

Web Technologies (R-22)

Lab Programs

1. Write an HTML page including JavaScript that takes a given set of integer numbers and shows them after sorting in descending order.

```
<html>
<head>
<title>Number in Descending Order</title>
<script language="javascript">
function ndesc()
{
var num_array=new Array();
var num=document.forms["frm1"].num.value;
document.forms["frm1"].desc.value="";
var nums=num.split(',');
var len=num.split(',').length;
for(var i=0;i<len;i++)
{
num_array.push(nums[i]);
}
function sortN(a,b)
{
return b-a;
}
document.forms["frm1"].desc.value=num_array.sort(sortN);
}
</script>
</head>
<body>
<form name="frm1">
<center>
<h3> Numbers in Descending Order</h3>
</center>
<br/>
<center>Enter  Numbers separated by Comma : <input type="text" name="num"></input><br/>
</center>
```

```

<br/>
<center>
<input type="button" name="inwords" value="In Descending Order" onclick="ndesc()"></input>
</center>
<br/><br/>
<center>Number in Descending Order: <input type="text" name="desc"></input></center>
<br/>
</form>
</body>
</html>

```

2. Write an HTML page including any required JavaScript that takes a number from one text field in the range of 0 to 999 and shows it in another text field in words. if the number is out of range, it should show “ out of range” and if it is not a number, it should show “ not a number” message in the result box.

```

<html>
<head>
<title>Number in words</title>
<script language="javascript">
function convert()
{
var num=document.forms["frm1"].num.value;
document.forms["frm1"].words.value="";
if(isNaN(num))
{
alert("Nota Number");
}
else if(num<0||num>999)
{
alert("Out of Range");
}
else

```

```
{
var len=num.length;
var words="";
for(var i=0;i<len;i++)
{
var n=num.substr(i,1);
switch(n)
{
case '0':words+="Zero ";break;
case '1':words+="One ";break;
case '2':words+="Two ";break;
case '3':words+="Three ";break;
case '4':words+="Four ";break;
case '5':words+="Five ";break;
case '6':words+="Six ";break;
case '7':words+="Seven ";break;
case '8':words+="Eight ";break;
default:words+="Nine ";
}
}
document.forms["frm1"].words.value=words;
}
}
</script>
</head>
<body>
<form name="frm1">
<center><h3>NUMBER IN WORDS</h3></center>
<br/>
<center>Enter a Number:<input type="text" name="num"></input><br/></center>
<br/>
<center><input type="button" name="inwords" value="In Words" onclick="convert()"></input></center>
<br/><br/><center>Number in Words:<input type="text" name="words"></input></center>
<br/>
</form>
</body>
</html>
```

3. Write an HTML page that has one input, which can take multi line text and a submit button. Once the user clicks the submit button, it should show the number of characters, words and lines in the text entered using an alert message. Words are separated with white space and lines are separated with new line character.

```
<html>
<head>
<title>Lines,words,characters</title>
<script language="javascript">
function wcount()
{
var str=document.forms["frm1"].inputstring.value;
var lines=str.split('\n').length;
document.forms["frm1"].linecount.value=lines;
document.forms["frm1"].wordcount.value=str.split(/\s/).length;
document.forms["frm1"].charactercount.value=str.length-(lines-1);
}
</script></head>
<body>
<form name="frm1">
<center><b>Enter Multiple lines of text </b><br><br><textarea name="inputstring" cols="50" rows="5"></text
area><br><br>
<input type="button" name="count" value="Count" onclick="wcount()"></input><br><br>
Number of lines: <input name="linecount" type="text" value="" size="6"><br><br>
Number of words: <input name="wordcount" type="text" value="" size="6"><br><br>
Number of characters: <input name="charactercount" type="text" value="" size="6"><br><br>
</form>
</body>
</html>
```

4. Write an HTML page that contains a selection box with a list of 5 countries. When the user selects a country, its capital should be printed next to the list. Add CSS to customize the properties of the font of the capital (color, bold and font size).

```
<html>
<head>
<title>capitals of countries</title>
```

```
<style>
p{
color:red;
font-weight:bold;
font-size:50;
}
</style>
<script language="javascript">
function capital()
{
var cunt=document.forms["frm1"].country.value;
var capital=" Please select any country ";
if(cunt=="india")
{
capital="NEW DELHI";
}
if(cunt=="china")
{
capital="BEIJING";
}
if(cunt=="pakistan")
{
capital="ISLAMABAD";
}
if(cunt=="bangladesh")
{
capital="DHAKA";
}
if(cunt=="japan")
{
capital="TOKYO";
}

if(cunt=="select")
{
capital="Please select any country";
}
document.getElementById("capt").innerHTML=capital;
}
</script>
</head>
<body>
<form name="frm1">
<br/>
<center>
Select a Country :<select name="country" onchange="capital()">
```

```

<option value="select">--SELECT--</option>
<option value="india">INDIA</option>
<option value="china">CHINA</option>
<option value="pakistan">PAKISTAN</option>
<option value="bangladesh">BANGLADESH</option>
<option value="japan">JAPAN</option>
</select>
<br/>
<br/>
<font color="green" size="6">Capital is:</font> <pid="capt"></p>
</center>
</form>
</body>
</html>

```

5. Create an XML document that contains 10 users information. Write a java program which takes users id as input and returns the users details by taking the user information from the XML document using DOM parser.

student.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<students-details>
<student>
<studentid>561</studentid>
<name>Ramu</name>
<address>ECIL</address>
<gender>Male</gender>
</student>
<student>
<studentid>562</studentid>
<name>Ramya</name>
<address>KBHP</address>
<gender>Female</gender>
</student>
<student>
<studentid>563</studentid>
<name>Mahi</name>
<address>BHEL</address>
<gender>Male</gender>
</student>

```

```
<student>
<studentid>564</studentid>
<name>Manvi</name>
<address>KOTI</address>
<gender>Female</gender>
</student>
<student>
<studentid>565</studentid>
<name>Ammu</name>
<address>ECIL</address>
<gender>Female</gender>
</student>
</students-details>
```

DOMParserDemo.java

```
import org.w3c.dom.*;
import javax.xml.parsers.*;
import java.util.Scanner;
import java.io.*;
public class DOMParserDemo
{
    public static void main(String[] args) throws Exception
    {
        DocumentBuilderFactory factory = DocumentBuilderFactory.newInstance();    DocumentBuilder builder = factory.newDocumentBuilder();    // parser is created    Document doc = builder.parse("student.xml");// file is parsed
        NodeList list = doc.getElementsByTagName("student");
        Scanner in = new Scanner(System.in);
        System.out.print("Enter student ID:\t");
        int n = in.nextInt();
        int flag = 0;
        for(int i = 0; i < list.getLength(); i++)
        {
            Node node = list.item(i);
            if(node.getNodeType() == Node.ELEMENT_NODE)
            {
                Element e = (Element) node;
                int x = Integer.parseInt(e.getElementsByTagName("studentid").item(0).getTextContent());    if(x == n)
                {
                    System.out.println("\n\n STUDENT-DETAILS");    System.out.println("=====");
                    System.out.println("student id:\t" + e.getElementsByTagName("studentid").item(0).getTextContent());
                    System.out.println("student Name:\t" + e.getElementsByTagName("name").item(0).getTextContent());
                    System.out.println("Address:\t" + e.getElementsByTagName("address").item(0).getTextContent());
                }
            }
        }
    }
}
```

```
        System.out.println("Gender:\t" + e.getElementsByTagName("gender").item(0).getTextContent());

        flag=1;
        break;
    }
    Else
    {
        flag=0;
    }
}
}
}
if(flag==0)
    System.out.println("student Id is not present. Try Again!!!");
}
}
```


7. Implementing the following web application using PHP.”

A user validation web application, where the user submits the login name and password to the server. The name and password are checked against the data already available in database and if the data matches, a successful login page is returned. Otherwise a failure message is shown to the user.

Login.html

```
<html>

<head>
<title>Login </title>
</head>
<body>
<form name="form1" method="post" action="Login.php">
<table align="center" width="80%" border="0">
<tr >
<td colspan=2 align="center">
<b><h3>Member Login</h3> </b></td>
</tr>
<br/>
<tr>
<td>Username :</td>
<td><input name="uname" type="text"></td>
</tr>
<tr>
<td>Password :</td>
<td><input name="pwd" type="password"></td>
</tr>
<tr>
<td></td>
<td><input type="submit" name="Submit" value="Login"></td>
</tr>
</table>
</form>
</body>
</html>
```

Login.php

```
<?php
$host = 'localhost';
$user = 'root';
$pass = "";
$dbname='sampledb';
$username=$_POST["uname"];
$password=$_POST["pwd"];
$conn = mysqli_connect($host, $user, $pass,$dbname);
$sql = "SELECT * FROM students where UserId='$username' and Password='$password'";
$retval=mysqli_query($conn, $sql);
if(mysqli_num_rows($retval) > 0)
{
    echo "Hello...".$username."<br/>";
    echo " Successfully Login.. ";
}
else
{
    echo "Invalid Login...";
}
mysqli_close($conn);
?>
```

Aim: “ Implementing the following web application using Servlets.”

A user validation web application, where the user submits the login name and password to the server. The name and password are checked against the data already available in Database and if the data matches, a successful login page is returned. Otherwise a failure message is shown to the user.

login.html

[illegible]

```
</tr>
<tr>
  <td>User Name</td>
  <td><input type="text" name="uname" ></td>
</tr>
<tr>
  <td>Password</td>
  <td><input type="password" name="pwd" ></td>
</tr>
<tr align="center">
  <td align="center" colspan="2">
    <input type="submit" name="ok" value="Submit">

  </td>
</tr>
</table>
</form>
```

StudentLoginSevlet.java:

```
package pres;
```

```
import java.io.IOException;
```

```
import java.io.PrintWriter;
```

```
import java.sql.Connection;
```

```
import java.sql.DriverManager;
```

```
import java.sql.ResultSet;
```

```
import java.sql.SQLException;
```

```
import java.sql.Statement;
```

```
import javax.servlet.*;
```

```
import javax.servlet.http.HttpServlet;
```

```
import javax.servlet.http.HttpServletRequest;
```

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

```
public class StudentLoginServlet extends HttpServlet {
```

```
    private Connection con=null;
```

```
    public void init() throws ServletException {
```

```
        try {
```

```
            DriverManager.registerDriver(new com.mysql.jdbc.Driver());
```

```
            con =
```

```
DriverManager.getConnection("jdbc:mysql://localhost:3306/mrecw","root","n  
aresh");
```

```
            System.out.println("got database connection");
```

```
        } catch (Exception e) {
```

```
            System.out.println("not able to database connection");
```

```
            e.printStackTrace();
```

```
        }
```

```
    }
```

```
    public void service(HttpServletRequest req, HttpServletResponse resp)
```

```

        throws ServletException, IOException {

    resp.setContentType("text/html");

    Statement statement=null;

    ResultSet resultSet = null;

    String uname=req.getParameter("uname");

    String pwd=req.getParameter("pwd");

    try {

        PrintWriter out=resp.getWriter();

        statement = con.createStatement();

        ResultSet rs=statement.executeQuery("select * from login where
uname='"+uname+"' and pwd='"+pwd+"' ");

        if(rs.next()){

            RequestDispatcher
rd=req.getRequestDispatcher("home.jsp");

            rd.forward(req,resp);

        }else{

            RequestDispatcher
rd=req.getRequestDispatcher("login.html");

            rd.include(req,resp);

            out.println("<h3 align='center' style='color:red;'>wrong
credentials</h3>");

```

```

    }

} catch (SQLException e) {

    e.printStackTrace();

    System.out.println("not able to get the connection");

}finally{

    try{

        //con.close();

        System.out.println("connection closed");

    }

    catch(Exception e){}

}

}

}

}

```

home.jsp:

```

<h2>welcome to home page- You are successfully logged in</h2><br/>

<a href="login.html">Back</a>

```

Web.xml

```

<web-app>

```

```
<welcome-file-list>

  <welcome-file>index.html</welcome-file>

</welcome-file-list>


<servlet>

  <servlet-name>sls</servlet-name>

  <servlet-class>pres.StudentLoginServlet</servlet-class>

</servlet>

<servlet-mapping>

  <servlet-name>sls</servlet-name>

  <url-pattern>/sls</url-pattern>

</servlet-mapping>

</web-app>
```

8. A user validation web application, where the user submits the login name and password to the server. The name and password are checked against the data already available in xml file (users.xml) and if the data matches, a successful login page is returned. Otherwise a failure message is shown to the user.

users.xml

```
<?xml version="1.0"?>
```

```
<users>
<user>
<userid>madhu</userid>
<password>12345</password>
</user>
<user>
<userid>naveen</userid>
<password>12345</password>
</user>
<user>
<userid>durga</userid>
<password>12345</password>
</user>
<user>
<userid>ramesh</userid>
<password>12345</password>
</user>
</users>
```

Loginxml.php

```
<html>
<head>
<title>Login </title>
</head>
<body>
<form name="form1" method="post">
<table align="center" width="80%" border="0" cellpadding="3" cellspacing="1">
<tr >
<td colspan=2 align="center">
<b><h3>Member Login</h3> </b></td>
</tr>
<br/>
<tr>
<td>Username : </td>
<td><input name="uname" type="text"></td>
</tr>
<tr>
<td>Password : </td>
<td><input name="pwd" type="password"></td>
</tr>
```



```
<tr>
<td></td>
<td><input type="submit" name="Submit" value="Login"></td>
</tr>
</table>
</form>
<?php
if(isset($_POST["Submit"]))
{
$username=$_POST["uname"];
$password=$_POST["pwd"];
$xml=simplexml_load_file("users.xml") or die("Error: Cannot create object");
foreach($xml->children() as $users)
{
    if($users->userid==$username)
    {
        if($users->password==$password)
        {
            echo "<center><b>Hello..".$username. ", ";
            echo "Login Successful</b></center> ";
            return;
        }
        else
        {
            echo "<center><b>Invalid Password...</b></center>";
            return;
        }
    }
}
echo "<center><b>Invalid Login..</b></center>";
}
?>
</body>
</html>
```