

ApplicationSession1:

```
<form action="Session2.jsp" method ='Post'>
    Name: <input type="text" name="uname"><br>
    Password:<input type="password" name="pass"><br>

    <input type="submit" value="Submit">
</form>
```

Session2:

```
<%
```

Session Count:

```
<%
```

```
    Integer count=(Integer)application.getAttribute("usercount");
    if(session.isNew())
    {
        if(count==null)
        {
            count=1;
        }
        else
        {
            count++;
        }
        application.setAttribute("usercount",count);
    }
%>
```

```
<h1>The number of users login into our application:<%= count %></h1>
```

SessionreqCount:

```
<%
```

```
    Integer count=(Integer)session.getAttribute("sessionreqcount");
    if(count==null)
```

```

    {
        count=1;
    }
    else
    {
        count++;
    }

    session.setAttribute("sessionreqcount",count);
%>

<h1>The number of requests in the current session: <%= count %> </h1>

```

Application1:

```

<body bgcolor = 'pink'>

    <form action="Application2.jsp" method = 'Post'>

        Enter message:<input type="text" name="message"><br>

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

    </form>

</body>

```

Application2:

```

<body bgcolor = 'cyan'>

    <%

        String message=request.getParameter("message");

        application.setAttribute("msg", message);

    %>

    <form action="Application3.jsp">

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

    </form>

</body>

```

Application3:

```

<body bgcolor = 'yellow'>

    <%

        String message=(String)application.getAttribute("msg");
    %>

```

```
out.println(message);

%>

<form action="Application4.jsp">

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

</form>

</body>
```

Application4:

```
<body bgcolor = 'magenta'>

<br><br><br>
```

```
<%

String message=(String)application.getAttribute("msg");

out.println(message);

%>

</body>
```

HitCount:

```
<body>

<%

Integer count=(Integer)application.getAttribute("hitcount");

if(count==null){

count=1;

}

else

{

count++;

}

application.setAttribute("hitcount",count);

%>

<h1>Hit count of the application is:<%= count %></h1>
```

Page Directive:%@<%

Info:

```
<%--
    Document  : kkpape
    Created on : Sep 26, 2023, 12:59:58 PM
    Author    : CHARUSAT
--%>
<% @page info="Using Directives" %>
<% @page contentType="text/html" pageEncoding="UTF-8"%>
<html>
    <body bgcolor = 'cyan'>
        <%
            String str = getServletInfo();
            out.println(str);
        %>
    </body>
</html>
```

Session:

```
<% @ page info="Using Directive" %>
<html>
<body bgcolor='cyan'>

<%

        String str=getServletInfo();
        out.println(str);

%>

</body>
</html>
```

Error page:

One.jsp:

```
<% @ page errorPage="HandleError.jsp" %>
<html>
<body bgcolor='cyan'>

<%

        int m=10,n=0;

        int k=m/n;

%>

</body>
```

</html>

HandleError.jsp:

```
<% @ page isErrorPage="true" %>
```

```
<html>
```

```
<body bgcolor='cyan'>
```

```
<%=exception.toString() %>
```

```
</body>
```

```
</html>
```

Content type:

```
<% @ page contentType="application/msword" %>
```

```
<html>
```

```
<body>
```

```
Today is:
```

```
<%= new java.util.Date() %>
```

```
</body>
```

```
</html>
```

Include Directive:

One1.jsp

```
<%--
```

```
Document : One1
```

```
Created on : Sep 27, 2023, 2:45:40 PMja
```

```
Author : CHARUSAT
```

```
--%>
```

```
<% @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 bgcolor='cyan'>
```

Before Inclusion !!!!

```
<br>
```

```
<% @ include file ="Two2.jsp" %>
```

```
<br>
```

After Inclusion!!!!

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

Two.2jsp:

```
<%--
  Document   : Two2
  Created on : Sep 27, 2023, 2:45:52 PM
  Author    : CHARUSAT
--%>

<% @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 bgcolor='red'>
    This is Two.jsp !!!!
  </body>
</html>
```

Include Action:

Platform.jsp:

```
<%--
  Document   : Platform
  Created on : Sep 29, 2023, 1:17:17 PM
  Author    : CHARUSAT
--%>

<% @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 bgcolor="lightblue">
    <br><br>
    This is Platform Selection Page
    <br><br>Detail
    <form action="Details.jsp">
```

```

        Choose Platform:
        <input type="radio" name="plat" value="Sun">Sun
        <input type="radio" name="plat" value="Micro">Microsoft<br><br>
        <input type="submit" value="Submit">
    </form>
</body>
</html>

```

Details.jsp:

```

<%--
    Document   : Details
    Created on : Sep 29, 2023, 1:18:09 PM
    Author    : CHARUSAT
--%>
<% @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>
        This is Details.jsp!!
        <br>
        <%
            String plat = request.getParameter("plat");
            if (plat.equals("Sun")) {
                %>
                <jsp:include page="Sun.jsp" />
                <%
            }else{
                %>
                <jsp:include page="Micro.jsp" /><%
            }
        %>
    </body>
</html>

```

Sun.jsp:

```

<%--
    Document   : Sun
    Created on : Sep 29, 2023, 1:19:08 PM
    Author    : CHARUSAT
--%>

<% @page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
    <body bgcolor ='cyan'>
        Available Courses:

```

```

        <br> Core Java
        <br> Adv Java
    </body>
</html>
Micro.jsp
<%--
    Document : Micro
    Created on : Sep 29, 2023, 1:37:07 PM
    Author : CHARUSAT
--%>
<% @page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
    <body bgcolor='yellow'>
        Available Courses:
        <br> VB.Net
        <br> ASP.Net
    </body>
</html>

```

Forward Action:

User.jsp:

```

<%--
    Document : User
    Created on : Sep 30, 2023, 1:47:45 PM
    Author : CHARUSAT
--%>

<% @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 bgcolor = 'lightblue'>
        <form action="Check.jsp">
            Name:
            <input type="text" name="uname"><br>
            Password:
            <input type="password" name="pass"><br>
            <br>
            Choose gender:
            <input type="radio" name="gender" value="Male">Male
            <input type="radio" name="gender" value="Female">Female
            <br><br>

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

```



```

        </form>

    </body>
</html>

Check.jsp:
<%--
    Document   : Check
    Created on : Sep 30, 2023, 1:49:21 PM
    Author    : CHARUSAT
--%>
<% @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>
        <br>
        <%
            String gender = request.getParameter("gender");
            if (gender.equals("Male")) {
                %>
                <jsp:forward page="Male.jsp" />
                <%
            } else {
                %>
                <jsp:forward page="Female.jsp" /><%
            }
        %>
    </body>
</html>
Male.jsp
<%--
    Document   : Male
    Created on : Sep 30, 2023, 1:49:40 PM
    Author    : CHARUSAT
--%>

<% @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 bgcolor="cyan">
        Hello <%=request.getParameter("uname") %>

```

```

    <br>
    Your password is: <%=request.getParameter("pass") %>
    <br>
    This is page for male.

</body>
</html>

Female.jsp
<%--
    Document   : Female.jsp
    Created on : Sep 30, 2023, 1:49:53 PM
    Author      : CHARUSAT
--%>

<% @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>
        <body bgcolor="yellow">

        Hello <%=request.getParameter("uname") %>
        <br>
        Your password is: <%=request.getParameter("pass") %>
        <br>
        This is page for female.

    </body>
</html>

```

useBean Action Tag:

Student.java

```

/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to
change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this
template
 */
package kkbean;

import java.io.Serializable;
public class Student implements Serializable{

    private int sno;

```

```

private String sname;

private int age;

public Student()

{

}

public Student(int sno, String sname, int age) {
    this.sno = sno;
    this.sname = sname;
    this.age = age;
}

public int getSno() {
    return sno;
}

public void setSno(int sno) {
    this.sno = sno;
}

public String getSname() {
    return sname;
}

public void setSname(String sname) {
    this.sname = sname;
}

public int getAge() {
    return age;
}

public void setAge(int age) {
    this.age = age;
}
}

```

Bean1.jsp:

```

<%--
    Document   : Bean1
    Created on  : Oct 3, 2023, 11:52:56 AM
    Author      : CHARUSAT
--%>
<%@page import = "kkbean.Student" %>

```

```

<% @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 bgcolor='cyan'>
    <jsp:useBean id="stud" class="kkbean.Student" scope="session">
      <jsp:setProperty name="stud" property="sno" value="101" />
      <jsp:setProperty name="stud" property="sname" value="KK" />
      <jsp:setProperty name="stud" property="age" value="36" />
    </jsp:useBean>

    <table border='0' >
      <tr>
        <th>STUDENT TABLE</th>
      </tr>
    </table>
    <table border='1'>
      <tr>
        <th>Serial No</th>
        <th>Student Name</th>
        <th>Age</th>
      </tr>
      <td>
        <%
          out.println(stud.getSno());
        %>
      </td>
      <td>
        <%
          out.println(stud.getSname());
        %>
      </td>
      <td>
        <%
          out.println(stud.getAge());
        %>
      </td>
    </tr>
  </table>
  <form action="Bean2.jsp">
    <input type="submit" value="Submit">
  </form>
</body>

```

</html>

Bean2.jsp:

<%--

Document : Bean2

Created on : Oct 3, 2023, 11:53:07 AM

Author : CHARUSAT

--%>

<% @page import = "kkbean.Student" %>

<% @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 bgcolor="yellow">

<jsp:useBean id="stud" class="kkbean.Student" scope="session" >

</jsp:useBean >

<table border='0' >

<tr>

<th>STUDENT TABLE</th>

</tr>

</table>

<table border='1'>

<tr>

<th>Student No</th>

<th>Student Name</th>

<th>Age</th>

</tr>

<td>

<%

out.println(stud.getSno());

%>

</td>

<td>

<%

out.println(stud.getSname());

%>

</td>

<td>

<%

out.println(stud.getAge());

%>

</td>

```
</tr>
</table>
```

Student No:

```
<jsp:getProperty name="stud" property="sno" /><br>
```

Student Name:

```
<jsp:getProperty name="stud" property="sname" /><br>
```

Student Age:

```
<jsp:getProperty name="stud" property="age" /><br>
```

```
</body>
```

```
</html>
```

MVC In JSP:

Model:

Students.java

```
package KK;
import java.sql.*;
/**
 *
 * @author CHARUSAT
 */
public class Student {

    ResultSet getStudList()
    {
        Connection con;

        try
        {
            Class.forName("oracle.jdbc.OracleDriver");

            con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:XE","KK","KK");

            String query="Select * from Student order by Sno";

            Statement stmt=con.createStatement();
            ResultSet rs=stmt.executeQuery(query);

            return rs;
        }
        catch(Exception e)
        {
            System.out.println(e);
            return null;
        }
    }
}
```

```

    }
}

}
View:
Start.jsp:
<%--
    Document : Start
    Created on : Oct 3, 2023, 9:42:55 PM
    Author : CHARUSAT
--%>
<% @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 bgcolor='yellow'>
        <h1><a href="Controller?oper=List">Get Student List</a></h1>
    </body>
</html>

```

Controller.java

```

/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to
change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/JSP_Servlet/Servlet.java to edit this
template
 */
package KK;

import jakarta.servlet.RequestDispatcher;
import jakarta.servlet.ServletException;
import jakarta.servlet.http.HttpServlet;
import jakarta.servlet.http.HttpServletRequest;
import jakarta.servlet.http.HttpServletResponse;
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.*;

public class Controller extends HttpServlet {

    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();

```

```

        out.println("<html>");
        out.println("<body>");

        String oper=request.getParameter("oper");
        if(oper.equals("List"))
        {
            Student s = new Student();
            ResultSet rs=s.getStudList();
            request.setAttribute("List", rs);
            RequestDispatcher rd=request.getRequestDispatcher("List.jsp");
            rd.forward(request, response);
        }

        out.println("</body>");
        out.println("</html>");
    }
}

```

View

List.jsp

```

<%--
    Document   : List
    Created on : Oct 3, 2023, 9:53:46 PM
    Author    : CHARUSAT
--%>
<% @page import="java.sql.*" %>
<% @page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
    <body bgcolor = 'cyan'>
        <center><h1> MVC Demonstration</h1> </center>
        <%
            ResultSet rs=(ResultSet)request.getAttribute("List");
        %>

        <table border="0" align='center'>
        <tr>
            <th>STUDENT TABLE</th>
        </tr>
        </table>
        <table border="1" align='center'>
        <tr>
            <th>Student No</th>
            <th>Student Name</th>
            <th>Student Age</th>
        </tr>

        <%

```



```
        while(rs.next())
        {
%>

<tr>
<td> <%=rs.getString("Sno") %> </td>
<td> <%=rs.getString("Sname") %> </td>
<td> <%=rs.getString("Sage") %> </td>
</tr>

<%
    }
%>

</table>

    </body>
</html>
```