```
<html>
<head><title>Hello World</title></head>

<body>
Hello World!<br/>
<%
out.println("Your IP address is " + request.getRemoteAddr());
%>
</body>
</html>
```

Jspaction.java

```jsp
<%! int day = 3; %>
<html>
<head><title>IF...ELSE Example</title></head>

<body>
<% if (day == 1 || day == 7) { %>
<p> Today is weekend</p>
<% } else { %>
<p> Today is not weekend</p>
<% } %>
</body>
</html>
```

Switch.jsp

```jsp
<%! int day = 3; %>
<html>
<head><title>SWITCH...CASE Example</title></head>

<body>
<%
switch(day) {
case 0:
out.println("It\'s Sunday.");
break;
case 1:
out.println("It\'s Monday.");
break;
case 2:
out.println("It\'s Tuesday.");
break;
case 3:
out.println("It\'s Wednesday.");
break;
case 4:
out.println("It\'s Thursday.");
break;
case 5:
out.println("It\'s Friday.");
break;
default:
out.println("It's Saturday.");
}
%>
</body>
</html>
```

forloop.jsp


```jsp
<%! int fontSize; %>
<html>
<head><title>FOR LOOP Example</title></head>

<body>
<%for ( fontSize = 1; fontSize <= 3; fontSize++){ %>
<font color = "green" size = "<%= fontSize %>">
JSP Tutorial
</font><br />
<%}%>
</body>
</html>
```

While.jsp
```
<%! int fontSize; %>
<html>
<head><title>WHILE LOOP Example</title></head>
<body>
<%while ( fontSize <= 3){ %>
<font color = "green" size = "<%= fontSize %>">
JSP Tutorial
</font><br />
<%fontSize++;%>
<%}%>
</body>
</html>
```

Following is the content of the date.jsp file −
```
<p>Today's date: <%= (new java.util.Date()).toLocaleString()%></p>
```

Following is the content of the main.jsp file −
```
<html>
<head>
<title>The include Action Example</title>
</head>
<body>
<center>
<h2>The include action Example</h2>
<jsp:include page = "date.jsp" flush = "true" />
</center>
</body>
</html>
```

Forwarding pages in JSP

index.jsp
```
<html>
<body>
<h2>this is index page</h2>
<jsp:forward page="printdate.jsp" />
</body>
</html>
```

printdate.jsp
```
<html>
<body>
<% out.print("Today is:"+java.util.Calendar.getInstance().getTime()); %>
</body>
```

```
</html>
```

Forwarding page 2

```
index.jsp
<html>
<body>
<h2>this is index page</h2>

<jsp:forward page="printdate.jsp" >
<jsp:param name="name" value="javat" />
</jsp:forward>

</body>
</html>
```

```
printdate.jsp

<html>
<body>
<% out.print("Today is:"+java.util.Calendar.getInstance().getTime()); %>
<%= request.getParameter("name") %>
</body>
</html>
```

```
Jsp:include1.jsp
index.jsp
<h2>this is index page</h2>
<jsp:include page="printdate.jsp" />
<h2>end section of index page</h2>
```

```
printdate.jsp
<% out.print("Today is:"+java.util.Calendar.getInstance().getTime()); %>
```

```
Jsp:include1.jsp

<html>
<head>
<title>JSP Include example with parameters</title>
</head>
<body>
<h2>This is index.jsp Page</h2>
<jsp:include page="display.jsp">
<jsp:param name="userid" value="Chaitanya" />
<jsp:param name="password" value="Chaitanya" />
```

```
<jsp:param name="name" value="Chaitanya K" />
<jsp:param name="age" value="27" />
</jsp:include>
</body>
</html>

display.jsp
<html>
<head>
<title>Display Page</title>
</head>
<body>
<h2>Hello this is a display.jsp Page</h2>
UserID: <%=request.getParameter("userid") %><br>
Password is: <%=request.getParameter("password") %><br>
User Name: <%=request.getParameter("name") %><br>
Age: <%=request.getParameter("age") %>
</body>
</html>
```

Jsp:param.jsp
first.jsp
```html
<html>
<head>
<title>Demo of JSP Param Action Tag</title>
</head>
<body>
<h3>JSP page: Demo Param along with forward</h3>
<jsp:forward page="second.jsp">
<jsp:param name ="date" value="20-05-2012" />
<jsp:param name ="time" value="10:15AM" />
<jsp:param name ="data" value="ABC" />
</jsp:forward>
</body>
</html>
```

In the above example first.jsp is passing three parameters (data, time & data) to second.jsp and second.jsp can access these parameters using the below code –

```
Date:<%= request.getParameter("date") %>
Time:<%= request.getParameter("time") %>
My Data:<%= request.getParameter("data") %>
```

JSP directive

Form Parameters.jsp
```html
<html>
<body>
<form action = "main.jsp" method = "POST" target = "_blank">
<input type = "checkbox" name = "maths" checked = "checked" /> Maths
<input type = "checkbox" name = "physics"  /> Physics
<input type = "checkbox" name = "chemistry" checked = "checked" /> Chem
<input type = "submit" value = "Select Subject" />
</form>
</body>
</html>
```


JSP directives

```
<%@ page import = "java.io.*,java.util.*" %>
```

```html
<html>
<head>
<title>HTTP Header Request Example</title>
</head>
```

```
<body>
<center>
<h2>HTTP Header Request Example</h2>
<table width = "100%" border = "1" align = "center">
<tr bgcolor = "#949494">
<th>Param Name</th>
<th>Param Value(s)</th>
</tr>
<%
Enumeration paramNames = request.getParameterNames();
while(paramNames.hasMoreElements()) {
String paramName = (String)paramNames.nextElement();
out.print("<tr><td>" + paramName + "</td>\n");
String paramValue = request.getHeader(paramName);
out.println("<td> " + paramValue + "</td></tr>\n");
}
%>
</table>
</center>
</body>
</html>
```

Errorpage in JSP

Process.jsp
```
<%@ page errorPage="error.jsp" %>
<%
String num1=request.getParameter("n1");
String num2=request.getParameter("n2");
int a=Integer.parseInt(num1);

int b=Integer.parseInt(num2);
int c=a/b;
out.print("division of numbers is: "+c);
%>
```

Index.jsp
```
<form action="process.jsp">
No1:<input type="text" name="n1" /><br/><br/>
No1:<input type="text" name="n2" /><br/><br/>
<input type="submit" value="divide"/></form>
```
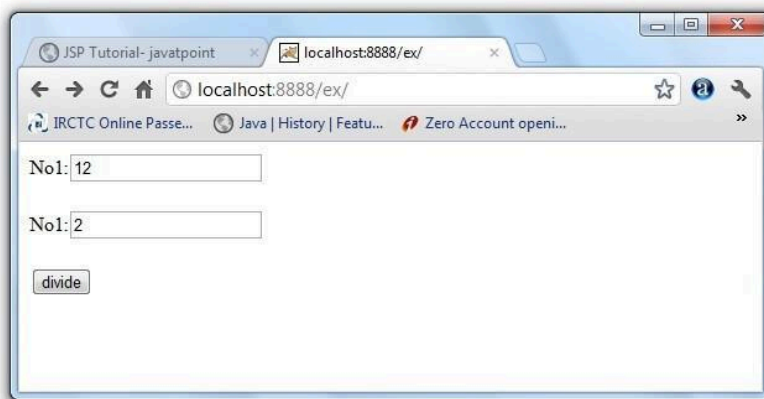
isErrorPage: Used to mark a page as an error page where exceptions are displayed.
Error.jsp
```
<%@ page isErrorPage="true" %>
<h3>Sorry an exception occured!</h3>

Exception is: <%= exception %>
```

Cookies

```html
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Setting Cookies</title>
</head>
<body>
<h1>Setting Cookies</h1>
 <form action="main.jsp" method="GET">
  First Name: <input type="text" name="first_name"> <br /><br/> Last
  Name: <input type="text" name="last_name" /><br/><br/> <input type="submit"
value="Submit" />
 </form>
</body>
</html>
```

Main.jsp

```jsp
<%
// Create cookies for first and last names.
Cookie firstName = new Cookie("first_name", request.getParameter("first_name"));
Cookie lastName = new Cookie("last_name", request.getParameter("last_name"));

// Set expiry date after one hour for both the cookies.
firstName.setMaxAge(60 * 60);
lastName.setMaxAge(60 * 60);

// Add both the cookies in the response header.
response.addCookie(firstName);
response.addCookie(lastName);
%>
<html>
<body>
<h1>Setting Cookies</h1>
 <ul>
  <b>First Name:</b><%=request.getParameter("first_name")%><br /><br/>
  <b>Last Name:</b><%=request.getParameter("last_name")%>
</body>
</html>
```

Read cookies

```jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
 pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
```

```jsp
<meta charset="ISO-8859-1">
<title>Read Cookies</title>
</head>
<body>
<h1>Read Cookies </h1>
 <%
  Cookie cookie = null;
 Cookie[] cookies = null;
 cookies = request.getCookies();
 if (cookies != null) {
  for (int i = 0; i < cookies.length; i++) {
   cookie = cookies[i];
   out.print("Name : " + cookie.getName() + ",  ");
   out.print("Value: " + cookie.getValue() + " <br/>");
  }
 } else {
  out.println("<h2>No cookies founds</h2>");
 }
 %>
</body>
</html>
```

2. Hidden Form Fields

```jsp
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>

<head>
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
        <title>Home Page</title>
</head>

<body>
        <%
                java.util.Date today= new java.util.Date();
                java.text.SimpleDateFormat sdf=new java.text.SimpleDateFormat("hh:mm;ss");
                String str =sdf.format(today);
        %>

                <form action ="welcome.jsp" metgod="post">
                        Enter your name:<input type="text" name="username"/>
                        <input type="hidden" value="<%=str%>" name="visittime"/>
                        <br>
                        <input type="submit" value="Show Message"/>
                </form>
</body>
</html>
```

Welcome.jsp

```jsp
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>

<head>
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
        <title>JSP Page</title>
</head>

<body>
        <%
                String name=request.getParameter("username");
                String time=request.getParameter("visittime");
        %>
        <h3>Hello <%=name%>,Welcome to our Page !</h3>
        You visited Home page at <%= time %>
</body>

</html>
```

Session in JSP

index.html
```html
<html>
<head>
<title>Welcome Page: Enter your name</title>
</head>
<body>
<form action="session.jsp">
<input type="text" name="inputname">
<input type="submit" value="click here!!"><br/>
</form>
</body>
</html>
```

session.jsp
```jsp
<html>
<head>
<title>Passing the input value to a session variable</title>
</head>
<body>
<%
String uname=request.getParameter("inputname");
out.print("Welcome "+ uname);
session.setAttribute("sessname",uname);
%>
<a href="output.jsp">Check Output Page Here </a>
</body>
</html>
```

In this page we are fetching the variable's value from session object and displaying it.

output.jsp
```jsp
<html>
<head>
<title>Output page: Fetching the value from session</title>
</head>
<body>
<%
String name=(String)session.getAttribute("sessname");
out.print("Hello User: You have entered the name: "+name);
%>
</body>
</html>
```

XMLjsp.jsp
Books.xml

```jsp
<%@ page contentType = "text/xml" %>
<books>
<book>
<name>Padam History</name>
<author>ZARA</author>
<price>100</price>
</book>
</books>
```

main.jsp

```jsp
<%@ taglib prefix = "c" uri="http://java.sun.com/jsp/jstl/core" %>
<%@ taglib prefix = "x" uri="http://java.sun.com/jsp/jstl/xml" %>

<html>
<head>
<title>JSTL x:parse Tags</title>
</head>

<body>
<h3>Books Info:</h3>
<c:import var = "bookInfo" url="http://localhost:8080/books.xml"/>
<x:parse xml = "${bookInfo}" var = "output"/>
<b>The title of the first book is</b>:
<x:out select = "$output/books/book[1]/name" />
<br>

<b>The price of the second book</b>:
<x:out select = "$output/books/book[2]/price" />
</body>
</html>
```

Getpara.jsp

```jsp
<html>
<head>
<title>Using GET Method to Read Form Data</title>
</head>
<body>
<h1>Using GET Method to Read Form Data</h1>
<ul>
<li><p><b>First Name:</b>
<%= request.getParameter("first_name")%>
</p></li>
<li><p><b>Last  Name:</b>
```

```jsp
<%= request.getParameter("last_name")%>
</p></li>
</ul>

</body>
</html>
```

Output
http://localhost:8080/main.jsp?first_name=ZARA&last_name=ALI in your browser's
Location:box. This will generate the following result −

Using GET Method to Read Form Data

First Name: ZARA
Last Name: ALI

Post.jsp
Hello.htm file −

```html
<html>
<body>

<form action = "main.jsp" method = "POST">
First Name: <input type = "text" name = "first_name">
<br />
Last Name: <input type = "text" name = "last_name" />
<input type = "submit" value = "Submit" />
</form>

</body>
</html>
```

```jsp
<html>
<head>
<title>Using GET and POST Method to Read Form Data</title>
</head>

<body>
<center>
<h1>Using POST Method to Read Form Data</h1>

<ul>
<li><p><b>First Name:</b>
<%= request.getParameter("first_name")%>
</p></li>
<li><p><b>Last  Name:</b>
```

```jsp
<%= request.getParameter("last_name")%>
</p></li>
</ul>

</body>
</html>
```

Checkbox.jsp
```html
<html>
<body>

<form action = "main.jsp" method = "POST" target = "_blank">
<input type = "checkbox" name = "maths" checked = "checked" /> Maths
<input type = "checkbox" name = "physics"  /> Physics
<input type = "checkbox" name = "chemistry" checked = "checked" /> Chemistry
<input type = "submit" value = "Select Subject" />
</form>

</body>
</html>


<html>
<head>
<title>Reading Checkbox Data</title>
</head>

<body>
<h1>Reading Checkbox Data</h1>
<ul>
<li><p><b>Maths Flag:</b>
<%= request.getParameter("maths")%>
</p></li>
<li><p><b>Physics Flag:</b>
<%= request.getParameter("physics")%>
</p></li>
<li><p><b>Chemistry Flag:</b>
<%= request.getParameter("chemistry")%>
</p></li>
</ul>
</body>
</html>
```

usebeanIndex.jsp

```jsp
<jsp:useBean id="obj" class="com.javatpoint.Calculator"/>

<%
int m=obj.cube(5);
out.print("cube of 5 is "+m);
%>
```

```java
package com.javatpoint;
public class Calculator{
  public int cube(int n){return n*n*n;}
  }
```

StudentBeanTest.jsp

```html
<html>
<head>
<title>JSP Page to show use of useBean action</title>
</head>
<body>
<h1>Demo: Action</h1>
<jsp:useBean id="student" class="javabeansample.StuBean"/>
<jsp:setProperty name="student" property="*"/>
<h1>
name:<jsp:getProperty name="student" property="name"/><br>
empno:<jsp:getProperty name="student" property="rollno"/><br>
</h1>
</body>
</html>
```

StudentBean.java

```java
package javabeansample;
public class StuBean {
public StuBean() {
}
private String name;
private int rollno;
public void setName(String name)
{
this.name=name;
}
public String getName()
{
return name;
}
public void setRollno(int rollno)
{
this.rollno=rollno;
}
public int getRollno()
{
return rollno;
}
}
```

Jspusebean.jsp
Details.java

```java
public class Details {
public Details() {
}
```

```java
private String username;
private int age;
private String password;
public String getUsername() {
return username;
}
public void setUsername(String username) {
this.username = username;
}
public int getAge() {
return age;
}
public void setAge(int age) {
this.age = age;
}
public String getPassword() {
return password;
}
public void setPassword(String password) {
this.password = password;
}
}
```

index.jsp
```html
<html>
<head><title>
useBean, getProperty and setProperty example
</title></head>
<form action="userdetails.jsp" method="post">
User Name: <input type="text" name="username"><br>
User Password: <input type="password" name="password"><br>
User Age: <input type="text" name="age"><br>
<input type="submit" value="register">
</form>
</html>
```
userdetails.jsp
```html
<jsp:useBean id="userinfo" class="beginnersbook.com.Details"></jsp:useBean>
<jsp:setProperty property="*" name="userinfo"/>
You have enterted below details:<br>
<jsp:getProperty property="username" name="userinfo"/><br>
<jsp:getProperty property="password" name="userinfo"/><br>
<jsp:getProperty property="age" name="userinfo" /><br>
```


Javabean.jsp
index.html

```
<form action="process.jsp" method="post">
Name:<input type="text" name="name"><br>
Password:<input type="password" name="password"><br>
Email:<input type="text" name="email"><br>
<input type="submit" value="register">
</form>
```

process.jsp
```
<jsp:useBean id="u" class="org.sssit.User"></jsp:useBean>
<jsp:setProperty property="*" name="u"/>

Record:<br>
<jsp:getProperty property="name" name="u"/><br>
<jsp:getProperty property="password" name="u"/><br>
<jsp:getProperty property="email" name="u" /><br>
```
User.java
```
package org.sssit;

public class User {
private String name,password,email;
//setters and getters
}
```

JSP directives

Reusing Bean in Multiple Jsp Pages
index.jsp
Same as above.
User.java
Same as above.
process.jsp
```
<jsp:useBean id="u" class="org.sssit.User" scope="session"></jsp:useBean>
<jsp:setProperty property="*" name="u"/>

Record:<br>
<jsp:getProperty property="name" name="u"/><br>
<jsp:getProperty property="password" name="u"/><br>
<jsp:getProperty property="email" name="u" /><br>

<a href="second.jsp">Visit Page</a>
```
_____
second.jsp
```
<jsp:useBean id="u" class="org.sssit.User" scope="session"></jsp:useBean>
Record:<br>
<jsp:getProperty property="name" name="u"/><br>
<jsp:getProperty property="password" name="u"/><br>
```

```jsp
<jsp:getProperty property="email" name="u" /><br>
```
Using variable value in setProperty tag
process.jsp
```jsp
<jsp:useBean id="u" class="org.sssit.User"></jsp:useBean>
<%
String name="arjun";
%>
<jsp:setProperty property="name" name="u" value="<%=name %>"/>

Record:<br>
<jsp:getProperty property="name" name="u"/><br>
```

Jspservlet.jsp
```jsp
<%@ page language="java"
contentType="text/html; charset=windows-1256"
pageEncoding="windows-1256"
%>

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

<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=windows-1256">
<title>Login Page</title>
</head>

<body>
<form action="LoginServlet">

Please enter your username
<input type="text" name="un"/><br>

Please enter your password
<input type="text" name="pw"/>

<input type="submit" value="submit">

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

import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
```

```java
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

/**
Servlet implementation class LoginServlet
*/
public class LoginServlet extends HttpServlet {

public void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, java.io.IOException {

try
{

UserBean user = new UserBean();
user.setUserName(request.getParameter("un"));
user.setPassword(request.getParameter("pw"));

user = UserDAO.login(user);

if (user.isValid())
{

HttpSession session = request.getSession(true);
session.setAttribute("currentSessionUser",user);
response.sendRedirect("userLogged.jsp"); //logged-in page
}

else
response.sendRedirect("invalidLogin.jsp"); //error page
}

catch (Throwable theException)
{
System.out.println(theException);
}
}
}

public class UserBean {

private String username;
private String password;
private String firstName;
private String lastName;
public boolean valid;
```

```java
public String getFirstName() {
return firstName;
}

public void setFirstName(String newFirstName) {
firstName = newFirstName;
}

public String getLastName() {
return lastName;
}

public void setLastName(String newLastName) {
lastName = newLastName;
}

public String getPassword() {
return password;
}

public void setPassword(String newPassword) {
password = newPassword;
}

public String getUsername() {
return username;
}

public void setUserName(String newUsername) {
username = newUsername;
}

public boolean isValid() {
return valid;
}

public void setValid(boolean newValid) {
valid = newValid;
}
}
```

```sql
CREATE TABLE  "REGISTERUSER"
   (    "NAME" VARCHAR2(4000),
    "PASS" VARCHAR2(4000),
```

```
  "EMAIL" VARCHAR2(4000),
  "COUNTRY" VARCHAR2(4000)
  )
/
```

register.html

```html
<html>
<body>
<form action="servlet/Register" method="post">

Name:<input type="text" name="userName"/><br/><br/>
Password:<input type="password" name="userPass"/><br/><br/>
Email Id:<input type="text" name="userEmail"/><br/><br/>
Country:
<select name="userCountry">
<option>India</option>
<option>Pakistan</option>
<option>other</option>
</select>

<br/><br/>
<input type="submit" value="register"/>

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

Register.java
```java
import java.io.*;
import java.sql.*;
import javax.servlet.ServletException;
import javax.servlet.http.*;

public class Register extends HttpServlet {
public void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {

response.setContentType("text/html");
PrintWriter out = response.getWriter();

String n=request.getParameter("userName");
String p=request.getParameter("userPass");
String e=request.getParameter("userEmail");
String c=request.getParameter("userCountry");
```

```java
try{
Class.forName("oracle.jdbc.driver.OracleDriver");
Connection con=DriverManager.getConnection(
"jdbc:oracle:thin:@localhost:1521:xe","system","oracle");

PreparedStatement ps=con.prepareStatement(
"insert into registeruser values(?,?,?,?)");

ps.setString(1,n);
ps.setString(2,p);
ps.setString(3,e);
ps.setString(4,c);

int i=ps.executeUpdate();
if(i>0)
out.print("You are successfully registered...");


}catch (Exception e2) {System.out.println(e2);}

out.close();
}

}
```

```xml
<web-app>

<servlet>
<servlet-name>Register</servlet-name>
<servlet-class>Register</servlet-class>
</servlet>

<servlet-mapping>
<servlet-name>Register</servlet-name>
<url-pattern>/servlet/Register</url-pattern>
</servlet-mapping>

<welcome-file-list>
   <welcome-file>register.html</welcome-file>
</welcome-file-list>

</web-app>
```

Sampleproject
```jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
      pageEncoding="ISO-8859-1"%>
```

```html
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>User Data</title>
</head>
<style>
div.ex {
        text-align: right width:300px;
        padding: 10px;
        border: 5px solid grey;
        margin: 0px
}
</style>
<body>
        <h1>Registration Form</h1>
        <div class="ex">
                <form action="RegistrationController" method="post">
                        <table style="with: 50%">
                                <tr>
                                        <td>Full Name</td>
                                        <td><input type="text" name="fullname" /></td>
                                </tr>
                                <tr>
                                        <td>Address</td>
                                        <td><input type="text" name="address" /></td>
                                </tr>
                                <tr>
                                        <td>Age</td>
                                        <td><input type="text" name="age" /></td>
                                </tr>
                                <tr>
                                        <td>Qualification</td>
                                        <td><input type="text" name="qual" /></td>
                                </tr>
                                <tr>
                                        <td>Percentage</td>
                                        <td><input type="text" name="percent" /></td>
                                </tr>
                                <tr>
                                        <td>Year Passed</td>
                                        <td><input type="text" name="yop" /></td>
                                </tr>
                        </table>
                        <input type="submit" value="register" />
```

```
            </form>
        </div>
</body>
</html>
web.xml mapping
<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns="http://java.sun.com/xml/ns/javaee"
        xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
http://java.sun.com/xml/ns/javaee/web-app_2_5.xsd"
        id="WebApp_ID" version="2.5">
        <display-name>registration</display-name>
        <welcome-file-list>
                <welcome-file>registration.jsp</welcome-file>
        </welcome-file-list>
        <servlet>
                <description></description>
                <display-name>RegistrationController</display-name>
                <servlet-name>RegistrationController</servlet-name>
                <servlet-class>com.candidjava.RegistrationController</servlet-class>
        </servlet>
        <servlet-mapping>
                <servlet-name>RegistrationController</servlet-name>
                <url-pattern>/RegistrationController</url-pattern>
        </servlet-mapping>
</web-app>


Registration Servlet code


package com.candidjava;

import java.io.IOException;
import java.io.PrintWriter;

import javax.servlet.RequestDispatcher;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 * Servlet implementation class UserDataServlet
 */
public class RegistrationController extends HttpServlet {
```

```java
        protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
                // TODO Auto-generated method stub
                response.setContentType("text/html");
                PrintWriter out = response.getWriter();
                String name = request.getParameter("fullname");
                String Addr = request.getParameter("address");
                String age = request.getParameter("age");
                String Qual = request.getParameter("qual");
                String Persent = request.getParameter("percent");
                String Year = request.getParameter("yop");

if(name.isEmpty()||Addr.isEmpty()||age.isEmpty()||Qual.isEmpty()||Persent.isEmpty()||Year.isEmpty())
                {
                        RequestDispatcher rd = request.getRequestDispatcher("registration.jsp");
                        out.println("<font color=red>Please fill all the fields</font>");
                        rd.include(request, response);
                }
                else
                {
                        RequestDispatcher rd = request.getRequestDispatcher("home.jsp");
                        rd.forward(request, response);
                }
        }

}
```

Success page (home.jsp)

```jsp
 <%@ page language="java" contentType="text/html; charset=ISO-8859-1"
   pageEncoding="ISO-8859-1"%>
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Display</title>
<style>
table#nat{
        width: 50%;
        background-color: #c48ec5;
```

```jsp
}
</style>
</head>
<body>
<% String name =  request.getParameter("fullname");
        String Addr = request.getParameter("address");
        String age = request.getParameter("age");
        String Qual = request.getParameter("qual");
        String Persent = request.getParameter("percent");
        String Year = request.getParameter("yop"); %>
<table id ="nat">
<tr>
        <td>Full Name</td>
        <td><%= name %></td>
</tr>
<tr>

        <td>Address</td>
        <td><%= Addr %></td>
</tr>
<tr>

        <td>Age</td>
        <td><%= age %></td>
</tr>
<tr>

        <td>Qualification</td>
        <td><%= Qual %></td>
</tr>
<tr>

        <td>Percentage</td>
        <td><%= Persent %></td>
</tr>
<tr>

        <td>Year of Passout</td>
        <td><%= Year %></td>
</tr>
</table>
</body>
</html>
```
Screenshot

Requestdispacher.jsp
loginform.jsp
```jsp
<head>
<title>Request Dispatcher</title>
```

```html
</head>
<body>
<h2 align="center">Request Dispatcher in Jsp</h2>
<form method="post" action="dispatcher.jsp" >
<table align="center">
<tr>
<td>Name:</td>
<td><input type="text" name="fname"/></td>
</tr>
<tr>
<td>Password:</td>
<td><input type="password" name="pwd"/></td>
</tr>
<tr>
<td><input type="submit" value="Submit"/></td>
</tr>
</table>
</form>
</body>
</html>
```

dispatcher.jsp

```html
<html>
<head>
<title>Request Dispatcher</title>
</head>
<%
String st=request.getParameter("fname");
String st1=request.getParameter("pwd");
if(st=="")
{
getServletContext().getRequestDispatcher("/form.jsp").forward(request, response);
}
else{
getServletContext().getRequestDispatcher("/welcome.jsp").forward(request, response);
}
%>
</html>
```

welcome.jsp

```html
<html>
<body>
<h2 align="center">Welcome to View Page.</h2>
<h3 align="center"><font color="darklight">UserName:-
<%=request.getParameter("fname")%></font></h3>
<h3 align="center"><font color="darklight">Password:-
<%=request.getParameter("pwd")%></font></h3>
</body>
```

```
</html>
JSTL XML tag
<x:forEach var="book"
    select="$applicationScope:booklist/books/*">
  <tr>
    <c:set var="bookId">
      <x:out select="$book/@id"/>
    </c:set>=
    <td bgcolor="#ffffaa">
      <c:url var="url"
      value="/bookdetails" >
        <c:param name="bookId" value="${bookId}" />
        <c:param name="Clear" value="0" />
      </c:url>
      <a href="${url}">
      <strong><x:out select="$book/title"/> 
      </strong></a></td>
    <td bgcolor="#ffffaa" rowspan=2>
      <c:set var="price">
        <x:out select="$book/price"/>
      </c:set>
      <fmt:formatNumber value="${price}" type="currency"/>
       
    </td>
    <td bgcolor="#ffffaa" rowspan=2>
    <c:url var="url" value="/catalog" >
      <c:param name="Add" value="${bookId}" />
    </c:url>
    <p><strong><a href="${url}"> 
      <fmt:message key="CartAdd"/> </a>
    </td>
  </tr>
  <tr>
    <td bgcolor="#ffffff">
      <fmt:message key="By"/> <em>
      <x:out select="$book/firstname"/> 
      <x:out select="$book/surname"/></em></td></tr>
</x:forEach>
Transformation Tags

JSTL SQL tag
<c:set var="sufficientInventory" value="true" />
<sql:transaction>
  <c:forEach var="item" items="${sessionScope.cart.items}">
    <c:set var="book" value="${item.item}" />
    <c:set var="bookId" value="${book.bookId}" />
```

```jsp
        <sql:query var="books"
            sql="select * from PUBLIC.books where id = ?" >
            <sql:param value="${bookId}" />
        </sql:query>
        <jsp:useBean id="inventory"
            class="database.BookInventory" />
        <c:forEach var="bookRow" begin="0"
            items="${books.rowsByIndex}">
            <jsp:useBean id="bookRow"  type="java.lang.Object[]" />
            <jsp:setProperty name="inventory" property="quantity"
                value="${bookRow[7]}" />

            <c:if test="${item.quantity > inventory.quantity}">
                <c:set var="sufficientInventory" value="false" />
                <h3><font color="red" size="+2">
                <fmt:message key="OrderError"/>
                 There is insufficient inventory for
                 <i>${bookRow[3]}</i>.</font></h3>
            </c:if>
        </c:forEach>
    </c:forEach>

    <c:if test="${sufficientInventory == 'true'}" />
        <c:forEach var="item" items="${sessionScope.cart.items}">
         <c:set var="book" value="${item.item}" />
         <c:set var="bookId" value="${book.bookId}" />

            <sql:query var="books"
                sql="select * from PUBLIC.books where id = ?" >
                <sql:param value="${bookId}" />
            </sql:query>

            <c:forEach var="bookRow" begin="0"
                items="${books.rows}">
                        <sql:update var="books" sql="update PUBLIC.books set
                    inventory = inventory - ? where id = ?" >
                    <sql:param value="${item.quantity}" />
                    <sql:param value="${bookId}" />
                </sql:update>
            </c:forEach>
        </c:forEach>
        <h3><fmt:message key="ThankYou"/>
            ${param.cardname}.</h3><br>
    </c:if>
</sql:transaction>
```

query Tag Result Interfac