build -->
<target name="clean" description="Prepare for clean build">
<delete dir="classes"/>
<mkdir dir="classes"/>
</target>
<!-- Build Javadoc documentation -->
<target name="javadoc"

```

| | | |
|--|--|------------------------------------|
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| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

```


description="Generate JavaDoc API docs">
<delete dir="./doc/api"/>
<mkdir dir="./doc/api"/>
<javadoc sourcepath="./src/java" destdir="./doc/api"
classpath="{servlet.jar}:{jdbc20ext.jar}" packageNames="*"
author="true"
private="true"
version="true"
windowtitle="{project.title} API Documentation"
doctitle="&lt;h1&gt;{project.title}
Documentation (Version {project.version})&lt;/h1&gt;"
bottom="Copyright &#169; 2002">
<classpath refid="compile.classpath"/>
</javadoc>
</target>

<!-- Build entire project -->
<target name="project" depends="clean,prepare,compile"/>

<!-- Create binary distribution -->
<target name="dist"
description="Create binary distribution">
  <mkdir dir="{distpath.project}"/>
  <jar rfile="{distpath.project}/{project.distname}.jar"
basedir="./classes"/>
  <copy file="{distpath.project}/{project.distname}.jar"
todir="{distpath.project}"/>
  <war basedir=".." warfile="{distpath.project}/{project.distname}.war"
webxml="web.xml">
<exclude name="{distpath.project}/{project.distname}.war"/>
  </war>
</target>

<!-- Build project and create distribution-->
<target name="all" depends="project"/>
</project>

```

| | | |
|--|---|----------------------|
|  | Uttarakhand Open University, Haldwani School of Computer Science & IT | LABORATORY MANUAL |
| | PRACTICAL INSTRUCTION SHEET | |
| DEPTT: Computer Science & IT | LABORATORY: Web Technology Lab (BCA-19) | SEMESTER: VI |

Step 4: Create directory **libext** under the **struts2tutorial\WEB-INF** then you copy latest Servlets api jar (in our case servlet-api.jar) file over there. This library file will be used to compile Servlets in our application.

Step 5: Now create directories **java** and **classes** under **struts2tutorial\WEB-INF\src**. The directory **struts2tutorial\WEB-INF\src\java** will be used to put all the java sources file and directory **struts2tutorial\WEB-INF\src\classes** will be used by ant build utility to store compiled java files.