



IP LAB Manual

Internet Programming (Anna University)

OBJECTIVES:

- To be familiar with Web page design using HTML/XML and style sheets
- To be exposed to creation of user interfaces using Java frames and applets.
- To learn to create dynamic web pages using server side scripting.
- To learn to write Client Server applications.
- To be familiar with the PHP programming.
- To be exposed to creating applications with AJAX

LIST OF EXPERIMENTS

1. Create a web page with the following using HTML
 - a. To embed a map in a web page
 - b. To fix the hot spots in that map
 - c. Show all the related information when the hot spots are clicked.
2. Create a web page with the following.
 - a. Cascading style sheets.
 - b. Embedded style sheets.
 - c. Inline style sheets.Use our college information for the web pages.
3. Validate the Registration, user login, user profile and payment by credit card pages using JavaScript.
4. Write programs in Java using Servlets:
 - i. To invoke servlets from HTML forms
 - ii. Session tracking using hidden form fields and Session tracking for a hit count
5. Write programs in Java to create three-tier applications using servlets for conducting on-line examination for displaying student mark list. Assume that student information is available in a database which has been stored in a database server.
6. Install TOMCAT web server. Convert the static web pages of programs into dynamic web pages using servlets (or JSP) 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.
7. Redo the previous task using JSP by converting the static web pages into dynamic web pages. Create a database with user information and books information. The books catalogue should be dynamically loaded from the database.
8. 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
9.
 - i. Validate the form using PHP regular expression.
 - ii. PHP stores a form data into database.

10. Write a web service for finding what people think by asking 500 people's opinion for any consumer product.

TOTAL: 60PERIODS

OUTCOMES: Upon Completion of the course, the students will be able to:

- Construct Web pages using HTML/XML and style sheets.
- Build dynamic web pages with validation using Java Script objects and by applying different event handling mechanisms.
- Develop dynamic web pages using server side scripting.
- Use PHP programming to develop web applications.
- Construct web applications using AJAX and web services.

SOFTWARE REQUIRED:

- Dream Weaver or Equivalent, MySQL or Equivalent, Apache Server, WAMP/XAMPP

Ex.No: 1 HOT SPOT CREATION

mapping.html

```
<html>
<body>
  <p>Click on the State to see its related information:</p>
  
  <map name="india">
    <area shape="rect" coords="180,560,240,580" alt="tamilnadu"
    href="tamilnadu.html">
    <area shape="rect" coords="180,300,280,320" alt="MP"
    href="madhyapradesh.html">
    <area shape="rect" coords="220,420,240,480" alt="andhra"
    href="andhra.html">
    <area shape="circle" coords="200,40,40" href="kashmir.html"
    alt="kashmir">
  </map>
</body>
</html>
```

tamilnadu.html

```
<html>
<head>
  <title>Tamil Nadu</title>
</head>
<body>
  
  <a href="mapping.html">Go back to Home page</a>
  <p>Tamil Nadu is one of the 28 states of India. Its capital is Chennai
  (formerly known as Madras), the largest city.<br> Tamil Nadu is a
  land most known for its monumental ancient Hindu temples and
  classical form of dance Bharata Natyam.<br> Tamil Nadu lies in the
  southernmost part of the Indian Peninsula and is bordered by the
  union territory of Puducherry and the states of Kerala, Karnataka, and
  Andhra Pradesh. It is bounded by the Eastern Ghats on the north, by
  the Nilgiri, the Anamalai Hills, and Kerala on the west, by the Bay of
  Bengal in the east, by the Gulf of Mannar and the Palk Strait on the
  southeast, and by the Indian Ocean on the south.<br>Tamil Nadu is
  the eleventh largest state in India by area and the seventh most
```

populous state in India. It is the second largest state economy in India as of 2012.
 The state ranked 6th among states in India according to the Human Development Index as of 2011.
The state has the highest number (10.56 per cent) of business enterprises and stands second in total employment (9.97 per cent) in India, compared to the population share of about 6 per cent. In the 2013 Raghuram Rajan panel report, Tamil Nadu was ranked as the third most developed state in India based on a "Multidimensional Development Index".

</p>

</body>

</html>

madhyapradesh.html

<html>

<head><title>madhya pradesh</title></head>

<body>

Go back to Home page

<p>Madhya Pradesh (MP) is a state in central India. Its capital is Bhopal, and the largest city is Indore.
Nicknamed the "heart of India" due to its geographical location in India, Madhya Pradesh is the second largest state in the country by area. With over 75 million inhabitants, it is the sixth largest state in India by population. It borders the states of Uttar Pradesh to the northeast, Chhattisgarh to the southeast, Maharashtra to the south, Gujarat to the west, and Rajasthan to the northwest. The area covered by the present-day Madhya Pradesh includes the area of the ancient Avanti mahajanapada, whose capital Ujjain (also known as Avanti) arose as a major city during the second wave of Indian urbanisation in the sixth century BCE.
Subsequently, the region was ruled by the major dynasties of India, including the Mauryans, Satvahanas, Rashtrakutas, the Mughals and the Marathas. By the early 18th century, the region was divided into several small kingdoms which were captured by the British and incorporated into Central Provinces and Berar and the Central India Agency.
 In 1956, this state was reorganised and its parts were combined with the states of Madhya Bharat, Vindhya Pradesh and Bhopal to form the new Madhya Pradesh state with Bhopal as its capital; the Marathi-speaking Vidarbha region was removed and merged with the then Bombay State. This state was the largest in India by area until 2000, when its southeastern Chhattisgarh region was made a separate state.</p>

</body>

</html>

andhra.html

```
<html>
<head>
  <title>andhra pradesh</title>
</head>
<body>
  
  <a href="mapping.html">Go back to Home page</a>
  <p>Andhra Pradesh abbreviated A.P., is one of the 28 states of India,
  situated on the country's southeastern coast. It is India's
  fourth-largest state by area and fifth-largest by population.<br> Its
  capital and largest city is Hyderabad. On 30 July 2013, the Congress
  Working Committee adopted a resolution on the bifurcation of the
  state subject to parliamentary approval. Andhra Pradesh has the
  longest coastline among all the states of India.<b> Two major rivers,
  the Godavari and the Krishna, run across the state.<b. The small
  enclave (30 square kilometres (12 sq mi)) of Yanam, a district of
  Pondicherry, lies in the Godavari delta to the northeast of the state.
  The state comprises three regions: Telangana, Coastal Andhra and
  Rayalaseema. The state's most populous cities are Hyderabad,
  Visakhapatnam, Guntur, Vijayawada, Rajahmundry, Warangal and
  Nellore. The primary official language of Andhra Pradesh is Telugu and
  the co-official language is Urdu. Other languages often spoken in the
  state include Hindi, Marathi, Tamil, Kannada and Oriya.<p>
</body>
</html>
```

kashmir.html

```
<html>
<head>
  <title>Jammu and Kashmir</title>
</head>
<body>
  
  <a href="mapping.html">Go back to Home page</a>
  <p>Jammu and Kashmir is a state of India. It is located mostly in the
  Himalayan mountains and shares a border with the states of Himachal
  Pradesh and Punjab to the south.<br> Jammu and Kashmir has an
  international border with the People's Republic of China in the north
  and east while Line of Control separates it from Pakistani controlled
  territories of Azad Kashmir and Gilgit-Baltistan in the west and
```

northwest respectively.
Formerly a part of the erstwhile Princely State of Kashmir and Jammu, which governed the larger historic region of Kashmir, this territory is disputed among China, India and Pakistan. Pakistan, which claims the territory as disputed,[1] refers to it alternatively as Indian-occupied Kashmir or Indian-held Kashmir, while some international agencies such as the United Nations call it Indian-administered Kashmir.
The regions under the control of Pakistan are referred to as Pakistan-occupied Kashmir or PoK within India, as "Azad" Jammu and Kashmir in Pakistan, and as Pakistan-administered Kashmir or Pakistan-controlled Kashmir generally. Jammu and Kashmir consists of three regions: Jammu, the Kashmir valley and Ladakh.
Srinagar is the summer capital, and Jammu is the winter capital. Ladakh, also known as "Little Tibet", is renowned for its remote mountain beauty and Buddhist culture.</p>

</body>

</html>

OUTPUT

Mapping.html

Click on the state to see for more information.



Click on the tamilnadu area, we get



Tamil Nadu is one of the 28 states of India. Its capital is Chennai (formerly known as Madras), the largest city. Tamil Nadu is a land most known for its renowned ancient Hindu temples and classical dance of South Indian Kuchipudi. Tamil Nadu lies in the southernmost part of the Indian Peninsula and is bordered by the Indian territory of Pondicherry and the states of Kerala, Karnataka, and Andhra Pradesh. It is bounded by the East on the north, by the Bay of Bengal in the east, by the Gulf of Mannar, and the Palk Strait on the southeast, and by the Indian Ocean on the south. Tamil Nadu is the seventh largest state in India by area and the seventh most populous state in India. It is the second largest state economy in India as of 2012. The state ranked 6th among states in India according to the Human Development Index as of 2011. The state has the highest number (10.56 per cent) of business enterprises and stands second in total employment (9.97 per cent) in India, compared to the population share of about 6 per cent. In the 2013 *Pragati* survey panel report, Tamil Nadu was ranked as the third most developed state in India based on development index.

Go back and Click on Kashmir, we get,

[illegible]

Ex.NO: 2(a) CASCADING STYLESHEETS(EXTERNAL)

style.css

```
/* An external stylesheet */
```

a

{

```
text-decoration: none
```

}

i

{

```
color: red;
```

```
font-weight: bold;
```

background-color: blue

}

u

{

margin-left: 2cm

}

.classone

{

```
text-decoration: underline;
```

margin-left: .5cm


```
}
```

ExternalCSS.html

```
<html>
<head>
  <title>Linking External Style Sheets</title>
  <link rel = "stylesheet" type = "text/css" href = "styles.css" />
</head>
<body>
  <h1>Shopping list for <i>Monday</i>:</h1>
  <ul>
    <li>Milk</li>
    <li>Bread
    <ul>
      <li>White bread</li>
      <li>Rye bread</li>
      <li>Whole wheat bread</li>
    </ul>
    </li>
    <li>Rice</li>
    <li>Potatoes</li>
    <li>Pizza <i>with mushrooms</i></li>
  </ul>

  <p><a href = "http://www.food.com">Go to the Grocery
store</a></p>
  <p class = "classone">Nooyi was born in <i>Madras (presently
Chennai)</i>,Tamil Nadu, India. She was educated at Holy Angels
Anglo Indian Higher Secondary School in Madras. </p>
</body>
</html>
```

OUTPUT

Shopping list for **Monday**:

- Milk
- Bread
 - White bread
 - Rye bread
 - Whole wheat bread
- Rice
- Potatoes
- Pizza **with mushrooms**

[Go to the Grocery store](#)

Nooyi was born in **Madras (presently Chennai)**, Tamil Nadu, India. She was educated at Holy Angels Anglo Indian Higher Secondary School in Madras.

Ex.NO:2(b) CASCADING STYLE SHEET(EMBEDDED)

```
<html>
<head>
  <title>Style Sheets</title>
  <!-- this begins the style sheet section -->
  <style type = "text/css">
    i
    {
      background-color: #8000ff;
      color: white
    }
    h1
    {
      font-family: arial, sans-serif ;
      color: blue
    }
    p
    {
      font-size: 14pt
    }
  </style>
</head>
<body>
  <!-- this class attribute applies the .special style -->
  <h1>Indra Krishnamurthy Nooyi.</h1>
  <div style="align:center"> </div>
  <p>Indra Krishnamurthy Nooyi (born 28 October 1955) is an
Indian-American business executive and the current Chairman and
Chief Executive Officer of PepsiCo, the second largest food and
beverage business in the world by net revenue. According to Forbes,
```

she is consistently ranked among World's 100 Most Powerful Women.</p>

<p class = "special">Nooyi was born in <i>Madras (presently Chennai)</i>, Tamil Nadu, India. She was educated at Holy Angels Anglo Indian Higher Secondary School in Madras. She received a Bachelor's degree in Physics, Chemistry and Mathematics from Madras Christian College in 1974 and a Post Graduate Diploma in Management (MBA) from Indian Institute of Management Calcutta in 1976.

Beginning her career in India, Nooyi held product manager positions at Johnson & Johnson and textile firm Metturbearseal. She was admitted to Yale School of Management in 1978 and earned a Master's degree in Public and Private Management. While at Yale, she completed her summer internship with Booz Allen Hamilton. Graduating in 1980, Nooyi joined the Boston Consulting Group (BCG), and then held strategy positions at Motorola and Asea Brown Boveri. </p>

</body>

</html>

Ex.NO 2(C) CASCADING STYLE SHEET(INLINE)

InlineCSS.html

<html>

<head>

<title>Inline Styles</title>

</head>

<body>

<p>This text does not have any style applied to it.</p>

<!-- The style attribute allows you to declare -->

<!-- inline styles. Separate multiple styles -->

<!-- with a semicolon. -->

<p style = "font-size: 20pt">This text has the <i>font-size</i> style applied to it, making it 20pt.</p>

<p style = "font-size: 20pt; color: #0000ff">This text has the <i>font-size</i> and <i>color</i> styles applied to it, making it 20pt. and blue.</p>

</body>

</html>

OUTPUT

This text does not have any style applied to it.

This text has the *font-size* style applied to it, making it 20pt.

This text has the *font-size* and *color* styles applied to it, making it 20pt. and blue.

Ex.NO 3

FORM VALIDATION

```
<html>
<head>
<title>Form Validation</title>
  <script type="text/javascript">
    function validate()
    {
      if (document.myForm.Name.value == "" )
      {
        alert( "Please provide your name!" );
        document.myForm.Name.focus();
        return false;
      }
      if (document.myForm.Email.value == "" )
      {
        alert( "Please provide your Email!" );
        document.myForm.Email.focus() ;
        return false;
      }
      if (document.myForm.Address.value == "" )
      {
        alert( "Please provide your Address!" );
        document.myForm.Address.focus() ;
        return false;
      }
    }
  </script>
</head>
<body>
  <form name="myForm">
    <input type="text" name="Name" />
    <input type="text" name="Email" />
    <input type="text" name="Address" />
    <input type="button" value="Submit" />
  </form>
</body>
</html>
```

```

        if (document.myForm.Country.value == "-1" )
        {
            alert( "Please provide your country!" );
            return false;
        }
        if (document.myForm.Mobile.value == "" || isNaN(
            document.myForm.Mobile.value )
            ||document.myForm.Mobile.value.length != 10 )
        {
            alert ("Provide Your valid Mobile Number");
            document.myForm.Mobile.focus() ;
            return false;
        }
        alert("Registration Successful..Thank you!");
        return true;
    }
</script>
</head>
<body>
    <h1>Welcome Guest...Register With US!!</h1><br><br>
    <form action="FormValidation.html" name="myForm"
        onsubmit="return validate()">
        <table border="0">
            <tr>
                <td>Name</td>
                <td><input type="text" name="Name" size="30" /></td>
            </tr>
            <tr>
                <td>E-Mail</td>
                <td><input type="text" name="EMail" size="30"/></td>
            </tr>
            <tr>
                <td>Address</td>
                <td><textarea rows="4" cols="50"
                    name="Address"></textarea> </td>
            </tr>
            <tr>
                <td>Country</td>
                <td>
                    <select name="Country">
                        <option value="-1" selected>Select</option>
                        <option value="1">USA</option>
                        <option value="2">UK</option>
                        <option value="3">INDIA</option>
                    </select>
                </td>
            </tr>
        </table>
    </form>

```

```

        </select>
      </td>
    </tr>
    <tr>
      <td>Mobile Number</td>
      <td><input type="text" name="Mobile" Size="30"/></td>
    </tr>
    <tr>
      <td>gender</td>
      <td>
        <input type="radio" name="group1" value="Male" checked
        />Male
        <input type="radio" name="group1"
        value="Female">Female
      </td>
    </tr>
    <tr>
      <td align="right"></td>
      <td><input type="submit" value="Register" /></td>
    </tr>
  </table>
</form>
</body>
</html>

```

OUTPUT - FORM DESIGN

Welcome Guest...Register With US!!

Name	<input type="text"/>
E-Mail	<input type="text"/>
Address	<input type="text"/>
Country	<input type="text" value="Select"/>
Mobile Number	<input type="text"/>
gender	<input checked="" type="radio"/> Male <input type="radio"/> Female
	<input type="button" value="Register"/>

OUTPUT WITH JS VALIDATION

Welcome Guest...Register With US!!

Name:

E-Mail:

Address:

Country:

Mobile Number:

gender: ☒ Male ☐ Female

Please provide your name!

Ex.NO:4 INVOKING SERVLET FROM HTML

i) To invoke servlets from HTML forms

Sendform.html

```
<html>
<head>
    <title>The Servlet example </title>
</head>
<body>
    <h1>A simple Web Application For Servlet</h1>
    <form method="POST" action="WelcomeServlet">
        <label>Enter your name </label>
        <input type="text" name="user"/> </br> </br>
        <input type="submit" value="SubmitData"/>
        <input type="reset" value="ResetData"/>
    </form>
</body>
</html>
```

WelcomeServlet.java

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

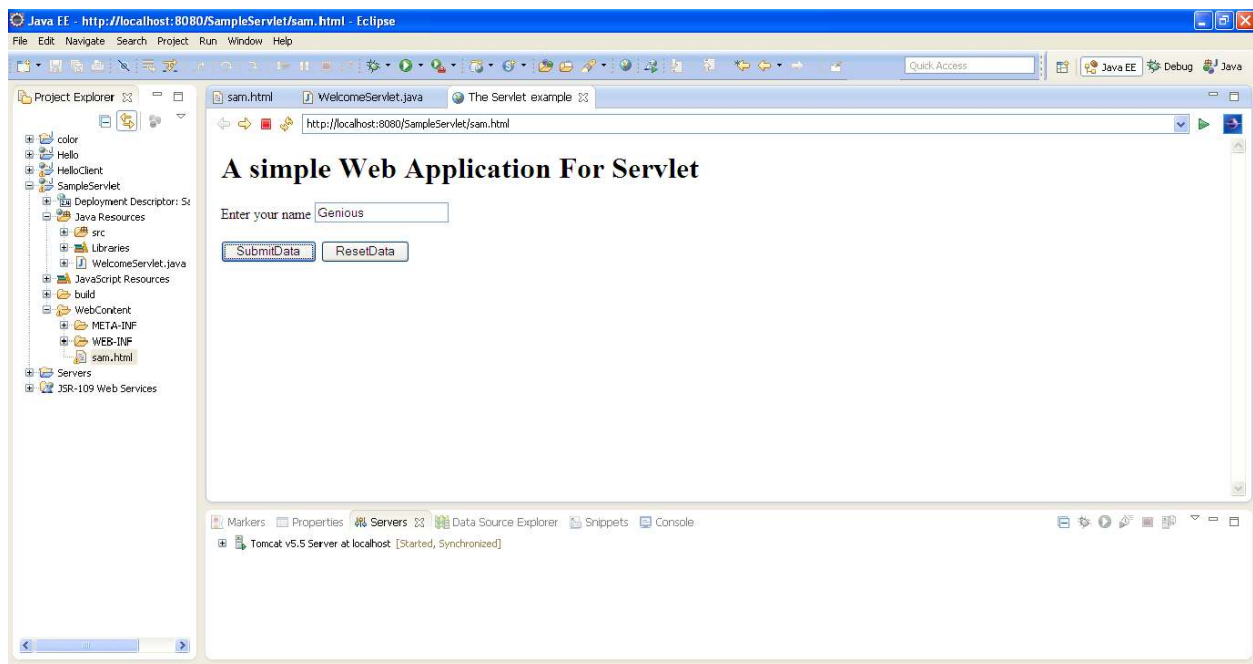


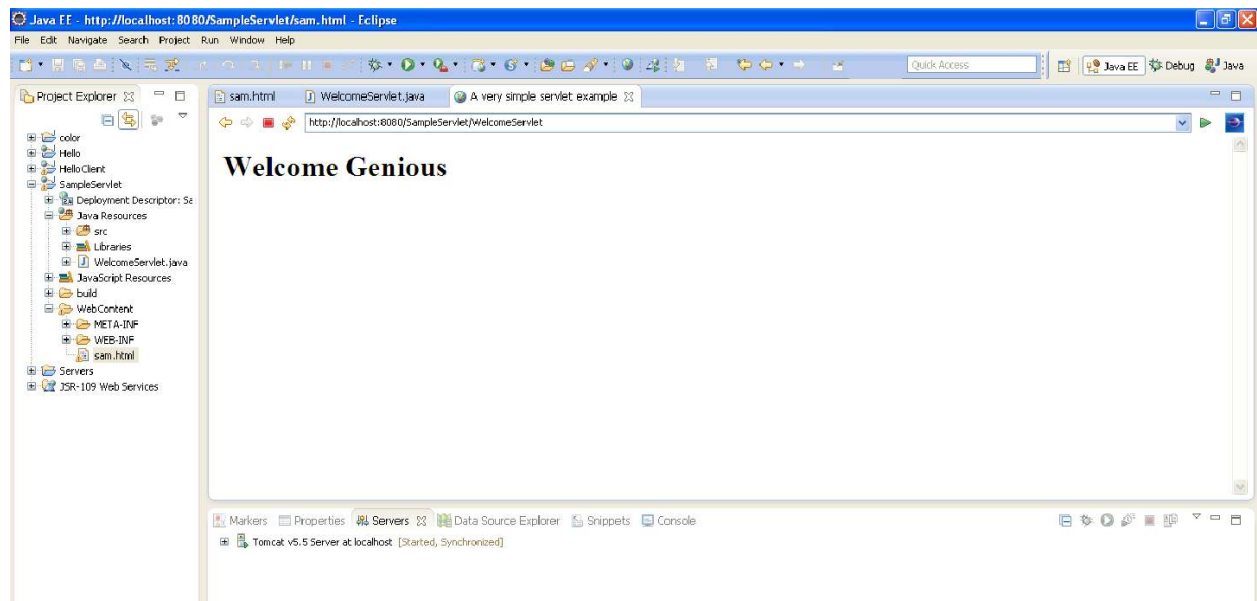
```

public class WelcomeServlet extends HttpServlet
{
    private static final long serialVersionUID = 1L;
    public void init(ServletConfig config) throws ServletException
    {
        super.init(config);
    }
    protected void doPost(HttpServletRequest request,
        HttpServletResponse response) throws ServletException, IOException
    {
        String name = request.getParameter("user");
        String welcomeMessage = "Welcome " + user;
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        out.println("<html>");
        out.println("<head>");
        out.println("<title> A very simple servlet example</title>");
        out.println("</head>");
        out.println("<body>");
        out.println("<h1>" + welcomeMessage + "</h1>");
        out.println("</body>");
        out.println("</html>");
        out.close();
    }
}

```

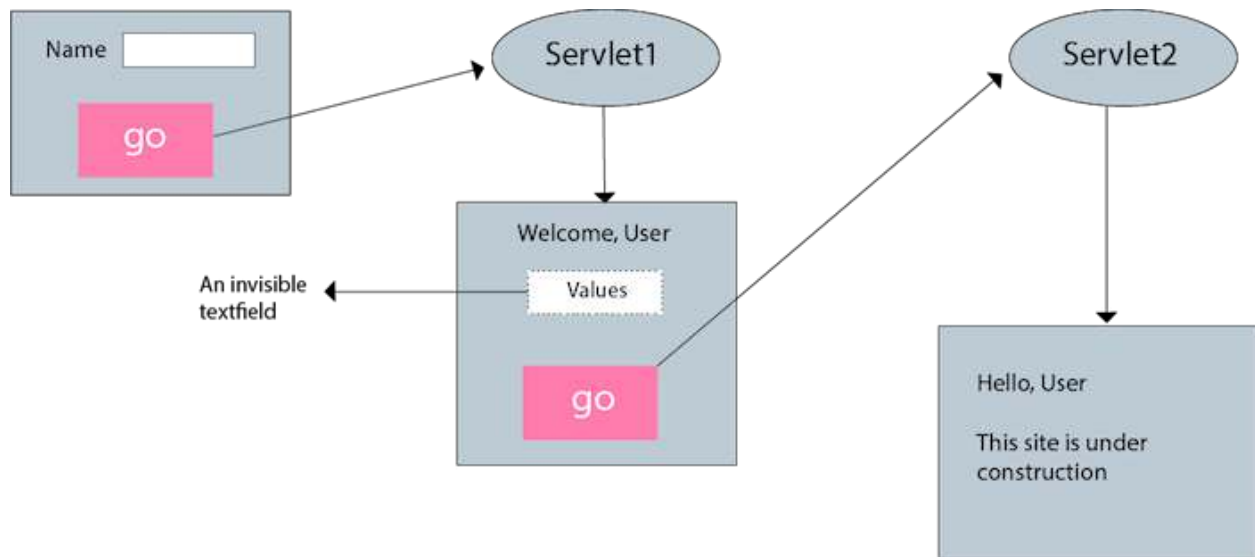
OUTPUT





ii) Session tracking using hidden form fields

In this example, we are storing the name of the user in a hidden textfield and getting that value from another servlet.



index.html

```

1. <form action="servlet1">
2. Name:<input type="text" name="userName"/><br/>
3. <input type="submit" value="go"/>
4. </form>
  
```

FirstServlet.java

```

1. import java.io.*;
2. import javax.servlet.*;
3. import javax.servlet.http.*;
4.
5. public class FirstServlet extends HttpServlet {
6.     public void doGet(HttpServletRequest request, HttpServletResponse response){
7.         try{
8.
9.             response.setContentType("text/html");
10.            PrintWriter out = response.getWriter();
11.
12.            String n=request.getParameter("userName");
13.            out.print("Welcome "+n);
14.
15.            //creating form that have invisible textfield
16.            out.print("<form action='servlet2'>");
  
```

```

17.         out.print("<input type='hidden' name='uname' value='"+n+"'>"
);
18.         out.print("<input type='submit' value='go'>");
19.         out.print("</form>");
20.         out.close();
21.
22.         }catch(Exception e){System.out.println(e);}
23.     }
24.
25. }

```

SecondServlet.java

```

1.  import java.io.*;
2.  import javax.servlet.*;
3.  import javax.servlet.http.*;
4.  public class SecondServlet extends HttpServlet {
5.      public void doGet(HttpServletRequest request, HttpServletResponse r
        esponse)
6.          try
7.          {
8.              response.setContentType("text/html");
9.              PrintWriter out = response.getWriter();
10.             //Getting the value from the hidden field
11.             String n=request.getParameter("uname");
12.             out.print("Hello "+n);
13.
14.             out.close();
15.         }catch(Exception e){System.out.println(e);}
16.     }
17. }

```

web.xml

```

1.  <web-app>
2.
3.  <servlet>
4.  <servlet-name>s1</servlet-name>
5.  <servlet-class>FirstServlet</servlet-class>

```

```

6.    </servlet>
7.
8.    <servlet-mapping>
9.    <servlet-name>s1</servlet-name>
10.   <url-pattern>/servlet1</url-pattern>
11.   </servlet-mapping>
12.
13.   <servlet>
14.   <servlet-name>s2</servlet-name>
15.   <servlet-class>SecondServlet</servlet-class>
16.   </servlet>
17.
18.   <servlet-mapping>
19.   <servlet-name>s2</servlet-name>
20.   <url-pattern>/servlet2</url-pattern>
21.   </servlet-mapping>
22.
23. </web-app>

```

ii) Session tracking for a hit count

The aim of this code is, in a single session, the user visits the site (**HitCount servlet**) by clicking the **submit** button number of times. Everytime, the existing hit count number is incremented and the value is stored with session object.

HttpSession Example

Following is the client file: HitCount.html

```

1 <body>
2 <h3>Hit Count Example with HttpSession</h3>
3
4 <form method="get" action="http://localhost:8888/india/HC">
5
6   Click for Hit Count <input type="submit" value="GET HITS">
7
8 </form>
9 </body>

```

HitCount servlet web.xml entry

```

1 <servlet>
2 <servlet-name>snrao1</servlet-name>
3 <servlet-class>HitCount</servlet-class>
4 </servlet>
5

```

```

6 <servlet-mapping>
7   <servlet-name>snrao1</servlet-name>
8   <url-pattern>/HC</url-pattern>
9 </servlet-mapping>

```

Java

```

1 import java.io.*;
2 import javax.servlet.*;
3 import javax.servlet.http.*;
4 import java.util.*;
5
6 public class HitCount extends HttpServlet
7 {
8   public void service(HttpServletRequest req, HttpServletResponse res)
9     throws ServletException, IOException
10  {
11    res.setContentType("text/html") ;
12    PrintWriter out = res.getWriter( );
13    HttpSession session = req.getSession();    // this is how to get a
14    session object
15    Integer hitNumber = (Integer) session.getAttribute("rama"); //
16    retrieving value from session object
17
18    if(hitNumber == null)
19    {
20      hitNumber = new Integer(1);
21    }
22    else
23    {
24      hitNumber = new Integer(hitNumber.intValue()+1) ;
25    }
26
27    session.setAttribute("rama", hitNumber);    // storing the value
28    with session object
29
30    out.println("Your Session ID: " + session.getId()); // never changes
31    in the whole session
32
33    out.println("<br>Session Creation Time: " + new
34    Date(session.getCreationTime()));    // never changes in
35    the whole session
36
37
38
39
40

```

```

31 out.println("<br>Time of Last Access: " + new
32 Date(session.getLastAccessedTime()));           // changes for
    every hit
33
34 out.println("<br>Latest Hit Count: " + hitNumber);    // increments
    by 1 for every hit
35 }
36 }
HttpSession session = req.getSession();

```

The `getSession()` method of `HttpServletRequest` returns an object of `HttpSession`.

```
Integer hitNumber = (Integer) session.getAttribute("rama");
```

To store the values of the session, the values are binded with the session object with **`setAttribute()`** and retrieved later with **`getAttribute()`**, defined in **`HttpSession`** interface. When the first time the user calls the **`HitCount`** servlet, the **`getAttribute("rama")`** returns **`null`** as no value on the key **`rama`** was set to the session object earlier (as first time the servlet is called).

```
session.setAttribute("rama", hitNumber);
```

The value of `hitNumber` is attached to the session object with key `rama` using `setAttribute()` method. The parameters of `setAttribute()` are – the first parameter is always a string and the second one should be an object of any Java class.

```

if(hitNumber == null)
{
hitNumber = new Integer(1);
}

```

In the first visit, the `hitNumber` is null and thereby if condition is executed. Here, the `hitNumber` is given with the value 1.

In the subsequent visits, the `hitNumber` is not null as with `setAttribute()`, the `hitNumber` is set with key `rama` and thereby else condition is executed. The if condition is executed only once.

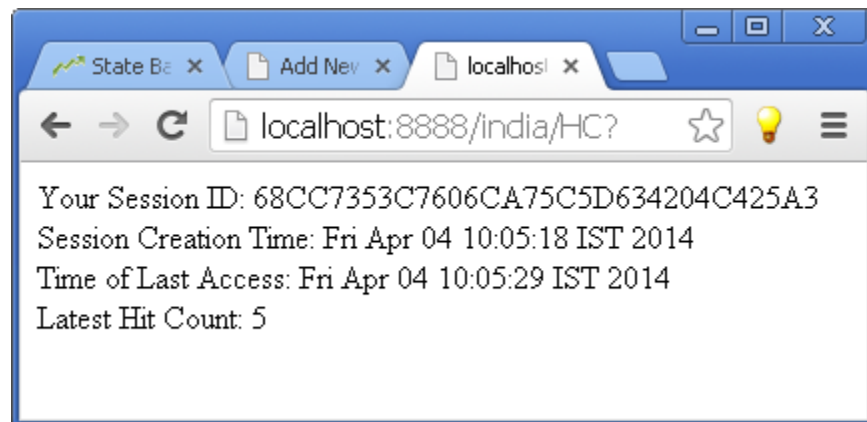
```

else
{
hitNumber = new Integer(hitNumber.intValue()+1) ;
}

```

getId() returns the session ID, getCreationTime() returns the session creation time and getLastAccessedTime() returns the latest accessed time. These methods are more explained in HTTP Session, HttpSession Methods.

Output screen on HttpSession Example: HTML file with Submit button "GET HITS"



Output screenshot on HttpSession Example when user clicked 5 times

At any time the session can be closed with session.invalidate() method. The invalidate() method invalidates the current session and when invalidated, the session object is destroyed (and thereby the data attached with the session is also lost).

Let us see how to call invalidate(). Suppose think, after 100000 hits, you would like to start again the session count.

```
if(hitNumber == 100000)
{
    session.invalidate();
}
```

Now the session object is garbage collected and no more session. When you call again, a fresh session object is created with new ID and new data.

Ex.NO 5

ONLINE EXAMINATION

(THREE TIER APPLICATION USING SERVELETS)

TestQuestionsEntry.jsp

```
<%@page language="java" import="java.sql.*" %>
<%
if(request.getParameter("submit")!=null)
{
    Connection con = null;
    try
    {
        con =
        DriverManager.getConnection("jdbc:oracle:thin:@172.18.1.54:1
521:XE", "csea01", "123");
    try
    {
        Statement st = con.createStatement();
        String quest = request.getParameter("quest").toString();
        String QA = request.getParameter("QA").toString();
        String QB = request.getParameter("QB").toString();
        String QC = request.getParameter("QC").toString();
        String QD = request.getParameter("QD").toString();
        String correctAns =
        request.getParameter("correctAns").toString();
        String qry = "insert into
        questions(quest,QA,QB,QC,QD,correctAns)
        values('"+quest+"','"+QA+"','"+QB+"','"+QC+"','"+QD+"','"+cor
        rectAns+"')";
        int val = st.executeUpdate(qry);
        con.close();
    }
    catch(SQLException ex)
    {
        System.out.println("SQL satatment not found");
    }
}
}
catch(Exception e)
{
    e.printStackTrace();
}
}
%>
```

```

<html>
  <title>Question Entry Form</title>
<head>
  <script>
    function validateForm(theForm)
    {
      if(theForm.quest.value=="")
      {
        alert("Please enter Question.");
        theForm.quest.focus();
        return false;
      }
      return true;
    }
  </script>
</head>
<body>
  <br>
  <br>
  <center>
    <table border="1" width="450px" bgcolor="pink" cellspacing="0"
    cellpadding="0">
      <tr>
        <td width="100%">
          <form method="POST" action="" onsubmit="return
          validateForm(this);">
            <h2 align="center"><font color="red">Online Test Application -
            Questions Entry</font></h2>
            <table border="0" width="400px" cellspacing="2" cellpadding="4">
              <tr>
                <td width="50%"><b>Enter Question:</b></td>
                <td width="50%"><input type="text" name="quest" size="40"/>
              </td>
            </tr>
            <tr>
                <td width="50%"><b>Enter Answer(A.):</b></td>
                <td width="50%"><input type="text" name="QA" size="40"/>
            </td>
            </tr>
            <tr>
                <td width="50%"><b>Enter Answer(B.):</b></td>
                <td width="50%"><input type="text" name="QB" size="40"/>
            </td>
            </tr>
          </table>
        </td>
      </tr>
    </table>
  </center>

```

```

        <tr>
        <td width="50%"><b>Enter Answer(C.):</b></td>
        <td width="50%"><input type="text" name="QC" size="40"/> </td>
        </tr>
        <tr>
        <td width="50%"><b>Enter Answer(D.):</b></td>
        <td width="50%"><input type="text" name="QD" size="40"/> </td>
        </tr>
        <tr>
        <td width="50%"><b>Correct Answer:</b></td>
        <td width="50%"><input type="text" name="correctAns"
        size="10"/> </td>
        </tr>
    </table>
    <center>
    <p>
    <input type="submit" value="Submit" name="submit">
    </p>
    </center>
    </form>
    </td>
    </tr>
    </table>
</center>
</body>
</html>

```

OnlineTest.jsp

```

<%@ page import="java.sql.*" %>
    <%@page import="java.util.*"%>

<%@page import="java.lang.String.*"%>
<html>
<head>
    <title>Online Test</title>
    <script type="text/javascript">
    function validation(Form_obj)
    {
    if(Form_obj.rollno.value.length==0)
    {
    alert("Please,fill your Roll No");
    Form_obj.rollno.focus();
    return false;
    }
    }
    }

```

```

        if(Form_obj.regno.value.length==0)
        {
            alert("Please,fill your Register No");
            Form_obj.regno.focus();
            return false;
        }
        if(Form_obj.name.value.length==0)
        {
            alert("Please,fill up the Name");
            Form_obj.Name.focus();
            return false;
        }
        return true;
    }
</script>
</head>
<body>
    <%
        Connection conn = null;
        Statement st = null;

        ResultSet rs = null;
        int n=0;
        try
        {
            conn =
            DriverManager.getConnection("jdbc:oracle:thin:@172.18.1.54:1521:X
            E", "csea01", "123");
            st = conn.createStatement();
            rs = st.executeQuery("select * from questions");
        }
        %>
        <h2 align="center"><font color="red">Online Test</font></h2>
        <form method="post" action="AnsDiscussion.jsp" name="entry"
        onSubmit="return validation(this)">
        <table border="0">
        <tr>
        <td><h3>Roll Number : </h3></td>
        <td><input type="text" name="rollno" size="10"></td>
        <td><h3>Register Number : </h3></td>
        <td><input type="text" name="regno" size="10"></td>
        </tr>
        <tr>
        <td><h3>Name : </h3></td>
        <td><input type="text" name="name" size="50"></td>
    
```

```

</tr>
</table>
<br>
<b>Check the Correct Answers:</b>
    <table border="0" bgcolor="pink">

    <%
    while(rs.next())
    {
    %>
    <tr>
    <td><%=rs.getString("quest")%></td>
    <td><input type="radio" name="radio<%=n%>" value="<%=
rs.getString("QA") %>"></td>
    <td><%=rs.getString("QA")%></td>
    <td><input type="radio" name="radio<%=n%>" value="<%=
rs.getString("QB") %>"></td>
    <td><%=rs.getString("QB")%></td>
    <td><input type="radio" name="radio<%=n%>" value="<%=
rs.getString("QC") %>"></td>
    <td><%=rs.getString("QC")%></td>
    <td><input type="radio" name="radio<%=n%>" value="<%=
rs.getString("QD") %>"></td>
    <td><%=rs.getString("QD")%></td>
    <td><input type="hidden" name="ans<%=n%>" value="<%=
rs.getString("correctAns") %>"></td>
    </tr>
    <%
    n++;
    }
    %>
    </table>
    <br>
    <input type="hidden" name="count" value="<%= n %>">
    <input type="submit" value="Submit" name="submit">
    </form>
    <%
    }
    catch (Exception ex)
    {
    ex.printStackTrace();
    }
    %>
</body>

```

</html>

AnsDiscussion.jsp

```
<%@ page language="java" contentType="text/html;
charset=ISO-8859-1"
pageEncoding="ISO-8859-1"%>
<%@ page import="java.sql.*" %>
<%@page import="java.util.*"%>
<html>
<head><title>Online Test</title></head>
<body bgcolor="#F5F9F1">
    <center>
        <h3>Discussions</h3>
        <br><br>
        <table>
            <%
                Connection conn = null;
                Statement st = null;
                ResultSet rs = null;
                String query;
                String rollno = request.getParameter("rollno");
                String regno = request.getParameter("regno");
                String Name = request.getParameter("name");
                int n=0,score=0;
                n=Integer.parseInt(request.getParameter("count"));
                String selected[]= new String[n];
                String correctans[]= new String[n];
                if(request.getParameter("ans"+0)!=null)
                {
                    %>

                    <tr><td><b>Your Answers</b></td></tr>
                    <%
                        for(int i=0;i<n;i++)
                        {
                            selected[i]=request.getParameter("radio"+i);
                            %>
                            <tr><td><%= (i+1)%>. <%=selected[i]%></td></tr>
                            <%
                                }
                                %>
                            <tr><td><b>Correct Answers</b></td></tr>
                            <%
                                for(int j=0;j<n;j++)
```

```

{
correctans[j]=request.getParameter("ans"+j);
}%>
<tr><td><%= (j+1)%>. <%=correctans[j]%></td></tr>
<%
}
for(int k=0;k<n;k++)
{
if ((selected[k]).equals(correctans[k]))
score=score+1;
}
}
try
{
conn =
DriverManager.getConnection("jdbc:oracle:thin:@172.18.1.54:1521:X
E", "csea01", "123");
st = conn.createStatement();
        query = "INSERT INTO studentjsp (" +
        "rollno,regno,Name,score" + ") VALUES (" + rollno + "," +
        "regno + "," + Name + "," + score + ")";

st.executeUpdate(query);
}
catch (Exception ex)
{
ex.printStackTrace();
}
}%>
<tr><td>
<form method="post" action="finalscore.jsp" name="entry">
        <input type="submit" value="Score" name="submit">
        <input type="hidden" name="regno" value="<%= regno %>">
</form>
</td></tr>
</table>
</center>
</body>
</html>

```

Finalscore.jsp

```

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

```

```

        <%@ page import="java.sql.*" %>
<html>
<head>
    <title>Online Test</title>
</head>
<body bgcolor="#F5F9F1">
    <%
        Connection conn = null;
        Statement st = null;
        ResultSet rs = null;
        String regno=request.getParameter("regno");
        String query;
        try
        {
            conn =
            DriverManager.getConnection("jdbc:oracle:thin:@172.18.1.54:1
            521:XE", "csea01", "123");
            st = conn.createStatement();
            query = "SELECT * FROM studentjsp WHERE
            regno='"+regno+"'";
            System.out.println(query);
            rs = st.executeQuery(query);
            %>
            <center>
            <h2>Student Mark sheet</h2>
            <h3>Mailam Engineering College</h3>
            <table border="1" cellspacing="0" cellpadding="0">
            <tr><td><b>Roll No</b></td><td><b>Register
            No</b></td><td><b>Name</b></td><td><b>Marks</b></td></tr>
            <%while(rs.next())
            {
            %>
            <tr>
            <td><%=rs.getString("rollno")%></td>
            <td><%=rs.getString("regno")%></td>
            <td><%=rs.getString("Name")%></td>
            <td><%=rs.getString("score")%></td>
            </tr>
            <%
            }
            %>
            </table>

```



```
        </center>
    <%
    }
    catch (Exception ex)
    {
    ex.printStackTrace();
    }
    %>
</body>
</html>
```

OUTPUT

Online Test Application - Questions Entry

Enter Question:

Enter Answer(A.):

Enter Answer(B.):

Enter Answer(C.):

Enter Answer(D.):

Correct Answer:

Online Test

Roll Number :

Register Number :

Name :

Check the Correct Answers:

What does HTML stand for? ☒ Hyper Text Markup Language ☐ Hyperlinks and Text Markup Language ☐ Home Tool Markup Language ☐ Hyper Transform Markup Language
Who is making the Web standards? ☐ Google ☒ The World Wide Web Consortium ☐ Microsoft ☐ Mozilla
What does CSS stand for? ☒ Cascading Style Sheets ☐ Creative Style Sheets ☐ Colorful Style Sheets ☐ Computer Style Sheets

Discussions

Your Answers

1. Hyper Text Markup Language
2. The World Wide Web Consortium
3. Cascading Style Sheets

Correct Answers

1. Hyper Text Markup Language
2. The World Wide Web Consortium
3. Cascading Style Sheets

Ex.NO 6

DYNAMIC WEBPAGES AND XML

AIM:

Install TOMCAT web server. Convert the static webpages of assignments 2 into dynamic webpages 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.

PROCEDURE:

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

Home page:

Main.html:

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

</html>

Login page:

Login.html:

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

Registration page:

Reg.html:

```
<html>
<body><br /><br />
<form name="myform" method="post" action="reg">
<table align="center" >
<tr>
<td>NAME</td>
<td>:<input type="text" name="name" /></td>
</tr>
<tr>
<td>ADDRESS</td>
<td>:<input type="text" name="addr" /></td>
</tr>
<tr>
<td>CONTACT NUMBER</td>
<td>:<input type="text" name="phno" /></td>
</tr>
<tr>
<td>LOGINID</td>
<td>:<input type="text" name="id" /></td>
```

```

</tr>
<tr>
<td>PASSWORD</td>
<td>:<input type="password" name="pwd" /></td>
</tr>
</table>
<br /><br />
<div align="center">
<input type="submit" value="ok" onclick="validate()" />
&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;<input type="reset" value="clear"
/>
</div>
</form>
</body>
</html>

```

User profile page:

Profile.html:

```

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

```

Books catalog page:

Catalog.html:

```

<html>
<body><br /><br /><br />
<form method="post" action="catalog">
<div align="center"><pre>
BOOK TITLE :<input type="text" name="title" /><br />
</pre><br /><br />
</div>
<br /><br />
<div align="center">

```



```

PrintWriter pw=resp.getWriter();
pw.println("<html><body>");
String id=req.getParameter("id");
String pwd=req.getParameter("pwd");
try
{
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection
con=DriverManager.getConnection("jdbc:odbc:orcl","scott","tiger
");
Statement stmt=con.createStatement();
String sqlstmt="select id,pwd from login";
ResultSet rs=stmt.executeQuery(sqlstmt);
int flag=0;
while(rs.next())
{
if(id.equals(rs.getString(1))&&pwd.equals(rs.getString(2)))
{
flag=1;
}
}
if(flag==0)
{
pw.println("<br><br>SORRY INVALID ID TRY AGAIN
ID<br><br>");
pw.println("<a href=\"login.html\">press LOGIN to
RETRY</a>");
}
else
{
pw.println("<br><br>VALID LOGIN ID<br><br>"); 58
pw.println("<h3><ul>");
pw.println("<li><a
href=\"profile.html\"><fontcolor=\"black\">USER
PROFILE</font>
</a></li><br><br>");
pw.println("<li><a
href=\"catalog.html\"><fontcolor=\"black\">BOOKS
CATALOG</font></a></li><br><br>");
pw.println("<li><a
href=\"order.html\"><fontcolor=\"black\">ORDER
CONFIRMATION</font>
</a></li></ul><br><br>");
}
}

```

```

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

```

Registration servlet:

Reg.java :

```

import java.sql.*;
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class reg extends HttpServlet
{
public void service(HttpServletRequest req,HttpServletResponse resp)
throws ServletException,IOException
{
PrintWriter pw=resp.getWriter();
resp.setContentType("text/html");
pw.println("<html><body>");
String name=req.getParameter("name");
String addr=req.getParameter("addr");
String phno=req.getParameter("phno");
String id1=req.getParameter("id");
String pwd1=req.getParameter("pwd");
int no=Integer.parseInt(phno);
try
{
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection
con=DriverManager.getConnection("jdbc:odbc:orcl","scott","tiger
");
Statement stmt=con.createStatement();
String sqlstmt="select id,pwd from login";
ResultSet rs=stmt.executeQuery(sqlstmt);
int flag=0;
while(rs.next())
{
if(id1.equals(rs.getString(1))&&pwd1.equals(rs.getString(2)))
{
flag=1;
}
}
}
}

```



```

}
if(flag==1)
{
pw.println("<br><br>SORRY INVALID ID ALREADY
EXITS TRY AGAIN WITH NEW ID<br><br>");
pw.println("<a href=\"reg.html\">press REGISTER to
RETRY</a>");
}
else
{
Statement stmt1=con.createStatement();
stmt1.executeUpdate("insert into login
values(\""+name+"\",\""+addr+"\",\""+no+"\",\""+id1+"\",\""+pwd1+"")
;");
pw.println("<br><br>YOUR DETAILS ARE
ENTERED<br><br>");
pw.println("<a href=\"login.html\">press LOGIN to
login</a>");
}
pw.println("</body></html>");
}
catch(Exception e)
{
resp.sendError(500,e.toString());
}
}
}
}

```

Profile servlet:

Profile.java:

```

import java.sql.*;
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class profile extends HttpServlet
{
public void service(HttpServletRequest req,HttpServletResponse resp)
throws ServletException,IOException
{
PrintWriter pw=resp.getWriter();
pw.println("<html><body>");
String id=req.getParameter("id");
try
{

```

```

Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection
con=DriverManager.getConnection("jdbc:odbc: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("<br><br>SORRY INVALID ID TRY AGAIN
ID<br><br>");
pw.println("<a href=\"profile.html\">press HERE to
RETRY</a>");
}
pw.println("</body></html>");
}
catch(Exception e)
{
resp.sendError(500,e.toString());
}
}
}

```

Catalog servlet:

Catalog.java:

```

import java.sql.*;
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class catalog extends HttpServlet
{
public void service(HttpServletRequest req,HttpServletResponse resp)

```

```

throws ServletException,IOException
{
    PrintWriter pw=resp.getWriter();
    pw.println("<html><body>");
    String title=req.getParameter("title");
    try
    {
        Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
        Connection
        con=DriverManager.getConnection("jdbc:odbc: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())
        {
            pw.println("<div align='"+center'">");
            pw.println("TITLE:"+rs.getString(1)+"<br>");
            pw.println("AUTHOR :"+rs.getString(2)+"<br>"); pw.println("VERSION
            :"+rs.getString(3)+"<br>");
            pw.println("PUBLISHER :"+rs.getString(4)+"<br>");
            pw.println("COST:"+rs.getString(5)+"<br>");
            pw.println("</div>");
            flag=1;
        }
        if(flag==0)
        {
            pw.println("<br><br>SORRY INVALID TITLE TRY
            AGAIN <br><br>");
            pw.println("<a href='"+catalog.html'">press HERE to
            RETRY</a>");
        }
        pw.println("</body></html>");
    }
    catch(Exception e)
    {
        resp.sendError(500,e.toString());
    }
}
}
}

```

Order servlet:

Order.java:

```
import java.sql.*;
```

```

import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class order extends HttpServlet
{
    public void service(HttpServletRequest req,HttpServletResponse resp)
    throws ServletException,IOException
    {
        int count;
        PrintWriter pw=resp.getWriter();
        pw.println("<html><body>");
        String id=req.getParameter("id");
        String pwd=req.getParameter("pwd");
        String title=req.getParameter("title");
        String count1=req.getParameter("no");
        String date=req.getParameter("date");
        String cno=req.getParameter("cno");
        try
        {
            count=Integer.parseInt(count1);
            Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
            Connection
            con=DriverManager.getConnection("jdbc:odbc:orcl","scott","tiger
            ");
            Statement stmt=con.createStatement();
            String sqlstmt="select id,pwd 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("<br><br>SORRY INVALID ID TRY AGAIN
                ID<br><br>");
                pw.println("<a href= \" order.html \" >press HERE to RETRY</a>");
            }
            else
            {
                Statement stmt2=con.createStatement();

```

```

String s="select cost from book where title='"+title+"'"; ResultSet
rs1=stmt2.executeQuery(s);
int flag1=0;
while(rs1.next())
{
flag1=1;
x=Integer.parseInt(rs1.getString(1));
amount=count*x;
pw.println("<br><br>AMOUNT
:"+amount+"<br><br><br><br>");
Statement stmt1=con.createStatement();
stmt1.executeUpdate("insert into details
values('"+id+"','"+title+"','"+amount+"','"+cno+"')");
pw.println("<br>YOUR ORDER has taken<br>");
}
if(flag1==0)
{
pw.println("<br><br><br>SORRY INVALID ID
TRY AGAIN ID<br><br>");
pw.println("<a href='"+order.html+"'>press HERE to
RETRY</a>");
}
}
pw.println("</body></html>");
con.close();
}
catch(Exception e)
{
resp.sendError(500,e.toString());
}
}
}
}

```

Web.xml:

```

<?xml version="1.0"?>
<web-app >
<servlet>
<servlet-name>login</servlet-name>
<servlet-class>login</servlet-class>
</servlet>
<servlet>
<servlet-name>reg</servlet-name>
<servlet-class>reg</servlet-class>
</servlet>
</web-app>

```

```
<servlet-name>profile</servlet-name>
<servlet-class>profile</servlet-class>
</servlet>
<servlet>
<servlet-name>order</servlet-name>
<servlet-class>order</servlet-class>
</servlet>
<servlet>
<servlet-name>catalog</servlet-name>
<servlet-class>catalog</servlet-class>
</servlet>
<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>
<servlet-mapping>
<servlet-name>profile</servlet-name>
<url-pattern>/profile</url-pattern>
</servlet-mapping>
<servlet-mapping>
<servlet-name>order</servlet-name>
<url-pattern>/order</url-pattern>
</servlet-mapping>
<servlet-mapping>
<servlet-name>catalog</servlet-name>
<url-pattern>/catalog</url-pattern>
</servlet-mapping>
<welcome-file-list>
<welcome-file>main.html</welcome-file> </welcome-file-list>
</web-app>
```

Ex.NO 7

DYNAMIC WEBPAGES USING JSP

AIM:

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 and books information. The books catalogue should be dynamically loaded from the database. Follow the MVC architecture while doing the website.

PROCEDURE:

- 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>

Home page:

Main.html:

```
<html>
<body>
<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="login.html">LOGIN</a>
<a href="reg.html">REGISTRATION</a></div></pre>
</body></html>
```

Login page:

Login.html:

```
<html>
```


Order.html:

```
<html>  
<body><br /><br />  
<form method="post" action="order.jsp">  
<div align="center"><pre>  
ID  
:<input type="text" name="id" /><br />  
PASSWORD  
:<input type="password" name="pwd" /><br/> TITLE  
:<input type="text" name="title" /><br /> NO. OF BOOKS :<input  
type="text" name="no" /><br />  
DATE  
:<input type="text" name="date" /><br />  
CREDIT CARD NUMBER :<input type="password" name="cno" /><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;&nbsp;<input type="reset" value="clear"  
name="button2"/>  
</div>  
</form>  
</body>  
</html>
```

Login JSP:

Login.jsp:

```
<%@page import="java.sql.*"%>
<%@page import="java.io.*"%>
<% out.println("<html><body>");
String id=request.getParameter("id");
String pwd=request.getParameter("pwd");
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection
con=DriverManager.getConnection("jdbc:odbc:orcl","scott","tiger");
Statement
stmt=con.createStatement();
String sqlstmt="select id,pwd from login";
ResultSet rs=stmt.executeQuery(sqlstmt);
int flag=0;
while(rs.next())
{
if(id.equals(rs.getString(1))&&pwd.equals(rs.getString(2)))
```

```

{
flag=1;
}
}
if(flag==0)
{
out.println("<br><br>SORRY INVALID ID TRY AGAIN
ID<br><br>");
out.println("<a href=\"login.html\">press LOGIN to
RETRY</a>");
}
else
{
out.println("<br><br>VALID LOGIN ID<br><br>");
out.println("<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></ul><br><br>");
}
out.println("</body></html>");
con.close();
%>

```

Registration JSP:

Reg.jsp :

```

<%@page import="java.sql.*"%>
<%@page import="java.io.*"%>
<% response.setContentType("text/html");
out.println("<html><body>");
String name=request.getParameter("name");
String addr=request.getParameter("addr");
String phno=request.getParameter("phno");

```

```

String id1=request.getParameter("id");
String pwd1=request.getParameter("pwd");
int no=Integer.parseInt(phno);
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection
con=DriverManager.getConnection("jdbc:odbc:orcl","scott","tiger");
Statement
stmt=con.createStatement();
String sqlstmt="select id,pwd from login";
ResultSet rs=stmt.executeQuery(sqlstmt);
int flag=0;
while(rs.next())
{ if(id1.equals(rs.getString(1))&&pwd1.equals(rs.getString(2)))
{
flag=1;
}
}
if(flag==1)
{ out.println("<br><br>SORRY INVALID ID ALREADY
EXITS TRY AGAIN WITH NEW ID<br><br>");
out.println("<a href=\"reg.html\">press REGISTER to
RETRY</a>");
}
else
{ Statement stmt1=con.createStatement();
stmt1.executeUpdate("insert into login
values('"+name+"','"+addr+"','"+no+"','"+id1+"','"+pwd1+"');");
out.println("<br><br>YOUR DETAILS
ARE
ENTERED<br><br>");
out.println("<a href=\"login.html\">press LOGIN to
login</a>");
}
out.println("</body></html>");
con.close();
%>

```

Profile JSP:

Profile.jsp:

```

<%@page import="java.sql.*"%>
<%@page import="java.io.*"%>
<% out.println("<html><body>");
String id=request.getParameter("id");
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection

```

```

con=DriverManager.getConnection("jdbc:odbc:orcl","scott","tiger");
Statement
stmt=con.createStatement();
String sqlstmt="select * from login where id="+id+""; ResultSet
rs=stmt.executeQuery(sqlstmt);
int flag=0;
out.println("<br><br><br>");
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("<br><br>SORRY INVALID ID TRY AGAIN
ID<br><br>");
out.println("<a href=\"profile.html\">press HERE to
RETRY</a>");
}
out.println("</body></html>");
con.close(); %>

```

Catalog JSP:

Catalog.jsp:

```

<%@page import="java.sql.*"%>
<%@page import="java.io.*"%>
<% out.println("<html><body>");
String title=request.getParameter("title");
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection
con=DriverManager.getConnection("jdbc:odbc: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("<br><br>SORRY INVALID TITLE TRY
AGAIN <br><br>");
out.println("<a href=\"catalog.html\">press HERE to
RETRY</a>");
}
out.println("</body></html>");
con.close();
%>

```

Order servlet:

Order.java:

```

<%@page import="java.sql.*"%>
<%@page import="java.io.*"%>
<% int count;
out.println("<html><body>");
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");
count=Integer.parseInt(count1);
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection
con=DriverManager.getConnection("jdbc:odbc:orcl","scott","tiger");
Statement
stmt=con.createStatement();
String sqlstmt="select id,pwd 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("<br><br>SORRY INVALID ID TRY AGAIN
ID<br><br>");
out.println("<a href= \"order.html \" >press HERE to RETRY</a>");
}
else
{
Statement stmt2=con.createStatement();
String s="select cost from book where title='"+title+"'"; ResultSet
rs1=stmt2.executeQuery(s);
int flag1=0;
while(rs1.next())
{
flag1=1;
x=Integer.parseInt(rs1.getString(1));
amount=count*x;
out.println("<br><br>AMOUNT
:"+amount+"<br><br><br><br>");
Statement stmt1=con.createStatement();
stmt1.executeUpdate("insert into details
values('"+id+"','"+title+"','"+amount+"','"+cno+"')");
out.println("<br>YOUR ORDER has taken<br>");
}
if(flag1==0)
{
out.println("<br><br><br>SORRY INVALID ID
TRY AGAIN ID<br><br>");
out.println("<a href=\"order.html\">press HERE to
RETRY</a>");
}
}
out.println("</body></html>");
con.close();
%>

```

Ex.NO 8

XML DOCUMENT TO STORE INFORMATION OF 10 USERS

AIM:

Create and Save an XML document at the server, which contains 10 users information. Write program, which takes user ID as input and returns the user details by taking the user information from XML Document.

Procedure:

Login Page:

Std.html:

```
<html>
<head>
<script>
function LoadXmlDoc(dname)
{
xmldoc=new ActiveXObject("Microsoft.XMLDOM");
xmldoc.async="false";
xmldoc.load(dname);
return xmldoc;
}
function validate()
{
var i,k,j=0;
xmldoc=LoadXmlDoc("student.xml");
var v1=myform.n2.value;
if(v1.length==0)
window.alert("enter the roll no.");
else
{
v1=parseInt(v1);
arr=xmldoc.getElementsByTagName("students");
for(i=0;i<arr.length;i++)
{
var
txt=xmldoc.getElementsByTagName("rollno")[i].childNodes[0].nodeValue;
if(txt==v1)
{k=i;
j=1;
}
}
```



```

}
if(j==1)
{
nam=xmlDoc.getElementsByTagName("name")[k].childNodes[0].nodeValue;
rol=xmlDoc.getElementsByTagName("rollno")[k].childNodes[0].nodeValue;
per=xmlDoc.getElementsByTagName("percentage")[k].childNodes[0].nodeValue;
document.write("<body bgcolor='pink'>");
document.write("<table border=1 align='center'><tr><th colspan='2'>USER DETAILS</th></tr>");
document.write("<tr><th>Name::</th><td>"+nam+"</td></tr>");
document.write("<tr><th>RollNumber::</th><td>"+rol+"</td></tr>");
document.write("<tr><th>Percentage::</th><td>"+per+"</td></tr>"); document.write("</table></body>");
}
else
window.alert("roll number not found");
}
}
</script>
</head>
<body bgcolor="pink" text="red">
<form name="myform">
<table align="center">
<tr><td><B>RollNumber</B></td><td><input type="text" size=15 name="n2"></td></tr>
</table>
<br>
<center><input type=submit value="submit" name="b1" onClick="validate()"></center>
</form>
</body>
</html>

```

Student XML Document:

Student.xml:

```

<?xml version="1.0" ?>
<cse>
<students>
<rollno>501</rollno>
<name>ABC</name>
<percentage>65%</percentage>
</students>

```

```
<students>
<rollNo>502</rollNo>
<name>DEF</name>
<percentage>67%</percentage>
</students>
<students>
<rollNo>503</rollNo>
<name>GHI</name>
<percentage>69%</percentage>
</students>
<students>
<rollNo>504</rollNo>
<name>JKL</name>
<percentage>65%</percentage>
</students>
<students>
<rollNo>505</rollNo>
<name>MNO</name>
<percentage>73%</percentage>
</students>
<students>
<rollNo>506</rollNo>
<name>PQR</name>
<percentage>74%</percentage>
</students>
<students>
<rollNo>507</rollNo>
<name>stu</name>
<percentage>65%</percentage>
</students>
<students>
<rollNo>508</rollNo>
<name>VWX</name>
<percentage>70%</percentage>
</students>
<students>
<rollNo>509</rollNo>
<name>YZ</name>
<percentage>72%</percentage>
</students>
<students>
<rollNo>510</rollNo>
<name>PQR</name>
<percentage>75%</percentage>
```

</students>
</cse>

Output:

Ex.NO 9

i) FORM VALIDATION USING PHP regular expression

HP - Validate Name

The code below shows a simple way to check if the name field only contains letters and whitespace. If the value of the name field is not valid, then store an error message:

```
$name = test_input($_POST["name"]);  
if (!preg_match("/^[a-zA-Z ]*$/",$name)) {  
    $nameErr = "Only letters and white space allowed";  
}
```

The preg_match() function searches a string for pattern, returning true if the pattern exists, and false otherwise.

PHP - Validate E-mail

The easiest and safest way to check whether an email address is well-formed is to use PHP's filter_var() function.

In the code below, if the e-mail address is not well-formed, then store an error message:

```
$email = test_input($_POST["email"]);  
if (!filter_var($email, FILTER_VALIDATE_EMAIL)) {  
    $emailErr = "Invalid email format";  
}
```

PHP - Validate URL

The code below shows a way to check if a URL address syntax is valid (this regular expression also allows dashes in the URL). If the URL address syntax is not valid, then store an error message:

```
$website = test_input($_POST["website"]);
if
(!preg_match("/\b(?:(:https?|ftp):\/\/|www\.)[-a-z0-9+&@#\/%?~_]|!:,.;]*[-a-z0-9+&@#\/%?~_]/i",$website)) {
    $websiteErr = "Invalid URL";
}
```

PHP - Validate Name, E-mail, and URL

Now, the script looks like this:

Example

```
<?php
// define variables and set to empty values
$nameErr = $emailErr = $genderErr = $websiteErr = "";
$name = $email = $gender = $comment = $website = "";

if ($_SERVER["REQUEST_METHOD"] == "POST") {
    if (empty($_POST["name"])) {
        $nameErr = "Name is required";
    } else {
        $name = test_input($_POST["name"]);
        // check if name only contains letters and whitespace
        if (!preg_match("/^[a-zA-Z ]*$/",$name)) {
            $nameErr = "Only letters and white space allowed";
        }
    }
}

if (empty($_POST["email"])) {
    $emailErr = "Email is required";
} else {
    $email = test_input($_POST["email"]);
    // check if e-mail address is well-formed
```

```

    if (!filter_var($email, FILTER_VALIDATE_EMAIL)) {
        $emailErr = "Invalid email format";
    }
}

if (empty($_POST["website"])) {
    $website = "";
} else {
    $website = test_input($_POST["website"]);
    // check if URL address syntax is valid (this regular expression also
allows dashes in the URL)
    if (!preg_match("/\b(?:https?|ftp):\/\/\w+([.-]|\w)*[^\s$/:;,.*?]+$/i", $website)) {
        $websiteErr = "Invalid URL";
    }
}

if (empty($_POST["comment"])) {
    $comment = "";
} else {
    $comment = test_input($_POST["comment"]);
}

if (empty($_POST["gender"])) {
    $genderErr = "Gender is required";
} else {
    $gender = test_input($_POST["gender"]);
}
}
?>

```

```

<?php
// Initialize variables to null.
$nameError = "";
$emailError = "";
$genderError = "";
$websiteError = "";
// On submitting form below function will execute.
if(isset($_POST['submit'])){
if (empty($_POST["name"])) {
$nameError = "Name is required";
} else {
$name = test_input($_POST["name"]);
// check name only contains letters and whitespace
if (!preg_match("/^[a-zA-Z ]*$/",$name)) {
$nameError = "Only letters and white space allowed";
}
}
if (empty($_POST["email"])) {
$emailError = "Email is required";
} else {
$email = test_input($_POST["email"]);
// check if e-mail address syntax is valid or not
if (!preg_match("/([w-]+@[w-]+\.[w-]+)/",$email)) {
$emailError = "Invalid email format";
}
}
if (empty($_POST["website"])) {
$website = "";
} else {
$website = test_input($_POST["website"]);
// check address syntax is valid or not(this regular expression also allows dashes in the URL)
if
(!preg_match("/b(?:?:https?|ftp):\/\/www.)[-a-z0-9+&@#/%?=_~|!:,.;]*[-a-z0-9+&@#/%=_~|]/i",$we
bsite)) {
$websiteError = "Invalid URL";
}
}
if (empty($_POST["comment"])) {
$comment = "";
} else {
$comment = test_input($_POST["comment"]);
}
if (empty($_POST["gender"])) {
$genderError = "Gender is required";
} else {
$gender = test_input($_POST["gender"]);
}
}
function test_input($data) {
$data = trim($data);
$data = stripslashes($data);
$data = htmlspecialchars($data);
return $data;
}
//php code ends here
?>

```

HTML Code segment from “validation.php”

```
<!DOCTYPE html>
<html>
<head>
<title>Form Validation with PHP - Demo Preview</title>
<meta content="noindex, nofollow" name="robots">
<link href="style.css" rel="stylesheet">
</head>
<body>
<div class="maindiv">
<div class="form_div">
<div class="title">
<h2>Form Validation with PHP.</h2>
</div>
<form action="validation.php" method="post">
<h2>Form</h2>
<span class="error">* required field.</span>
Name:
<input class="input" name="name" type="text" value="">
<span class="error">* <?php echo $nameError;?></span>
E-mail:
<input class="input" name="email" type="text" value="">
<span class="error">* <?php echo $emailError;?></span>
Gender:
<input class="radio" name="gender" type="radio" value="female">Female
<input class="radio" name="gender" type="radio" value="male">Male
<span class="error">*<?php echo $genderError;?></span>
Website:
<input class="input" name="website" type="text" value="">
<span class="error"><?php echo $websiteError;?></span>
Comment:
<textarea cols="40" name="comment" rows="5">
</textarea>
<input class="submit" name="submit" type="submit" value="Submit">
</form>
</div>
</body>
</html>
```

Copy

CSS File : style.css

```
@import "http://fonts.googleapis.com/css?family=Droid+Serif";
/* Above line is to import Google font style */
.maindiv{
margin:0 auto;
width:980px;
height:500px;
background:#fff;
padding-top:20px;
font-size:14px
}
.title{
width:500px;
height:70px;
text-shadow:2px 2px 2px #cfcfcf;
font-size:16px;
text-align:center;
font-family:'Droid Serif',serif
```

```

}
.form_div{
width:70%;
float:left
}
form{
width:440px;
border:1px dashed #ccc;
padding:10px 30px 40px;
background-color:#f0f8ff;
font-family:'Droid Serif',serif
}
form h2{
text-align:center;
text-shadow:2px 2px 2px #cfcfcf
}
textarea{
width:250px;
height:60px;
border-radius:1px;
box-shadow:0 0 1px 2px #123456;
margin-top:10px;
padding:5px;
border:none
}
.input{
width:250px;
height:15px;
border-radius:1px;
box-shadow:0 0 1px 2px #123456;
margin-top:10px;
padding:5px;
border:none;
margin-bottom:20px
}
.submit{
color:#fff;
border-radius:3px;
background:#1F8DD6;
padding:5px;
margin-top:40px;
border:none;
width:100px;
height:30px;
box-shadow:0 0 1px 2px #123456;
font-size:16px
}
.error{
color:red
}
.radio{
width:15px;
height:15px;
border-radius:1px;
margin-top:10px;
padding:5px;
border:none;
margin-bottom:20px
}
.formget{
float:right;

```



```
margin-top:85px
}
Copy
```

* required field.

Name: * Name is required

E-mail: * Email is required

Gender: ☐ Female ☐ Male *Gender is required

Website:

Comment:

FORM VALIDATION
WITH PHP

My html form:

```
<!doctype html public>
<body>
```

Please fill out the following form:

```
<table border="1" cellpadding="10">

<td>
<h1> Games Console Survey </h1>
<form action="createProfile.php" method = "post">
```

```
First Name: <br /> <input type="text" name="firstname" /><br />
<br />
```

```
Surname: <br /> <input type="text" name="lastname" /> <br />
```

```
<br />
```

```
<u>Gender</u>: <br />  
<br />
```

```
<input type="radio" name="gender" value="Male" /> Male<br />  
<input type="radio" name="gender" value="Female" /> Female <br />
```

```
<br />
```

```
<u>I Have The Following:</u> <br />  
<br />
```

```
<input type="checkbox" name="Console" value="Playstation 3" />  
Playstation 3<br />  
<input type="checkbox" name="Console" value="Xbox 360" /> Xbox 360  
<br />  
<input type="checkbox" name="Console" value="Wii" /> Wii <br />
```

```
<br />  
<input type="submit" />  
</form>
```

```
</form>
```

```
</td>  
</table>
```

```
</body>
```

```
</html>
```

process.php

```
<?php  
echo "First Name: ".$_POST['firstname'];  
?>
```

```
</br>
```

```
<?php  
echo "Surname: ".$_POST['lastname'];  
?>
```

</br>

```
<?php
echo "Gender: ".$_POST['gender'];
?>
```

</br>

```
<?php
echo "Console: ".$_POST['Console'];
?>
```

</br>

```
<?php
require_once 'Connection.php';
?>
```

Connection.php

```
<?php

$firstname = $_Post['firstname'];
$lastname = $_Post['lastname'];
$gender = $_Post['gender'];
$Console = $_Post['Console'];

try {
    $host = "localhost";
    $username = "root";
    $password = "";
    $database = "my_db";
    $dsn = "mysql:host=$host;dbname=$database";

    $conn = new PDO( $dsn, $username, $password );
    $conn->setAttribute(PDO::ATTR_ERRMODE,
PDO::ERRMODE_EXCEPTION);

    $sql = "INSERT INTO userprofile("
        . "firstname, lastname, sex, console"
        . " ) VALUES ("
        . "" . $firstname . ", "

```

```

        . "" . $lastname . "" , "
        . "" . $gender . "" , "
        . "" . $Console . ")";

$conn->query($sql);

$sql = "SELECT * FROM userdata";
$userdata = $conn->query($sql);
echo '<table>';
echo '<tr>';
echo '<th>First Name</th>
      <th>Last Name</th>
      <th>Gender</th>
      <th>Console</th>';
echo '<tr>';
foreach ($userdata as $userdata) {
    echo '<tr>';
    echo ' <td>' . $userprofile['firstname'] . '</td>';
    echo ' <td>' . $userprofile['lastname'] . '</td>';
    echo ' <td>' . $userprofile['gender'] . '</td>';
    echo ' <td>' . $userprofile['Console'] . '</td>';
    echo ' </tr> ';
}

echo '</table>';

    $conn = null;
}
catch (PDOException $e) {
    $conn = null;
    exit("Connection failed: " . $e->getMessage());
}
?>

<?php
require_once 'Connection.php';
?>

```

EX NO 10:**WEB SERVICES AND AJAX****Example.html**

```
<html>
<head>
    <script type="text/javascript">
        var req;
        function ajaxCall()
        {
            var poststr = "username=" + document.frmtest.content.value;
            var url = "ajax.jsp";
            if (window.XMLHttpRequest)
            {
                req = new XMLHttpRequest();
            }
            else if (window.ActiveXObject)
            {
                req = new ActiveXObject("Microsoft.XMLHTTP");
            }
            req.open("POST", "ajax.jsp", true);
            req.onreadystatechange = callback;
            req.setRequestHeader("Content-Type",
                "application/x-www-form-urlencoded");
            req.setRequestHeader("Content-length", poststr.length);
            req.setRequestHeader("Connection", "close");
            req.send(poststr);
        }
        function callback()
        {
            if (req.readyState == 4)
            {
                if (req.status == 200)
                {
                    // update the HTML DOM based on whether or not message is
                    valid
                    parseMessage();
                }
            }
        }
        function parseMessage()
```

```

        {
            var message = req.responseText;
            mdiv = document.getElementById("Message");
            mdiv.innerHTML = "<div
            style=\"color:green\">"+message+"</div>";
        }
    </script>
</head>
<body>
    <form action="" name="frmtest">
        <p>Enter your name here:</p>
        <textarea name="content" rows="3" cols="40"
        onkeyup="javascript:ajaxCall();"> </textarea>
    </form>
    <div id="Message"> </div>
</body>
</html>

```

ajax.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">
<%
String content = request.getParameter("username");
content = "Hello! " + content;
response.setContentType("text/html");
response.setHeader("Cache-Control", "no-cache");
response.getWriter().write(content);
%>

```

OUTPUT

