ASSINGMENT-4

UCS 1601 – INTERNET PROGRAMMING

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SERVLET TO COMPUTE THE GROSS PAY OF EMPLOYEES

HTML Code:index.html

```html
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" >

<meta name="viewport" content="width=device-width, initialscale=1.0">

<title>Form</title>

<link href="style.css" rel="stylesheet" type="text/css" />

</head>

<body>

  <br><br><h1>FORM</h1>

  <form action="MyServlet" method="POST">

  <table>

    <tr>

      <td>Enter Employee Id:</td>

      <td><input type="text" name="eid" id="eid"</textarea></td>

    </tr>

    <tr>

      <td>Enter Employee name:</td>

      <td> <input type="text" name="ename" id="ename"> </td>

    </tr>
```

```html
    <tr>
      <td>Enter Designation: </td>
      <td>
        <select name="des" id="des" required>
        <option value="None">--Select one of the below--</option>
        <option value="Manager">Manager</option>
        <option value="Employee">Employee</option>
        <option value="Clerk">Clerk</option>
        <option value="receptionist">Receptionist</option>
        </select>
      </td>
    <tr>
      <td>Enter department:</td>
      <td>
<select name="dept" id="dept" required>
<option value="None">--Select one of the below--</option>
<option value="Production">Production</option>
<option value="R&D">R&D</option>
<option value="Accounting">Accounting</option>
<option value="Marketing">Marketing</option>
        <option value="HR">HR</option>
</select>
<br>
<p id="dept"></p>
</td>
    </tr>
    <tr>
      <td>Enter Basic Salary:</td>
      <td><input type="text" name="salary" id="salary"> </td>
    </tr>
    <tr>
```

```html
<td><label for="phone">Contact Number:</label></td>

<td><input type="tel" id="phone" name="phone" pattern="[0-9]{10}"
required></td>

</tr>

    <tr>

<td><label for="addr">Address: </label> </td>

<td><textarea type="text" id="addr" name="address"
required ></textarea></td>

</tr>

    <tr>

<td><label for="dob">Date Of Birth:</label></td>

<td><input type="date" id="dob" name="dob" required></td>

</tr>

    <tr>

<td><label for="gender">Gender:</label></td>

<td>

<input type="radio" id="male" name="gender" value="male" >

<label for="Male">Male</label>  

<input type="radio" id="female" name="gender" value="female">

<label for="Female">Female</label>  

<input type="radio" id="other" name="gender" value="other">

<label for="Other">Other</label> <br>

</td>

</tr>

    <tr>

<td>Marital Status: </td>

<td>

<select name="mat" id="mat" required>

<option value="None">--Select one of the below--</option>

<option value="Single">Single</option>

<option value="Married">Married</option>

<option value="Divorced">Divorced</option>
```

```html
<option value="Widowed">Widowed</option>

</select>

<br>

<p id="demo" class="small"></p>

</td>

</tr>

    <tfoot>

<tr>

<th><input type="submit" id="submit" value="Submit"
onclick="display()"></th>

<th><input type="reset" onclick="ResetFunc()"><br><p id="res"
class="small"></p></th>

</tr>

</tfoot>


  </table>

  </form>

</body>

</html>
```

CSS STYLE SHEETS :

```css
form{

font-size: 19px;

}


h1 {

text-align: center;

font-size: 40px;

text-shadow: 2px 2px #696969;

}

table,td,th{
```

```css
    margin-top: 30px;

    margin-left: auto;

    margin-right: auto;

    width: 60%;

    border: 1px solid black;

    font-weight: bold;

    font-size: 19px;

}
td{

    padding: 30px;

    text-align: left;

}
th{

    height: 60px;

    padding: 40px;

    text-align: center;

    font-size: 20px;

}
input[type=text],select,input[type=tel]

{

width: 300px;

padding: 12px 17px;

margin: 8px 0;

box-sizing: border-box;

border-radius: 4px;

font-size: 15px;

}
textarea[type=text]

{

height: 100px;

width: 300px;
```

```css
    padding: 12px 17px;

    margin: 8px 0;

    box-sizing: border-box;

    border-radius: 4px;

    font-size: 15px;

}


input[type=submit],input[type=reset]

{

width: 150px;

padding: 12px 17px;

margin: 8px 0;

border-radius: 4px;

border: none;

font-size: 17px;

cursor: pointer;

background-color: white;

}


input[type=date]

{

padding: 5px 8px;

border-radius: 4px;

}
```

JAVASCRIPT – script.js:

```java
import jakarta.servlet.http.*;

import jakarta.servlet.*;

import java.io.*;

import java.util.*;

public class MyServlet extends HttpServlet{
```

```java
    public void doPost(HttpServletRequest request,HttpServletResponse
response) throws ServletException,IOException{

    response.setContentType("text/html");

    PrintWriter pw=response.getWriter();

    pw.println("<h1>Employee Payroll</h1><br>");

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

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

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

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

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

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

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

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

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


    double pay=0;

    if (des.equals("Manager"))

    {

      pay=Integer.valueOf(salary)*1.6;

    }

    else if(des.equals("Employee"))

    {

      pay=Integer.valueOf(salary)*1.3;

    }

    else if (des.equals("Clerk"))

    {

      pay=Integer.valueOf(salary)*1.2;

    }

    else

    {

      pay=Integer.valueOf(salary)*0.6;
```

```java
    }


    pw.println("<table border=1>");

    pw.println("<tr>" + "<td>Name: </td>" + "<td>"+ ename + "</td>" +
"</tr>");

    pw.println("<tr>" + "<td>Id: </td>" + "<td>"+ eid + "</td>" + "</tr>");

    pw.println("<tr>" + "<td>designation: </td>" + "<td>"+ des + "</td>"
+ "</tr>");

    pw.println("<tr>" + "<td>salary: </td>" + "<td>"+ pay + "</td>" +
"</tr>");

    pw.println("<tr>" + "<td>Phone: </td>" + "<td>"+ phone + "</td>" +
"</tr>");

    pw.println("<tr>" + "<td>DOB: </td>" + "<td>"+ dob + "</td>" + "</tr>");

    pw.println("<tr>" + "<td>Gender: </td>" + "<td>"+ gender + "</td>" +
"</tr>");

    pw.println("<tr>" + "<td>Marital Status: </td>" + "<td>"+ mat + "</td>"
+ "</tr>");


    }
}
```

XML CODE: web.xml

```xml
<web-app>
  <servlet>
    <servlet-name>MyServlet</servlet-name>
    <servlet-class>MyServlet</servlet-class>
  </servlet>
  <servlet-mapping>
    <servlet-name>MyServlet</servlet-name>
    <url-pattern>/MyServlet</url-pattern>
  </servlet-mapping>
</web-app>
```

Snapshots :

FORM

Enter Employee Id:	345
Enter Employee name:	shalini
Enter Designation:	Manager
Enter department:	R&D
Enter Basic Salary:	8900
Contact Number:	7200003801
Address:	204 1 st street airlines
Date Of Birth:	03-03-2002
Gender:	○ Male ● Female ○ Other
Marital Status:	Single
Submit	Reset

Employee Payroll

Name:	shalini
Id:	345
designation:	Manager
salary:	14240.0
Phone:	7200003801
DOB:	2002-03-03
Gender:	female
Marital Status:	Single

PATIENT MANAGEMENT SYSTEM

Style sheet

Table.css:

```css
*{
box-sizing: border-box;
-webkit-box-sizing: border-box;
-moz-box-sizing: border-box;
}
body{
font-family: Helvetica;
-webkit-font-smoothing: antialiased;
background: rgba( 71, 147, 227, 1);
}
h2{
text-align: center;
font-size: 18px;
text-transform: uppercase;
letter-spacing: 1px;
```

```css
    color: white;

    padding: 30px 0;

}


/* Table Styles */


.table-wrapper{

margin-top: 150px;

box-shadow: 0px 35px 50px rgba( 0, 0, 0, 0.2 );

}


.fl-table {

border-radius: 5px;

font-size: 12px;

font-weight: normal;

border: none;

border-collapse: collapse;

width: 100%;

max-width: 100%;

white-space: nowrap;

background-color: white;

}


.fl-table td, .fl-table th {

text-align: center;

padding: 8px;

}


.fl-table td {

border-right: 1px solid #f8f8f8;

font-size: 12px;
```

```css
    }


    .fl-table thead th {

    color: #ffffff;

    background: #4FC3A1;

    }


    .fl-table thead th:nth-child(odd) {

    color: #ffffff;

    background: #324960;

    }


    .fl-table tr:nth-child(even) {

    background: #F8F8F8;

    }

    /* Responsive */


    @media (max-width: 767px) {

    .fl-table {

    display: block;

    width: 100%;

    }
    .table-wrapper:before{

    content: "Scroll horizontally >";

    display: block;

    text-align: right;

    font-size: 11px;

    color: white;

    padding: 0 0 10px;

    }
```

```css
.fl-table thead, .fl-table tbody, .fl-table thead th {

display: block;

}

.fl-table thead th:last-child{

border-bottom: none;

}

.fl-table thead {

float: left;

}

.fl-table tbody {

width: auto;

position: relative;

overflow-x: auto;

}

.fl-table td, .fl-table th {

padding: 20px .625em .625em .625em;

height: 60px;

vertical-align: middle;

box-sizing: border-box;

overflow-x: hidden;

overflow-y: auto;

width: 120px;

font-size: 13px;

text-overflow: ellipsis;

}

.fl-table thead th {

text-align: left;

border-bottom: 1px solid #f7f7f9;

}

.fl-table tbody tr {

display: table-cell;
```

```css
}
.fl-table tbody tr:nth-child(odd) {
background: none;
}
.fl-table tr:nth-child(even) {
background: transparent;
}
.fl-table tr td:nth-child(odd) {
background: #F8F8F8;
border-right: 1px solid #E6E4E4;
}
.fl-table tr td:nth-child(even) {
border-right: 1px solid #E6E4E4;
}
.fl-table tbody td {
display: block;
text-align: center;
}
}

.button{width:20%;border:3px solid black;border-radius: 8px;}
```

UpdateStyle.css

```css
*{
box-sizing: border-box;
-webkit-box-sizing: border-box;
-moz-box-sizing: border-box;
}
h2{margin-top:25px;}
body{
text-align:center;
```

```css
font-size:22px;

font-family:Calibri;

background: rgba( 71, 147, 227, 1);

}

form{

border:4px solid black;

margin:auto;width:400px;

text-align:left;

padding:20px;

border-radius:20px;

box-shadow: 0px 35px 50px rgba( 0, 0, 0, 0.2 );

}

.field{

float:right;

margin-right:10px;

border:3px solid black;

border-radius: 8px;

}


.button{width:20%;border:3px solid black;border-radius: 8px;}

.field,select{width:165px;height:25px;}
```

Html code :

Index.html

```html
<!DOCTYPE html>

<html>

<head>

<meta name="viewport" content="width=device-width, initial-scale=1">
```

```html
<title> Login Page </title>

<style>

*{

box-sizing: border-box;

-webkit-box-sizing: border-box;

-moz-box-sizing: border-box;

}

h2{margin-top:25px;}

body{

text-align:center;

font-size:22px;

font-family:Calibri;

background: rgba( 71, 147, 227, 1);

}

form{

border:4px solid black;

margin-top:150px;margin-left:auto;margin-right:auto;width:400px;

text-align:left;

padding:40px;

border-radius:20px;

box-shadow: 0px 35px 50px rgba( 0, 0, 0, 0.2 );

}

.field{

float:right;

margin-right:10px;

border:3px solid black;

}

.button{width:20%;border:3px solid black;}

.field,select{width:165px;height:25px;}

</style>
```

```html
</head>

<body>

<center> <h1> Hospital Admin Login </h1> </center>

<form>

<div>

<label>Username </label>

<input class="field" type="text" placeholder="" name="username" id =
"uname" value = ""><br><br>

<label>Password </label>

<input class="field" type="password" placeholder="" name="password" id =
"pass" value = ""><br><br>

<!-- <button onclick="authenticate();">Login</button> -->

<center><input class="button" type="submit" value="Login"
onclick="authenticate();"></center>

</div>

</form>

<script>

function authenticate()

{

var username = "yasir";

var password = "1234";

var entereduser = document.getElementById("uname").value;

var enteredpass = document.getElementById("pass").value;

if(entereduser.localeCompare(username)==0 &&
enteredpass.localeCompare(password)==0)

{

//window.alert("valid Username and Password");

// location.href="options.html";

window.open('http://localhost:8080/Ex4b/dbservlet');

// window.open('options.html');

}
```

```
else
{
window.alert("Invalid Username or Password");
clear();
}
}


function clear()
{
document.getElementById("uname").innerHTML="";
document.getElementById("pass").innerHTML="";
}


</script>
</body>

</html>
```

Options.html

```html
<html>
<head>
<style>
*{
box-sizing: border-box;
-webkit-box-sizing: border-box;
-moz-box-sizing: border-box;
}
h2{margin-top:200px;}
    body{
text-align:center;
font-size:22px;
```

```css
font-family:Calibri;

-webkit-font-smoothing: antialiased;

background: rgba( 71, 147, 227, 1);

}

div{

border:3px solid black;

margin:auto;width:300px;

text-align:left;

border-radius:20px;

box-shadow: 0px 35px 50px rgba( 0, 0, 0, 0.2 );

}


</style>
</head>
<body>
<h2>Patient Management System</h2>

<h3>Patient Details</h3>

<div>

<ol>

<li><a href="add.html">Add record</a></li>

<li><a href="update.html">Update record</a></li>

<li><a href="delete.html">Delete record</a></li>

<li><a href="http://localhost:8080/Ex4b/viewServlet">View record</a></li>

<li><a href="search.html">Search record</a></li>

</ol>

</div>

</body>

</html>
```

Search.html

```html
<html>
```

```html
<head>
<style>
*{
box-sizing: border-box;
-webkit-box-sizing: border-box;
-moz-box-sizing: border-box;
}
h2{margin-top:25px;}
body{
text-align:center;
font-size:22px;
font-family:Calibri;
background: rgba( 71, 147, 227, 1);
}
form{
border:4px solid black;
margin:auto;width:400px;
text-align:left;
padding:20px;
border-radius:20px;
box-shadow: 0px 35px 50px rgba( 0, 0, 0, 0.2 );
}
.field{
float:right;
margin-right:10px;
border:3px solid black;
border-radius: 8px;
}

.button{width:20%;border:3px solid black;border-radius: 8px;}
.field,select{width:165px;height:25px;}
```

```html
</style>

</head>

<body>

<h2>Patient Management System</h2>

<h3>Search Patient Entry</h3>

  <form method="get" action="http://localhost:8080/Ex4b/searchServlet">

<br><br><label for="pid">Patient ID</label>

<input class="field" type="Number" id="pid" name="pid" required>

<br><br><center><input class="button" type="submit"
value="Search"></center>

  </form>

</body>

</html>
```

Update.html

```html
<html>

<head>

<style>

*{

box-sizing: border-box;

-webkit-box-sizing: border-box;

-moz-box-sizing: border-box;

}

h2{margin-top:25px;}

body{

text-align:center;

font-size:22px;

font-family:Calibri;

background: rgba( 71, 147, 227, 1);

}

form{

border:4px solid black;
```

```css
margin:auto;width:400px;

text-align:left;

padding:20px;

border-radius:20px;

box-shadow: 0px 35px 50px rgba( 0, 0, 0, 0.2 );

}

.field{

float:right;

margin-right:10px;

border:3px solid black;

border-radius: 8px;

}


.button{width:20%;border:3px solid black;border-radius: 8px;}

.field,select{width:165px;height:25px;}
```

```html
</style>

</head>

<body>

<h2>Patient Management System</h2>

<h3>Update Patient Entry</h3>

  <form method="get" action="http://localhost:8080/Ex4b/updateServlet">

<br><br><label for="pid">Patient ID</label>

<input class="field" type="text" id="pid" name="pid" required>

<br><br><center><input class="button" type="submit"
value="Update"></center>

  </form>

</body>

</html>
```

Delete.html

```html
<html>

<head>
```

```
<style>
*{
box-sizing: border-box;
-webkit-box-sizing: border-box;
-moz-box-sizing: border-box;
}
h2{margin-top:25px;}
body{
text-align:center;
font-size:22px;
font-family:Calibri;
background: rgba( 71, 147, 227, 1);
}
form{
border:4px solid black;
margin:auto;width:400px;
text-align:left;
padding:20px;
border-radius:20px;
box-shadow: 0px 35px 50px rgba( 0, 0, 0, 0.2 );
}
.field{
float:right;
margin-right:10px;
border:3px solid black;
border-radius: 8px;
}

.button{width:20%;border:3px solid black;border-radius: 8px;}
.field,select{width:165px;height:25px;}
</style>
```

```html
</head>

<body>

<h2>Patient Management System</h2>

<h3>Delete Patient Entry</h3>

  <form method="get" action="http://localhost:8080/Ex4b/deleteServlet">

<label for="pid">Patient ID</label>

<input class="field" type="text" id="pid" name="pid" required>

<br><br><center><input class="button" type="submit"
value="Remove"></center>

  </form>

</body>

</html>
```

Add.html

```html
<html>

<head>

<style>

*{

box-sizing: border-box;

-webkit-box-sizing: border-box;

-moz-box-sizing: border-box;

}

h2{margin-top:25px;}

    body{

text-align:center;

font-size:22px;

font-family:Calibri;

background: rgba( 71, 147, 227, 1);

}

form{

border:4px solid black;

margin:auto;width:400px;
```

```css
text-align:left;

padding:20px;

border-radius:20px;

box-shadow: 0px 35px 50px rgba( 0, 0, 0, 0.2 );

}

.field{

float:right;

margin-right:10px;

border:3px solid black;

border-radius: 8px;

}


.button{width:20%;border:3px solid black;border-radius: 8px;}

.field,select{width:165px;height:25px;}
```
```html
</style>

</head>

<body>

<h2>Patient Management System</h2>

<h3>Add Patient Entry</h3>

  <form method="get" action="http://localhost:8080/Ex4b/addServlet">

    <label for="ename">Patient Name</label>

<input class="field" type="text" id="pname" name="pname" required>

<br><br><label for="pid">Patient ID</label>

<input class="field" type="Number" id="pid" name="pid" required>

<br><br><label for="age">Age</label>

<input class="field" type="Number" id="age" name="age" required>

<br><br><label for="gender">Gender</label>

       

<input type="radio" id="gender" name="gender" value="Male" required>

<label for="male">Male</label><br>

           
```

```html
<input type="radio" id="gender" name="gender" value="Female" required>
<label for="female">Female</label><br>
           
<input type="radio" id="gender" name="gender" value="Other" required>
<label for="other">Other</label>
<br><br><label for="addr">Address</label>
<input class="field" type="text" id="addr" name="addr" required>
<br><br><label for="marital">Marital Status</label>
<select class="field" id="marital" name="marital" required>
<option value="Married">Married</option>
<option value="Single">Single</option>
<option value="Divorced">Divorced</option>
<option value="Widowed">Widowed</option>
</select>
<br><br><label for="dov">Date of Visit</label>
<input class="field" type="date" id="dov" name="dov" required>
<br><br><center><input class="button" type="submit" value="Add"></center>
  </form>
</body>
</html>
```

JAVASCRIPTS :

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


import java.io.*;
import jakarta.servlet.*;
import jakarta.servlet.http.*;


public class Home extends HttpServlet {
```

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

response.setContentType("text/html");

PrintWriter pw=response.getWriter();

int flag=0;

JDBC_CON db=new JDBC_CON();

db.establish();

flag=db.valid();

if(flag==2)

{

pw.println("<script>");

pw.println("alert(\"Failed to establish connection.Try again Later. Error
Code :1 \");");

//pw.println("location='http://localhost:8080/ex4sql/index.html';");

pw.println("</script>");

}

else if(flag==3)

{

pw.println("<script>");

pw.println("alert(\"Driver class not found! \");");

//pw.println("location='http://localhost:8080/ex4sql/index.html';");

pw.println("</script>");

}

else

{

pw.println("<script>");

// pw.println("alert(\"Connection esatablished successfully! \");");

pw.println("location='http://localhost:8080/Ex4b/options.html';");

pw.println("</script>");


}
}
```

```java
}

class JDBC_CON{

Connection con;

PreparedStatement ps;

Statement st;

CallableStatement cs;

ResultSet rs;

int flag;

public void establish(){

try

{

Class.forName("com.mysql.cj.jdbc.Driver");

try

{

flag=1;

con
=DriverManager.getConnection("jdbc:mysql://localhost:3306/mysql","root"
,"root");

}

catch (SQLException e)

{

flag=2;

}

}

catch(ClassNotFoundException e)

{

flag=3;

}

}

public int valid(){
```

```java
        return flag;

    }

}


INSERT.java


import java.sql.*;

import java.io.*;

import jakarta.servlet.*;

import jakarta.servlet.http.*;


public class insert extends HttpServlet {

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

response.setContentType("text/html");

PrintWriter pw=response.getWriter();

int flag=0;

Connection con;

Statement st;

ResultSet rs;

try

{

Class.forName("com.mysql.cj.jdbc.Driver");

try

{

flag=1;

con
=DriverManager.getConnection("jdbc:mysql://localhost:3306/patientdb","r
oot","root");

//TABLE COLUMNS IN THIS VIEW : Name, age, ID, gender, address, marital status,
Date of Visit
```

```
//DB SCHEMA :
[PAT_ID ,PAT_NAME ,PAT_AGE ,PAT_GENDER ,PAT_ADDR ,PAT_MARITAL ,PAT_DOV]

try

{


String sql = "INSERT INTO patient values (?, ?, ?, ?, ?, ?, ?)";

PreparedStatement statement = con.prepareStatement(sql);

statement.setInt(1, Integer.parseInt(request.getParameter("pid")));

statement.setString(2, request.getParameter("pname"));

statement.setInt(3, Integer.parseInt(request.getParameter("age")));

statement.setString(4, request.getParameter("gender"));

statement.setString(5, request.getParameter("addr"));

statement.setString(6, request.getParameter("marital"));

statement.setDate(7,
java.sql.Date.valueOf(request.getParameter("dov")));

statement.execute();

pw.println("<script>");

pw.println("alert(\"Inserted Successfully! Click ok to view table contnts
\");");

pw.println("location='http://localhost:8080/Ex4b/viewServlet';");

pw.println("</script>");


}

catch(SQLException e)

{

pw.println("<script>");

pw.println("alert(\"Insert Failed! Try Again! "+e+" \");");

pw.println("location='http://localhost:8080/Ex4b/options.html';");

pw.println("</script>");

}

}

catch (SQLException e)
```

```java
{
flag=2;
}
}
catch(ClassNotFoundException e)
{
flag=3;
}
if(flag==2)
{
pw.println("<script>");
pw.println("alert(\"Failed to establish connection.Try again Later. Error
Code :1 flag: 2 \");");
pw.println("location='http://localhost:8080/Ex4b/options.html';");
pw.println("</script>");
}
else if(flag==3)
{
pw.println("<script>");
pw.println("alert(\"Driver class not found.Error Code :0 flag: 3\");");
pw.println("location='http://localhost:8080/Ex4b/options.html';");
pw.println("</script>");
}
pw.close();
}
}


Search.java


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

```java
import jakarta.servlet.*;

import jakarta.servlet.http.*;


public class search extends HttpServlet {

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

response.setContentType("text/html");

PrintWriter pw=response.getWriter();

int flag=0;

Connection con;

Statement st;

ResultSet rs;

try

{

Class.forName("com.mysql.cj.jdbc.Driver");

try

{

flag=1;

con
=DriverManager.getConnection("jdbc:mysql://localhost:3306/patientdb","r
oot","root");

//TABLE COLUMNS IN THIS VIEW : Name, age, ID, gender, address, marital status,
Date of Visit


//DB SCHEMA :
[PAT_ID ,PAT_NAME ,PAT_AGE ,PAT_GENDER ,PAT_ADDR ,PAT_MARITAL ,PAT_DOV]

try

{


String srch = "SELECT * FROM patient where "+"PAT_ID = " +
request.getParameter("pid")+";";

String cssTag="<link rel=\'stylesheet\' type=\'text/css\'
href=\'tableStyle.css\'>";
```

```
st=con.createStatement();

rs=st.executeQuery(srch);

if(rs.next()){

pw.println("<head>"+cssTag+"<h2>Patient Details</h2>"+"</head>");

pw.println("<div class=\"table-wrapper\">");

pw.println("<table class=\"fl-table\" border=\'1px\'>");

pw.println("<thead>");

pw.println("<tr><th>Name</th><th>Age</th><th>ID</th><th>Gender</th><th>
Address</th><th>Marital status</th><th>Date of Visit</th></tr>");

pw.println("</thead>");

pw.println("<tbody>");

do{

pw.println("<tr><td>"+rs.getString(2)+"</td><td>"+rs.getString(3)+"</td
><td>"+rs.getString(1)+"</td><td>"+rs.getString(4)+"</td><td>"+rs.getSt
ring(5)+"</td><td>"+rs.getString(6)+"</td><td>"+rs.getString(7)+"</td><
/tr>");

}while(rs.next());

pw.println("</table></div><br><br>");

pw.println("<center><input class=\"button\" type=\"submit\"
value=\"Home\"
onclick=\"location='http://localhost:8080/Ex4b/options.html';\"></cente
r>");

pw.println("<script>");


pw.println("</script>");

}

else

{

pw.println("<script>");

pw.println("alert(\"Invalid Patient ID!\");");

pw.println("location='http://localhost:8080/Ex4b/options.html';");

pw.println("</script>");

}
```

```java
}
catch(SQLException e)
{
pw.println("<script>");
pw.println("alert(\"Invalid Patient ID!! Try Again! "+e+" \");");
pw.println("location='http://localhost:8080/Ex4b/options.html';");
pw.println("</script>");
}
}
catch (SQLException e)
{
flag=2;
}
}
catch(ClassNotFoundException e)
{
flag=3;
}
if(flag==2)
{
pw.println("<script>");
pw.println("alert(\"Failed to establish connection.Try again Later. Error Code :1 flag: 2 \");");
pw.println("location='http://localhost:8080/Ex4b/options.html';");
pw.println("</script>");
}
else if(flag==3)
{
pw.println("<script>");
pw.println("alert(\"Driver class not found.Error Code :0 flag: 3\");");
pw.println("location='http://localhost:8080/Ex4b/options.html';");
```

```java
pw.println("</script>");

}

pw.close();

}

}


UPDATE.java


import java.sql.*;

import java.io.*;

import jakarta.servlet.*;

import jakarta.servlet.http.*;


public class update extends HttpServlet {

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

response.setContentType("text/html");

PrintWriter pw=response.getWriter();

int flag=0;

Connection con;

Statement st;

ResultSet rs;

try

{

Class.forName("com.mysql.cj.jdbc.Driver");

try

{

flag=1;

con
=DriverManager.getConnection("jdbc:mysql://localhost:3306/patientdb","r
oot","root");
```

```java
//TABLE COLUMNS IN THIS VIEW : Name, age, ID, gender, address, marital status,
Date of Visit


//DB SCHEMA :
[PAT_ID ,PAT_NAME ,PAT_AGE ,PAT_GENDER ,PAT_ADDR ,PAT_MARITAL ,PAT_DOV]

try

{


String search = "SELECT * FROM patient where "+"PAT_ID = " +
request.getParameter("pid")+";";

String cssTag="<link rel=\'stylesheet\' type=\'text/css\'
href=\'updateStyle.css\'>";

st=con.createStatement();

rs=st.executeQuery(search);

if(rs.next()){


//pw.println("<tr><td>"+rs.getString(2)+"</td><td>"+rs.getString(3)+"</
td><td>"+rs.getString(1)+"</td><td>"+rs.getString(4)+"</td><td>"+rs.get
String(5)+"</td><td>"+rs.getString(6)+"</td><td>"+rs.getString(7)+"</td
></tr>");

pw.println("<html>");

pw.println("<head>"+cssTag+"</head>");

pw.println("<body>");

pw.println("<h2 Patient Management System</h2>");

pw.println("<h3>Add Patient Entry</h3>");

pw.println("<form method=\"get\"
action=\"http://localhost:8080/Ex4b/updateServlet2\">");

pw.println("<label for=\"ename\">Patient Name</label>");

pw.println("<input class=\"field\" type=\"text\" id=\"pname\"
name=\"pname\" value=\""+rs.getString(2) +"\" required>");

pw.println("<br><br><label for=\"pid\">Patient ID</label>");

pw.println("<input class=\"field\" type=\"Number\" id=\"pid\"
name=\"pid\" value=\""+rs.getString(1) +"\" required>");

pw.println("<br><br><label for=\"age\">Age</label>");
```

```java
pw.println("<input class=\"field\" type=\"Number\" id=\"age\" name=\"age\" value=\""+rs.getString(3) +"\" required>");

pw.println("<br><br><label for=\"gender\">Gender</label>");

pw.println("      ");

pw.println("<input type=\"radio\" id=\"gender\" name=\"gender\" value=\"Male\" required>");

pw.println("<label for=\"male\">Male</label><br>");

pw.println("           ");

pw.println("<input type=\"radio\" id=\"gender\" name=\"gender\" value=\"Female\" required> ");

pw.println("<label for=\"female\">Female</label><br>");

pw.println("           ");

pw.println("<input type=\"radio\" id=\"gender\" name=\"gender\" value=\"Other\" required>");

pw.println("<label for=\"other\">Other</label>");

pw.println("<br><br><label for=\"addr\">Address</label>");

pw.println("<input class=\"field\" type=\"text\" id=\"addr\" name=\"addr\" value=\""+rs.getString(5) +"\" required>");

pw.println("<br><br><label for=\"marital\">Marital Status</label>");

pw.println("<select class=\"field\" id=\"marital\" name=\"marital\" value=\""+rs.getString(6) +"\" required>");

pw.println("<option value=\"Married\">Married</option>");

pw.println("<option value=\"Single\">Single</option>");

pw.println("<option value=\"Divorced\">Divorced</option>");

pw.println("<option value=\"Widowed\">Widowed</option>");

pw.println("</select>");

pw.println("<br><br><label for=\"dov\">Date of Visit</label>");

pw.println("<input class=\"field\" type=\"date\" id=\"dov\" name=\"dov\" value=\""+rs.getString(7) +"\" required>");

pw.println("<br><br><input class=\"button\" type=\"submit\" value=\"Update\">");

pw.println("</form></body></html>");
```

```java
}
else
{
pw.println("<script>");

pw.println("alert(\"Invalid Patient ID!\");");

pw.println("location='http://localhost:8080/Ex4b/options.html';");

pw.println("</script>");

}


}
catch(SQLException e)
{
pw.println("<script>");

pw.println("alert(\"Invalid Patient ID!! Try Again! "+e+" \");");

pw.println("location='http://localhost:8080/Ex4b/options.html';");

pw.println("</script>");

}
}
catch (SQLException e)
{
flag=2;

}
}
catch(ClassNotFoundException e)
{
flag=3;

}
if(flag==2)
{
pw.println("<script>");
```

```java
pw.println("alert(\"Failed to establish connection.Try again Later. Error Code :1 flag: 2 \");");

pw.println("location='http://localhost:8080/Ex4b/options.html';");

pw.println("</script>");

}
else if(flag==3)
{
pw.println("<script>");

pw.println("alert(\"Driver class not found.Error Code :0 flag: 3\");");

pw.println("location='http://localhost:8080/Ex4b/options.html';");

pw.println("</script>");

}
pw.close();

}
}
```

VIEW.java

```java
import java.sql.*;

import java.io.*;

import jakarta.servlet.*;

import jakarta.servlet.http.*;


public class view extends HttpServlet {

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

response.setContentType("text/html");

PrintWriter pw=response.getWriter();

int flag=0;

Connection con;

Statement st;

ResultSet rs;

try
```

```java
{

Class.forName("com.mysql.cj.jdbc.Driver");

try

{

flag=1;

con
=DriverManager.getConnection("jdbc:mysql://localhost:3306/patientdb","r
oot","root");

//TABLE COLUMNS IN THIS VIEW : Name, age, ID, gender, address, marital status,
Date of Visit


//DB SCHEMA :
[PAT_ID ,PAT_NAME ,PAT_AGE ,PAT_GENDER ,PAT_ADDR ,PAT_MARITAL ,PAT_DOV]

try

{

String srch = "SELECT * FROM patient;";

String cssTag="<link rel=\'stylesheet\' type=\'text/css\'
href=\'tableStyle.css\'>";


st=con.createStatement();

rs=st.executeQuery(srch);

if(rs.next()){

pw.println("<head>"+cssTag+"<h2>Patient Database</h2>"+"</head>");

pw.println("<div class=\"table-wrapper\">");

pw.println("<table class=\"fl-table\" border=\'1px\'>");

pw.println("<thead>");

pw.println("<tr><th>Name</th><th>Age</th><th>ID</th><th>Gender</th><th>
Address</th><th>Marital status</th><th>Date of Visit</th></tr>");

pw.println("</thead>");

pw.println("<tbody>");

do{

pw.println("<tr><td>"+rs.getString(2)+"</td><td>"+rs.getString(3)+"</td
><td>"+rs.getString(1)+"</td><td>"+rs.getString(4)+"</td><td>"+rs.getSt
```

```java
ring(5)+"</td><td>"+rs.getString(6)+"</td><td>"+rs.getString(7)+"</td></tr>");

}while(rs.next());

pw.println("</tbody>");

pw.println("</table></div><br><br>");

pw.println("<center><input class=\"button\" type=\"submit\" value=\"Home\" onclick=\"location='http://localhost:8080/Ex4b/options.html';\"></center>");

pw.println("<script>");

pw.println("</script>");

}

else

{

pw.println("<script>");

pw.println("alert(\"No data exist \");");

pw.println("location='http://localhost:8080/Ex4b/options.html';");

pw.println("</script>");

}

}

catch(SQLException e)

{

pw.println("<script>");

pw.println("alert(\"Can't print table Exception: "+e+" \");");

pw.println("location='http://localhost:8080/Ex4b/options.html';");

pw.println("</script>");

}

}

catch (SQLException e)

{

flag=2;

}
```

```java
}
catch(ClassNotFoundException e)
{
flag=3;
}
if(flag==2)
{
pw.println("<script>");
pw.println("alert(\"Failed to establish connection.Try again Later. Error Code :1 flag: 2 \");");
pw.println("location='http://localhost:8080/Ex4b/options.html';");
pw.println("</script>");
//response.sendRedirect("http://localhost:8080/LabEX4/login.html");
}
else if(flag==3)
{
pw.println("<script>");
pw.println("alert(\"Driver class not found.Error Code :0 flag: 3\");");
pw.println("location='http://localhost:8080/Ex4b/options.html';");
pw.println("</script>");
//response.sendRedirect("http://localhost:8080/LabEX4/login.html");
}
pw.close();
}
}
```

DELETE.java

```java
import java.sql.*;
import java.io.*;
import jakarta.servlet.*;
import jakarta.servlet.http.*;
```

```java
public class delete extends HttpServlet {

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

response.setContentType("text/html");

PrintWriter pw=response.getWriter();

int flag=0;

Connection con;

ResultSet rs;

Statement st;

try

{

Class.forName("com.mysql.cj.jdbc.Driver");

try

{

flag=1;

con
=DriverManager.getConnection("jdbc:mysql://localhost:3306/patientdb","r
oot","root");

//TABLE COLUMNS IN THIS VIEW : Name, age, ID, gender, address, marital status,
Date of Visit


//DB SCHEMA :
[PAT_ID ,PAT_NAME ,PAT_AGE ,PAT_GENDER ,PAT_ADDR ,PAT_MARITAL ,PAT_DOV]

try

{

String srch = "SELECT * FROM patient where "+"PAT_ID = " +
request.getParameter("pid")+";";

st=con.createStatement();

rs=st.executeQuery(srch);


if(rs.next()){

String del = "Delete FROM patient where "+"PAT_ID = " +
request.getParameter("pid")+";";

st=con.createStatement();
```

```java
st.executeUpdate(del);

pw.println("<script>");

pw.println("alert(\"Deleted Successfully! Click ok to view table contnts \");");

pw.println("location='http://localhost:8080/Ex4b/viewServlet';");

pw.println("</script>");

}


else{

pw.println("<script>");

pw.println("alert(\"Invalid Patient ID! Patient doesn't exist ! Try again\");");

pw.println("location='http://localhost:8080/Ex4b/options.html';");

pw.println("</script>");

}


}

catch(SQLException e)

{

pw.println("<script>");

pw.println("alert(\"Insert Failed! Try Again! "+e+" \");");

pw.println("location='http://localhost:8080/Ex4b/options.html';");

pw.println("</script>");

}

}

catch (SQLException e)

{

flag=2;

}

}

catch(ClassNotFoundException e)

{
```

```java
flag=3;

}

if(flag==2)

{

pw.println("<script>");

pw.println("alert(\"Failed to establish connection.Try again Later. Error
Code :1 flag: 2 \");");

pw.println("location='http://localhost:8080/Ex4b/options.html';");

pw.println("</script>");

}

else if(flag==3)

{

pw.println("<script>");

pw.println("alert(\"Driver class not found.Error Code :0 flag: 3\");");

pw.println("location='http://localhost:8080/Ex4b/options.html';");

pw.println("</script>");

}

pw.close();

}

}
```

SQL FILES

Populate_patients.sql

```sql
use patientdb;

Insert into patient values(111,"Zide",22,"Male","Chennai,
India","Unmarried","2021-03-25");

Insert into patient values(222,"Zezilia",22,"Female","Chennai,
India","Married","2021-03-24");
```

Displayrows.sql

```sql
use patientdb;

select * from patient;
```

Create_patients.sql

```sql
CREATE DATABASE IF NOT EXISTS patientdb;

use patientdb;

CREATE TABLE IF NOT EXISTS PATIENT(

PAT_ID INT NOT NULL AUTO_INCREMENT,

PAT_NAME VARCHAR(20) NOT NULL,

PAT_AGE INT NOT NULL,

PAT_GENDER VARCHAR(10) NOT NULL,

PAT_ADDR VARCHAR(100) NOT NULL,

PAT_MARITAL VARCHAR(20) NOT NULL,

PAT_DOV DATE NOT NULL,

PRIMARY KEY(PAT_ID)

);
```

WEB.xml

```xml
<web-app>

<servlet>

<servlet-name>dbservlet</servlet-name>

<servlet-class>Home</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>dbservlet</servlet-name>

<url-pattern>/dbservlet</url-pattern>

</servlet-mapping>


<servlet>

<servlet-name>viewServlet</servlet-name>

<servlet-class>view</servlet-class>

</servlet>
```

```xml
<servlet-mapping>
<servlet-name>viewServlet</servlet-name>
<url-pattern>/viewServlet</url-pattern>
</servlet-mapping>

<servlet>
<servlet-name>addServlet</servlet-name>
<servlet-class>insert</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>addServlet</servlet-name>
<url-pattern>/addServlet</url-pattern>
</servlet-mapping>

<servlet>
<servlet-name>deleteServlet</servlet-name>
<servlet-class>delete</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>deleteServlet</servlet-name>
<url-pattern>/deleteServlet</url-pattern>
</servlet-mapping>

<servlet>
<servlet-name>searchServlet</servlet-name>
<servlet-class>search</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>searchServlet</servlet-name>
<url-pattern>/searchServlet</url-pattern>
</servlet-mapping>
```

```xml
<servlet>
<servlet-name>updateServlet</servlet-name>
<servlet-class>update</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>updateServlet</servlet-name>
<url-pattern>/updateServlet</url-pattern>
</servlet-mapping>

<servlet>
<servlet-name>updateServlet2</servlet-name>
<servlet-class>update2</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>updateServlet2</servlet-name>
<url-pattern>/updateServlet2</url-pattern>
</servlet-mapping>

</web-app>
```