**NAME: Sudharshan R 185001173**

**EX-NO: 3**

**EX-NAME: Java Servlets and MySQL**

**Date:25-03-2020**

**AIM:**

1. Create a HTML file with following form fields:

Write a servlet program which reads all form details, finds the gross pay based on basic pay and designation. The servlet returns all details (a-j, gross pay) in table format to the client.

1. Patient Management System (PMS)

Develop a Patient Management System (PMS) in a Hospital that maintains the patient records.

**CODE:**

**Db\_upd.java**

import java.sql.\*;

import java.io.\*;

import javax.servlet.\*;

import javax.servlet.http.\*;

public class db\_upd 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;

PreparedStatement ps;

Statement st;

CallableStatement cs;

ResultSet rs;

try

{

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

try

{

flag=1;

con =DriverManager.getConnection("jdbc:mysql://localhost:3306/patient","root","Sun@0097");

//Name, age, ID, gender, address, marital status, Date of Visit (Name,Age,ID,gender,address,marital\_status,DateOfVisit)

try

{

String srch = " SELECT \* FROM Patient\_Details WHERE ID="+(String)request.getParameter("id");

st=con.createStatement();

rs=st.executeQuery(srch);

if(rs.next())

{

String update = "UPDATE Patient\_Details SET age=?,address=? where id ="+request.getParameter("id");

ps=con.prepareStatement(update);

ps.setInt(1,Integer.parseInt(request.getParameter("age")));

ps.setString(2,request.getParameter("addr"));

ps.execute();

pw.println("<script>");

pw.println("alert(\"Updated Successfully \");");

pw.println("location='http://localhost:8080/LabEX4/update.html';");

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

}

else

{

pw.println("<script>");

pw.println("alert(\"Not found \");");

pw.println("location='http://localhost:8080/LabEX4/update.html';");

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

}

}

catch(SQLException e)

{

pw.println("<script>");

pw.println("alert(\"Could not Update data"+e+" \");");

pw.println("location='http://localhost:8080/LabEX4/update.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 \");");

pw.println("location='http://localhost:8080/LabEX4/login.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 \");");

pw.println("location='http://localhost:8080/LabEX4/login.html';");

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

//response.sendRedirect("http://localhost:8080/LabEX4/login.html");

}

pw.close();

}

}

**Delete.html**

<!DOCTYPE html>

<html>

<head>

<title>Lab Ex4</title>

<link rel="stylesheet" href="formstyle.css">

</head>

<body>

<div class="formblock centre" style="height:50%;">

<form class="centre" name="delete" action="./del">

<h1> DELETE</h1><br><br>

<input type="text" name="id" id="id" placeholder="ID"><br><br>

<input style="float:left;width:33%;" type="submit" value="Delete">

<input style="float:left;width:32%;" type="button" value="View" onclick='window.location.href="http://localhost:8080/LabEX4/view";'>

<input style="float:left;width:32%;margin:5px 2px;" type="button" value="Home" onclick='window.location.href="http://localhost:8080/LabEX4/home.html";'>

</form>

</div>

</body>

</html>

**Delete.java**

import java.sql.\*;

import java.io.\*;

import javax.servlet.\*;

import javax.servlet.http.\*;

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;

PreparedStatement ps;

Statement st;

CallableStatement cs;

ResultSet rs;

try

{

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

try

{

flag=1;

con =DriverManager.getConnection("jdbc:mysql://localhost:3306/patient","root","Sun@0097");

//Name, age, ID, gender, address, marital status, Date of Visit (Name,Age,ID,gender,address,marital\_status,DateOfVisit)

try

{

String del = " DELETE FROM Patient\_Details WHERE ID="+(String)request.getParameter("id");

ps=con.prepareStatement(del);

int af\_rows = ps.executeUpdate();

if(af\_rows==1){

pw.println("<script>");

pw.println("alert(\"deleted Successfully \");");

pw.println("location='http://localhost:8080/LabEX4/delete.html';");

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

}

else

{

pw.println("<script>");

pw.println("alert(\"Not found \");");

pw.println("location='http://localhost:8080/LabEX4/delete.html';");

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

}

}

catch(SQLException e)

{

pw.println("<script>");

pw.println("alert(\"Could not delete data"+e+" \");");

pw.println("location='http://localhost:8080/LabEX4/delete.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 \");");

pw.println("location='http://localhost:8080/LabEX4/login.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 \");");

pw.println("location='http://localhost:8080/LabEX4/login.html';");

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

//response.sendRedirect("http://localhost:8080/LabEX4/login.html");

}

pw.close();

}

}

**Employee.html**

<!DOCTYPE html>

<html>

<head>

<title>Employee</title>

<link rel="stylesheet" href="style.css">

</head>

<body>

<h1 class="centre">Employee Details</h1>

<form action="http://localhost:8080/LabEX4/EX">

<input type="number" id="eid" name="eid" min="2016000" max="2025000" onblur="this.checkValidity();" placeholder="ID" required><br>

<input type="text" id="ename" oninvalid="alert('Name must be only alphabets and between 1 and 32 characters');" pattern="[A-Za-z ]{1,32}" onblur="this.checkValidity();" name="ename" placeholder="Name" required><br>

<input type="text" id="desig" name="desig" pattern="[A-Za-z ]{1,40}" onblur="this.checkValidity();" placeholder="Designation" required><br>

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

<option value="Developement">Developement</option>

<option value="Research">Research</option>

<option value="Production">Production</option>

</select>

<br>

<input type="number" id="sal" name="sal" min="20000" max="100000" onblur="this.checkValidity();" placeholder="Basic Salary" required><br>

<input type="tel" id="phone" name="phone" pattern="[0-9]{5}-[0-9]{5}" onblur="this.checkValidity();" placeholder="Contact Number" oninvalid="alert('match the pattern properly');" required><br>

<p style="color:grey;text-align: center;">example : 12345-67890</p><br>

<textarea id="addr" name="addr" rows="4" cols="50" onfocus="this.value ='';" onselect="document.getElementById('adr').innerHTML = 'You have entered address';" oninvalid="alert('address must be only alphanumeric');" pattern="[A-Za-z 0-9]{1,}" onblur="this.checkValidity();" required> Enter your permanent address </textarea><br>

<p id="adr"></p>

<label for="dob">Date of Birth:</label>

<input type="date" id="dob" name="dob" required><br><br>

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

<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><br>

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

<option value="Bachelor">Bachelor</option>

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

<option value="Spinster">Spinster</option>

<option value="Widow">Widow</option>

</select>

<br>

<input type="reset" value="Reset">

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

</body>

</html>

**Formstyle.css**

.formblock{

display:flex;

border-radius:50px;

background:#191919;

width:30%;

height:90%;

text-align:center;

}

.centre{

margin: 0;

position: absolute;

top: 50%;

left: 50%;

-ms-transform: translate(-50%, -50%);

transform: translate(-50%, -50%);

color:white;

}

.centre input[type='text'],.centre input[type='number'],.centre input[type='password'],.centre input[type='date'],.centre textarea,.centre input[type='submit']{

background:none;

display:block;

margin:5px auto;

text-align:center;

border:2px solid blue;

width:110%;

transform:translateX(-6%);

padding-top:10px;

padding-bottom: 10px;

outline:none;

color:white;

border-radius:20px;

}

body{

background: #34495e;

}

.centre input[type='text']:focus,.centre input[type='number']:focus,.centre input[type='date']:focus,.centre textarea:focus,.centre input[type='password']:focus{

width:130%;

transform:translateX(-12%);

}

.slct{

background:none;

display:block;

margin:5px auto;

text-align-last:center;

border:2px solid blue;

width:110%;

transform:translateX(-6%);

padding-top:10px;

padding-bottom: 10px;

outline:none;

color:white;

border-radius:20px;

}

.slct option{

background: none;

color:black;

}

.centre input[type='submit']{

border:2px solid green;

width:50%;

}

.centre input[type='submit']:hover{

border:2px solid green;

cursor:pointer;

background: #2ecc71;

}

.centre input[type='button']{

background:none;

display:block;

margin:5px auto;

text-align:center;

border:2px solid green;

width:50%;

padding-top:10px;

padding-bottom: 10px;

outline:none;

color:white;

border-radius:20px;

}

.centre input[type='button']:hover{

border:2px solid green;

cursor:pointer;

background: #2ecc71;

}

**Grosscal.java**

import java.io.\*;

import javax.servlet.\*;

import javax.servlet.http.\*;

public class grosscal extends HttpServlet

{

public float calgross(float sal, String desig)

{

if(desig.equalsIgnoreCase("Manager"))

return sal+5000;

else if(desig.equalsIgnoreCase("Consultant"))

return sal+3000;

else if(desig.equalsIgnoreCase("developer"))

return sal+2000;

else

return sal+1000;

}

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

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

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

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

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

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

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

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

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

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

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

float s=Float.parseFloat(sal);

float gross = calgross(s,desig);

response.setContentType("text/html");

PrintWriter pw = response.getWriter();

pw.println("<link rel=\"stylesheet\" href=\"style.css\">");

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

pw.println("<thead>");

pw.println("<tr><th>Attribute</th><th>Value</th></tr>");

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

pw.println("<tbody>");

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>"+desig+"</td></tr>");

pw.println("<tr><td>Department</td><td>"+dept+"</td></tr>");

pw.println("<tr><td>Salary</td><td>"+sal+"</td></tr>");

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

pw.println("<tr><td>Address</td><td>"+addr+"</td></tr>");

pw.println("<tr><td>Date of Birth</td><td>"+dob+"</td></tr>");

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

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

pw.println("<tr><td>Gross Pay</td><td>"+gross+"</td></tr>");

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

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

pw.close();

}

public void destroy()

{

}

}

**Home.html**

<!DOCTYPE html>

<html>

<head>

<title>Lab Ex4</title>

<link rel="stylesheet" href="indexstyle.css">

</head>

<body>

<div class="block" style="height:70%;">

<button style="height:15%;transform: translateY(50%);" onclick='window.location.href="http://localhost:8080/LabEX4/update.html";'>Update Record</button>

<button style="height:15%;transform: translateY(50%);" onclick='window.location.href="http://localhost:8080/LabEX4/delete.html";'>Delete Record</button>

<button style="height:15%;transform: translateY(50%);" onclick='window.location.href="http://localhost:8080/LabEX4/insert.html";'>Insert Record</button>

<button style="height:15%;transform: translateY(50%);" onclick='window.location.href="http://localhost:8080/LabEX4/view";'>View Record</button>

<button style="height:15%;transform: translateY(50%);" onclick='window.location.href="http://localhost:8080/LabEX4/search.html";'>Search Record</button>

</div>

</body>

</html>

**Home.java**

import java.sql.\*;

import java.io.\*;

import javax.servlet.\*;

import javax.servlet.http.\*;

public class Home 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;

PreparedStatement ps;

Statement st;

CallableStatement cs;

ResultSet rs;

try

{

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

try

{

flag=1;

con =DriverManager.getConnection("jdbc:mysql://localhost:3306/patient","root","Sun@0097");

}

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 \");");

pw.println("location='http://localhost:8080/LabEX4/login.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 \");");

pw.println("location='http://localhost:8080/LabEX4/login.html';");

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

//response.sendRedirect("http://localhost:8080/LabEX4/login.html");

}

else

{

//response.sendRedirect("http://localhost:8080/LabEX4/home.html");

pw.println("<script>");

pw.println("alert(\"Successfully established connection. \");");

pw.println("location='http://localhost:8080/LabEX4/home.html';");

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

}

}

}

**Index.html**

<!DOCTYPE html>

<html>

<head>

<title>Lab Ex4</title>

<link rel="stylesheet" href="indexstyle.css">

</head>

<body>

<div class="block">

<button onclick='location.replace("http://localhost:8080/LabEX4/Employee.html");'>Employee details</button><br>

<button onclick='location.replace("http://localhost:8080/LabEX4/login.html");'>Patient record</button>

</div>

</body>

</html>

**Indexstyle.css**

body{

background: #34495e;

}

.block{

border-radius:50px;

background:#191919;

width:30%;

height:50%;

text-align:center;

margin: 0;

position: absolute;

top: 50%;

left: 50%;

-ms-transform: translate(-50%, -50%);

transform: translate(-50%, -50%);

}

button{

background:none;

display:block;

margin:5px auto;

text-align:center;

border:2px solid green;

width:50%;

height:20%;

padding-top:10px;

padding-bottom: 10px;

outline:none;

color:white;

transform: translateY(100%);

border-radius:20px;

}

button:hover{

border:2px solid green;

cursor:pointer;

background: #2ecc71;

}

**Insert.html**

<!DOCTYPE html>

<html>

<head>

<title>Lab Ex4</title>

<link rel="stylesheet" href="formstyle.css">

</head>

<body>

<div class="formblock centre">

<form class="centre" name="insert" action="./ins">

<h1> INSERT </h1>

<input type="text" name="id" id="id" placeholder="ID"><br>

<input type="text" name="name" id="name" placeholder="Name"><br>

<input type="number" name="age" id="age" placeholder="Age"><br>

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

<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>

<textarea id="addr" name="addr" rows="4" cols="50" onfocus="this.value ='';" required>Address </textarea><br>

<select class="slct" name="ms" id="ms" required>

<option value="Bachelor">Bachelor</option>

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

<option value="Spinster">Spinster</option>

<option value="Widow">Widow</option>

</select><br>

<label for="dov">Date of Visit:</label>

<input type="date" id="dov" name="dov" required><br>

<input style="float:left;width:33%;" type="submit" value="Insert">

<input style="float:left;width:32%;" type="button" value="View" onclick='window.location.href="http://localhost:8080/LabEX4/view";'>

<input style="float:left;width:32%;margin:5px 3px;" type="button" value="Home" onclick='window.location.href="http://localhost:8080/LabEX4/home.html";'>

</form>

</div>

</body>

</html>

**Insert.java**

import java.sql.\*;

import java.io.\*;

import javax.servlet.\*;

import javax.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;

PreparedStatement ps;

Statement st;

CallableStatement cs;

ResultSet rs;

try

{

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

try

{

flag=1;

con =DriverManager.getConnection("jdbc:mysql://localhost:3306/patient","root","Sun@0097");

//Name, age, ID, gender, address, marital status, Date of Visit (Name,Age,ID,gender,address,marital\_status,DateOfVisit)

try

{

String insert = "INSERT INTO Patient\_Details(Name,Age,ID,gender,address,marital\_status,DateOfVisit) VALUES(?,?,?,?,?,?,?)";

ps=con.prepareStatement(insert);

ps.setString(1,request.getParameter("name"));

ps.setInt(2,Integer.parseInt(request.getParameter("age")));

ps.setInt(3,Integer.parseInt(request.getParameter("id")));

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

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

ps.setString(6,request.getParameter("ms"));

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

ps.execute();

pw.println("<script>");

pw.println("alert(\"Inserted Successfully \");");

pw.println("location='http://localhost:8080/LabEX4/insert.html';");

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

}

catch(SQLException e)

{

pw.println("<script>");

pw.println("alert(\"Could not Insert data"+e+" \");");

pw.println("location='http://localhost:8080/LabEX4/insert.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 \");");

pw.println("location='http://localhost:8080/LabEX4/login.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 \");");

pw.println("location='http://localhost:8080/LabEX4/login.html';");

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

//response.sendRedirect("http://localhost:8080/LabEX4/login.html");

}

pw.close();

}

}

**Login.html**

<!DOCTYPE html>

<html>

<head>

<title>Login</title>

<script>

function validate(){

var id=document.getElementById("id").value;

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

var flag='0';

if(id=="user")

{

if(pass=="1234")

{

flag='1';

}

}

if(flag=='1')

{

location.replace("http://localhost:8080/LabEX4/valid");

}

else

{

alert('Invalid user ID /Password');

document.getElementById("id").value="";

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

}

}

</script>

<link rel="stylesheet" href="formstyle.css">

</head>

<body>

<div class="formblock centre" style="height:50%;">

<form class="centre" name="login">

<input type='text' id="id" name="id" placeholder="User ID"><br><br>

<input type='password' id="pass" name="pass" placeholder="Password"><br><br>

<input type="button" value="Login" onclick="validate();">

</form>

</div>

</body>

</html>

**Search.html**

<!DOCTYPE html>

<html>

<head>

<title>Lab Ex4</title>

<link rel="stylesheet" href="formstyle.css">

</head>

<body>

<div class="formblock centre" style="height:50%;">

<form class="centre" name="search" action="./srch">

<h1> SEARCH</h1><br><br>

<input type="text" name="id" id="id" placeholder="ID"><br><br>

<input style="float:left;width:49%;" type="submit" value="Search">

<input style="float:left;width:49%;" type="button" value="Home" onclick='window.location.href="http://localhost:8080/LabEX4/home.html";'>

</form>

</div>

</body>

</html>

**Search.java**

import java.sql.\*;

import java.io.\*;

import javax.servlet.\*;

import javax.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;

PreparedStatement ps;

Statement st;

CallableStatement cs;

ResultSet rs;

try

{

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

try

{

flag=1;

con =DriverManager.getConnection("jdbc:mysql://localhost:3306/patient","root","Sun@0097");

//Name, age, ID, gender, address, marital status, Date of Visit (Name,Age,ID,gender,address,marital\_status,DateOfVisit)

try

{

String srch = " SELECT \* FROM Patient\_Details WHERE ID="+(String)request.getParameter("id");

st=con.createStatement();

rs=st.executeQuery(srch);

if(rs.next()){

pw.println("<link rel=\"stylesheet\" href=\"viewstyle.css\">");

pw.println("<div class=\"formblock centre\">");

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

pw.println("<thead>");

pw.println("<tr><th>Attribute</th><th>Value</th></tr>");

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

pw.println("<tbody>");

pw.println("<tr><td>Name</td><td>"+rs.getString(1)+"</td></tr>");

pw.println("<tr><td>Age</td><td>"+rs.getString(2)+"</td></tr>");

pw.println("<tr><td>ID</td><td>"+rs.getString(3)+"</td></tr>");

pw.println("<tr><td>Gender</td><td>"+rs.getString(4)+"</td></tr>");

pw.println("<tr><td>Address</td><td>"+rs.getString(5)+"</td></tr>");

pw.println("<tr><td>Marital Status</td><td>"+rs.getString(6)+"</td></tr>");

pw.println("<tr><td>Date of visit</td><td>"+rs.getString(7)+"</td></tr>");

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

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

pw.println("<br><br><button style=\"height:10%;\" onclick=\'window.location.href=\"http://localhost:8080/LabEX4/home.html\";\'>Home</button>");

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

pw.println("<script>");

pw.println("alert(\"Found!! \");");

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

}

else

{

pw.println("<script>");

pw.println("alert(\"Not found \");");

pw.println("location='http://localhost:8080/LabEX4/search.html';");

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

}

}

catch(SQLException e)

{

pw.println("<script>");

pw.println("alert(\"Could not delete data"+e+" \");");

pw.println("location='http://localhost:8080/LabEX4/search.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 \");");

pw.println("location='http://localhost:8080/LabEX4/login.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 \");");

pw.println("location='http://localhost:8080/LabEX4/login.html';");

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

//response.sendRedirect("http://localhost:8080/LabEX4/login.html");

}

pw.close();

}

}

**Style.css**

input[type='text'],input[type='number'],input[type='tel'],input[type='date'],select,textarea {

background:none;

display:block;

margin:5px auto;

text-align:center;

border:2px solid blue;

width:50%;

padding-top:10px;

padding-bottom: 10px;

outline:none;

color:white;

border-radius:20px;

}

input:hover,textarea:hover,select:hover{

background-color:#CED4D4;

}

.centre {

text-align: center;

}

h1{

color:red;

font-size:24px;

letter-spacing: 1.5px;

text-shadow: 2px 2px black;

font-family: Arial, Helvetica, sans-serif;

}

input[type=submit] {

width: 25%;

background-color: #4CAF50;

color: white;

padding: 14px 20px;

margin-left:auto;

margin-right:auto;

border: none;

border-radius: 4px;

cursor: pointer;

}

input[type=reset] {

width: 25%;

background-color: #4CAF50;

color: white;

padding: 14px 20px;

margin-left:auto;

margin-right:auto;

border: none;

border-radius: 4px;

cursor: pointer;

}

input[type=submit]:hover {

background-color: #45a049;

}

input[type=reset]:hover {

background-color: #45a049;

}

body{

background-color:#191919;

padding-left:50px;

color:white;

text-align:center;

}

table{

border:2px solid blue;

border-collapse:collapse;

margin-left :auto;

margin-right :auto;

table-layout:auto;

width:60%;

color:white;

}

thead

{

background:none;

}

td{

margin-left :auto;

margin-right: auto;

padding-left: 15px;

border:2px solid blue;

border-collapse:collapse;

background:none;

}

td:hover

{

background:#2ecc71 ;

}

select

{

text-align-last:center;

}

**Update.html**

<!DOCTYPE html>

<html>

<head>

<title>Lab Ex4</title>

<link rel="stylesheet" href="formstyle.css">

</head>

<body>

<div class="formblock centre" style="height:50%;">

<form class="centre" name="delete" action="./upd">

<h1> UPDATE</h1><br><br>

<input type="text" name="id" id="id" placeholder="ID"><br><br>

<input style="float:left;width:33%;" type="submit" value="Update">

<input style="float:left;width:32%;" type="button" value="View" onclick='window.location.href="http://localhost:8080/LabEX4/view";'>

<input style="float:left;width:32%;margin:5px 2px;" type="button" value="Home" onclick='window.location.href="http://localhost:8080/LabEX4/home.html";'>

</form>

</body>

</html>

**update.java**

import java.sql.\*;

import java.io.\*;

import javax.servlet.\*;

import javax.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;

PreparedStatement ps;

Statement st;

CallableStatement cs;

ResultSet rs;

try

{

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

try

{

flag=1;

con =DriverManager.getConnection("jdbc:mysql://localhost:3306/patient","root","Sun@0097");

//Name, age, ID, gender, address, marital status, Date of Visit (Name,Age,ID,gender,address,marital\_status,DateOfVisit)

try

{

String srch = " SELECT \* FROM Patient\_Details WHERE ID="+(String)request.getParameter("id");

st=con.createStatement();

rs=st.executeQuery(srch);

if(rs.next())

{

pw.println("<link rel=\"stylesheet\" href=\"formstyle.css\">");

pw.println("<div class=\"formblock centre\" style=\"height:95%;\">");

pw.println(" <form class=\"centre\" name=\"insert\" action=\"./upd1\">");

pw.println(" <h1> UPDATE </h1>");

pw.println(" <input type=\"text\" name=\"id\" id=\"id\" value=\'"+(String)request.getParameter("id")+"\' readonly><br>");

pw.println(" <input type=\"text\" name=\"name\" id=\"name\" value=\'"+rs.getString(1)+"\' readonly><br>");

pw.println(" <input type=\"number\" name=\"age\" id=\"age\" value=\'"+rs.getString(2)+"\' ><br>");

pw.println(" <input type=\"text\" id=\"gender\" name=\"gender\" value=\'"+rs.getString(4)+"\' readonly><br>");

pw.println(" <textarea id=\"addr\" name=\"addr\" rows=\"4\" cols=\"50\" required> "+rs.getString(5)+" </textarea><br>");

pw.println(" <input type=\"text\" id=\"ms\" name=\"ms\" value=\'"+rs.getString(6)+"\' readonly><br>");

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

pw.println(" <input type=\"date\" id=\"dov\" name=\"dov\" value=\'"+rs.getString(7)+"\' readonly><br>");

pw.println(" <input style=\"float:left;width:33%;\" type=\"submit\" value=\"Update\">");

pw.println(" <input style=\"float:left;width:32%;\" type=\"button\" value=\"View\" onclick='window.location.href=\"http://localhost:8080/LabEX4/view\";'>");

pw.println(" <input style=\"float:left;width:32%;margin:5px 3px;\" type=\"button\" value=\"Home\" onclick='window.location.href=\"http://localhost:8080/LabEX4/home.html\";'>");

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

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

/\*pw.println("<form name=\"insert\" action=\"./upd1\">");

pw.println("<input type=\"number\" id='id' name='id' style='display:hidden;' value=\'"+(String)request.getParameter("id")+"\'>");

pw.println(" <label>Name:</label>");

pw.println(" <input type=\"text\" name=\"name\" id=\"name\" value=\'"+rs.getString(1)+"\'><br><br>");

pw.println(" <label>Age:</label>");

pw.println(" <input type=\"number\" name=\"age\" id=\"age\" value=\'"+rs.getString(2)+"\'><br><br>");

pw.println(" <label>Gender:</label>");

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

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

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

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

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

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

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

pw.println(" <textarea id=\"addr\" name=\"addr\" rows=\"4\" cols=\"50\" required> "+rs.getString(5)+" </textarea><br><br>");

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

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

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

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

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

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

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

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

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

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

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

pw.println("<script>");

pw.println("document.getElementById(\'"+rs.getString(4)+"\').checked=true;");

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

}

else

{

pw.println("<script>");

pw.println("alert(\"Not found \");");

pw.println("location='http://localhost:8080/LabEX4/search.html';");

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

}

}

catch(SQLException e)

{

pw.println("<script>");

pw.println("alert(\"Could not Update data"+e+" \");");

pw.println("location='http://localhost:8080/LabEX4/insert.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 \");");

pw.println("location='http://localhost:8080/LabEX4/login.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 \");");

pw.println("location='http://localhost:8080/LabEX4/login.html';");

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

//response.sendRedirect("http://localhost:8080/LabEX4/login.html");

} pw.close();

}

}

**View.java**

import java.sql.\*;

import java.io.\*;

import javax.servlet.\*;

import javax.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;

PreparedStatement ps;

Statement st;

CallableStatement cs;

ResultSet rs;

try

{

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

try

{

flag=1;

con =DriverManager.getConnection("jdbc:mysql://localhost:3306/patient","root","Sun@0097");

//Name, age, ID, gender, address, marital status, Date of Visit (Name,Age,ID,gender,address,marital\_status,DateOfVisit)

try

{

String srch = " SELECT \* FROM Patient\_Details;";

st=con.createStatement();

rs=st.executeQuery(srch);

if(rs.next()){

pw.println("<link rel=\"stylesheet\" href=\"viewstyle.css\">");

pw.println("<div class=\"formblock centre\">");

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

}while(rs.next());

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

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

pw.println("<br><br><button style=\"height:10%;\" onclick=\'window.location.href=\"http://localhost:8080/LabEX4/home.html\";\'>Home</button>");

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

pw.println("<script>");

pw.println("alert(\"Found!! \");");

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

}

else

{

pw.println("<script>");

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

pw.println("location='http://localhost:8080/LabEX4/home.html';");

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

}

}

catch(SQLException e)

{

pw.println("<script>");

pw.println("alert(\"Could not find data"+e+" \");");

pw.println("location='http://localhost:8080/LabEX4/home.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 \");");

pw.println("location='http://localhost:8080/LabEX4/login.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 \");");

pw.println("location='http://localhost:8080/LabEX4/login.html';");

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

//response.sendRedirect("http://localhost:8080/LabEX4/login.html");

}

pw.close();

}

}

**Viewstyle.css**

.formblock{

display:flex;

border-radius:50px;

background:#191919;

width:60%;

height:90%;

text-align:center;

}

.centre{

margin: 0;

position: absolute;

top: 50%;

left: 50%;

-ms-transform: translate(-50%, -50%);

transform: translate(-50%, -50%);

color:white;

}

.centre button{

background:none;

display:block;

margin:5px auto;

text-align:center;

border:2px solid green;

width:20%;

padding-top:10px;

padding-bottom: 10px;

outline:none;

color:white;

border-radius:20px;

}

.centre button:hover{

border:2px solid green;

cursor:pointer;

background: #2ecc71;

}

body{

background: #34495e;

}

table{

border:2px solid blue;

border-collapse:collapse;

margin-left :auto;

margin-right :auto;

transform: translateY(100%);

table-layout:auto;

width:60%;

color:white;

}

thead

{

background:none;

}

td{

margin-left :auto;

margin-right: auto;

padding-left: 15px;

border:2px solid blue;

border-collapse:collapse;

background:none;

}

td:hover

{

background:#2ecc71 ;

}

**Web.xml**

<web-app>

<servlet>

<servlet-name>EX</servlet-name>

<servlet-class>grosscal</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>EX</servlet-name>

<url-pattern>/EX</url-pattern>

</servlet-mapping>

<servlet>

<servlet-name>valid</servlet-name>

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

</servlet>

<servlet-mapping>

<servlet-name>valid</servlet-name>

<url-pattern>/valid</url-pattern>

</servlet-mapping>

<servlet>

<servlet-name>insert</servlet-name>

<servlet-class>Insert</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>insert</servlet-name>

<url-pattern>/ins</url-pattern>

</servlet-mapping>

<servlet>

<servlet-name>delete</servlet-name>

<servlet-class>delete</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>delete</servlet-name>

<url-pattern>/del</url-pattern>

</servlet-mapping>

<servlet>

<servlet-name>search</servlet-name>

<servlet-class>search</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>search</servlet-name>

<url-pattern>/srch</url-pattern>

</servlet-mapping>

<servlet>

<servlet-name>view</servlet-name>

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

</servlet>

<servlet-mapping>

<servlet-name>view</servlet-name>

<url-pattern>/view</url-pattern>

</servlet-mapping>

<servlet>

<servlet-name>update</servlet-name>

<servlet-class>update</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>update</servlet-name>

<url-pattern>/upd</url-pattern>

</servlet-mapping>

<servlet>

<servlet-name>db\_upd</servlet-name>

<servlet-class>db\_upd</servlet-class>

</servlet>

<servlet-mapping>

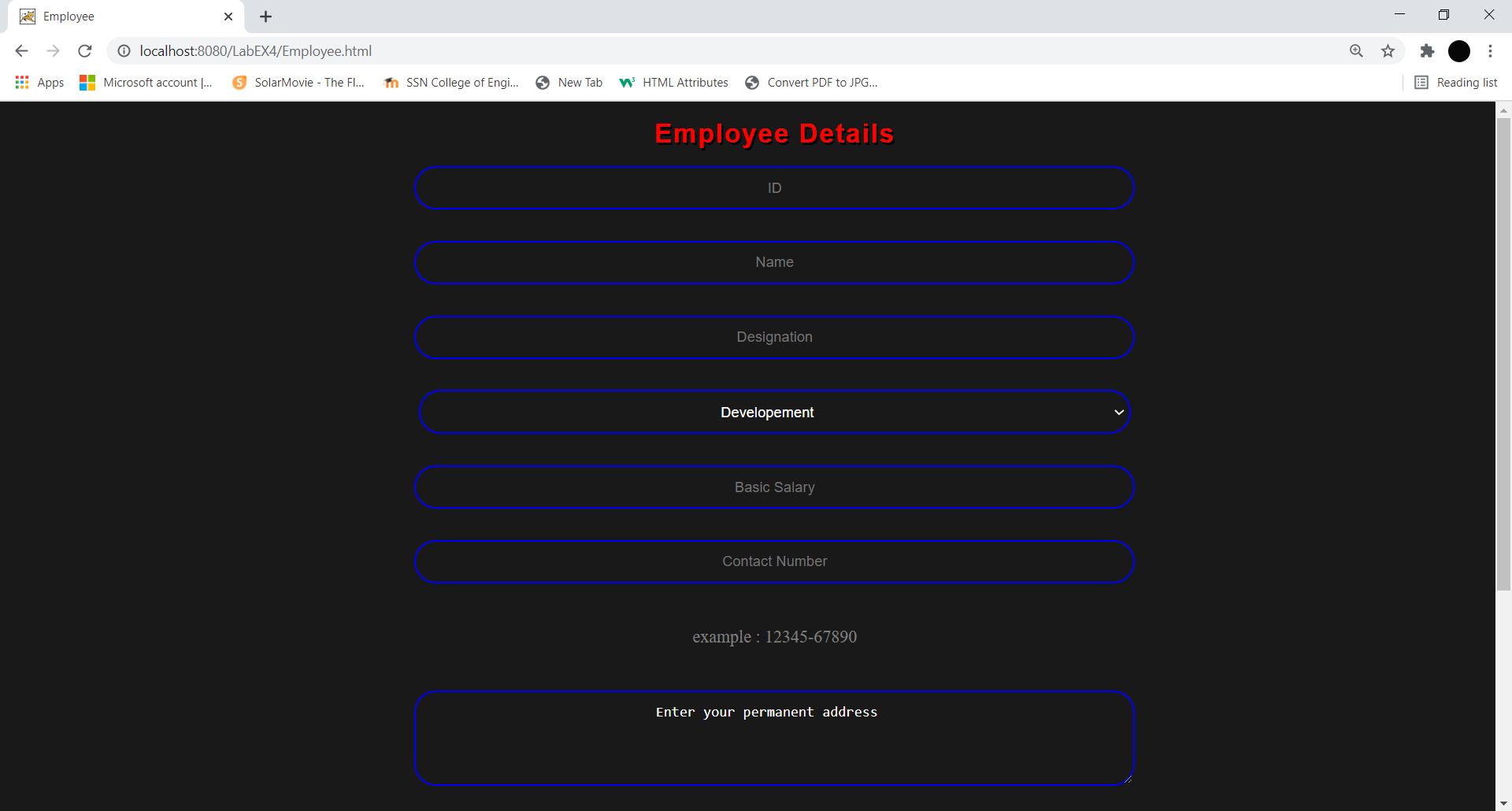
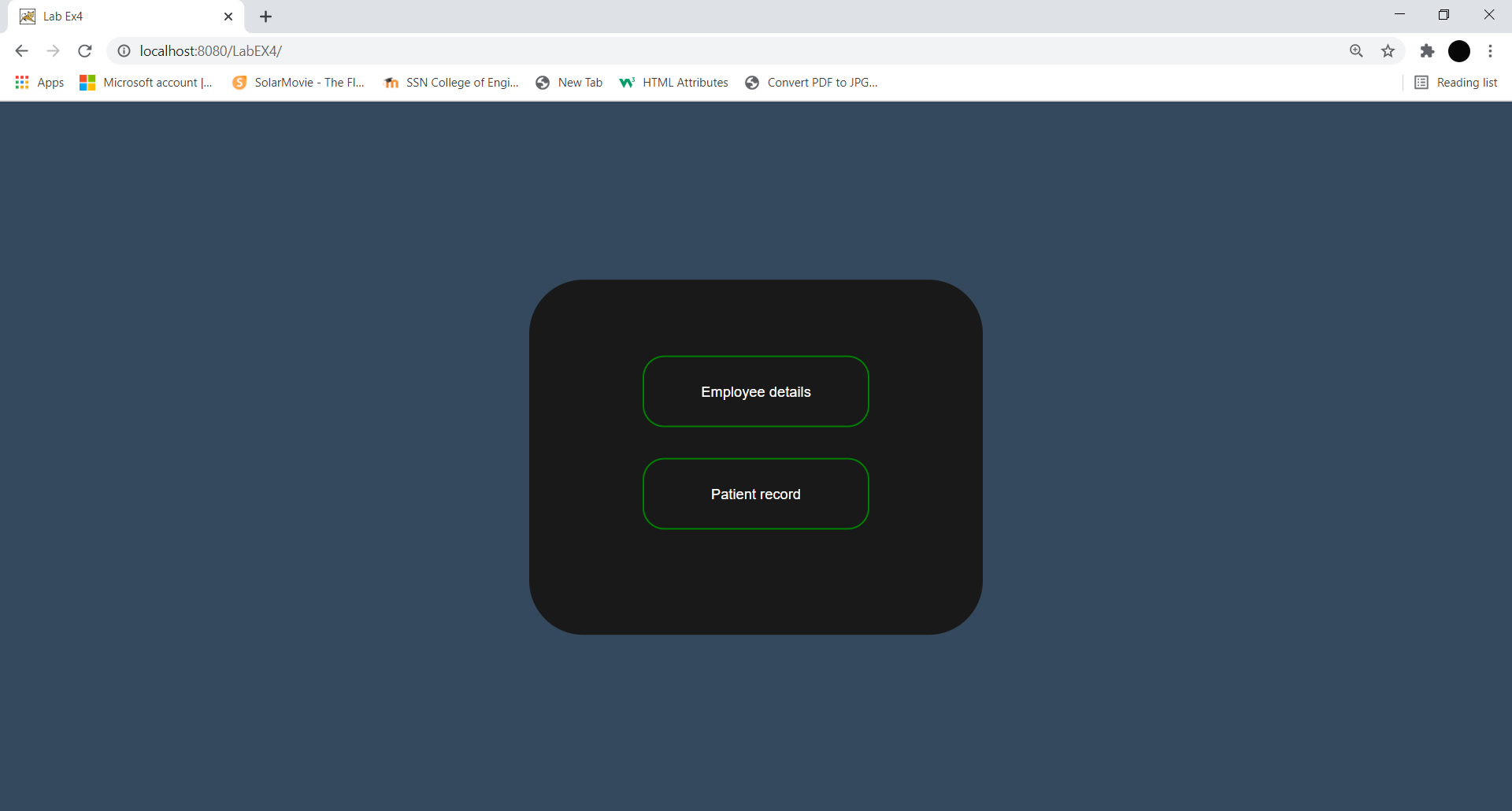
<servlet-name>db\_upd</servlet-name>

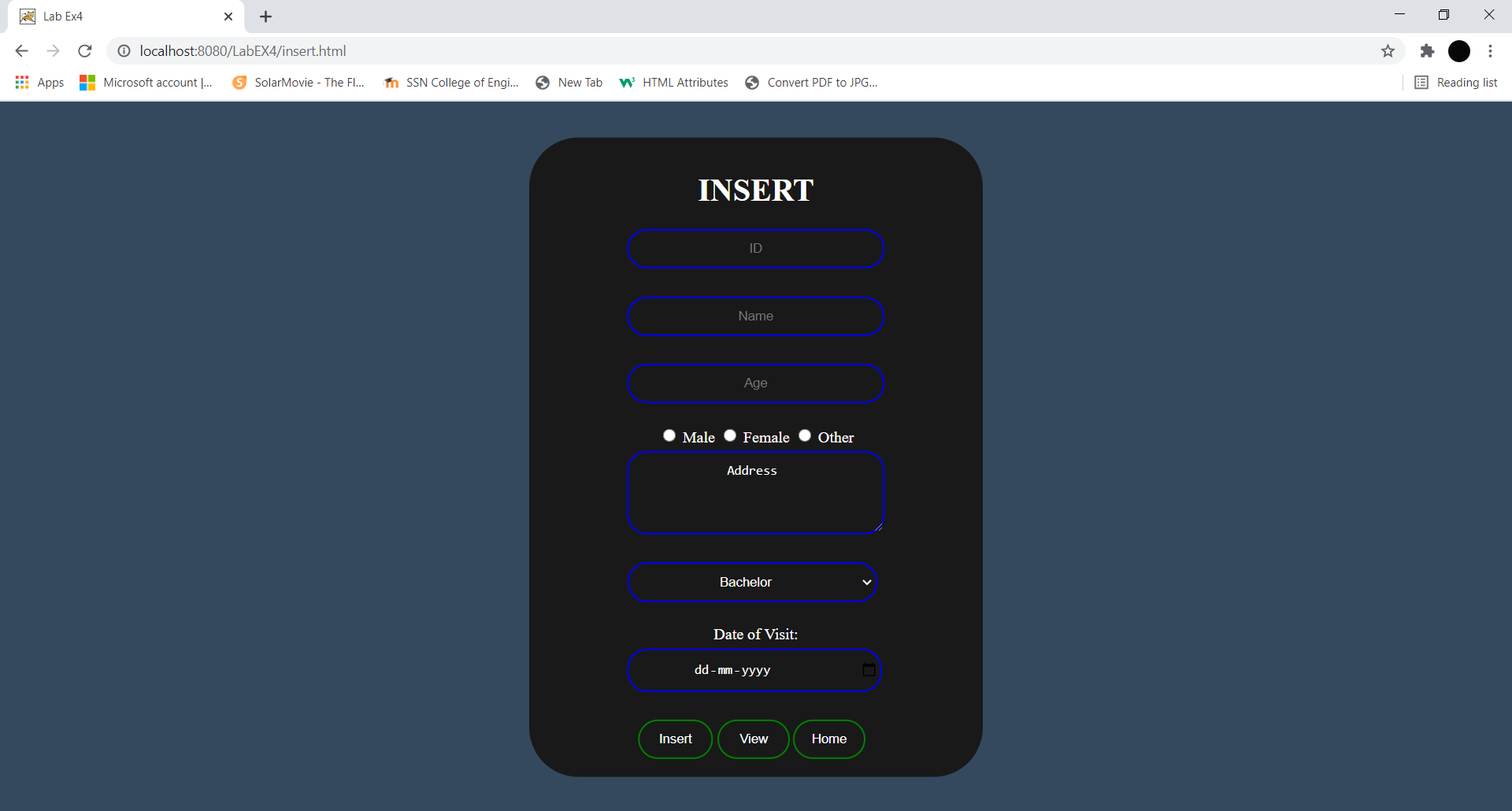
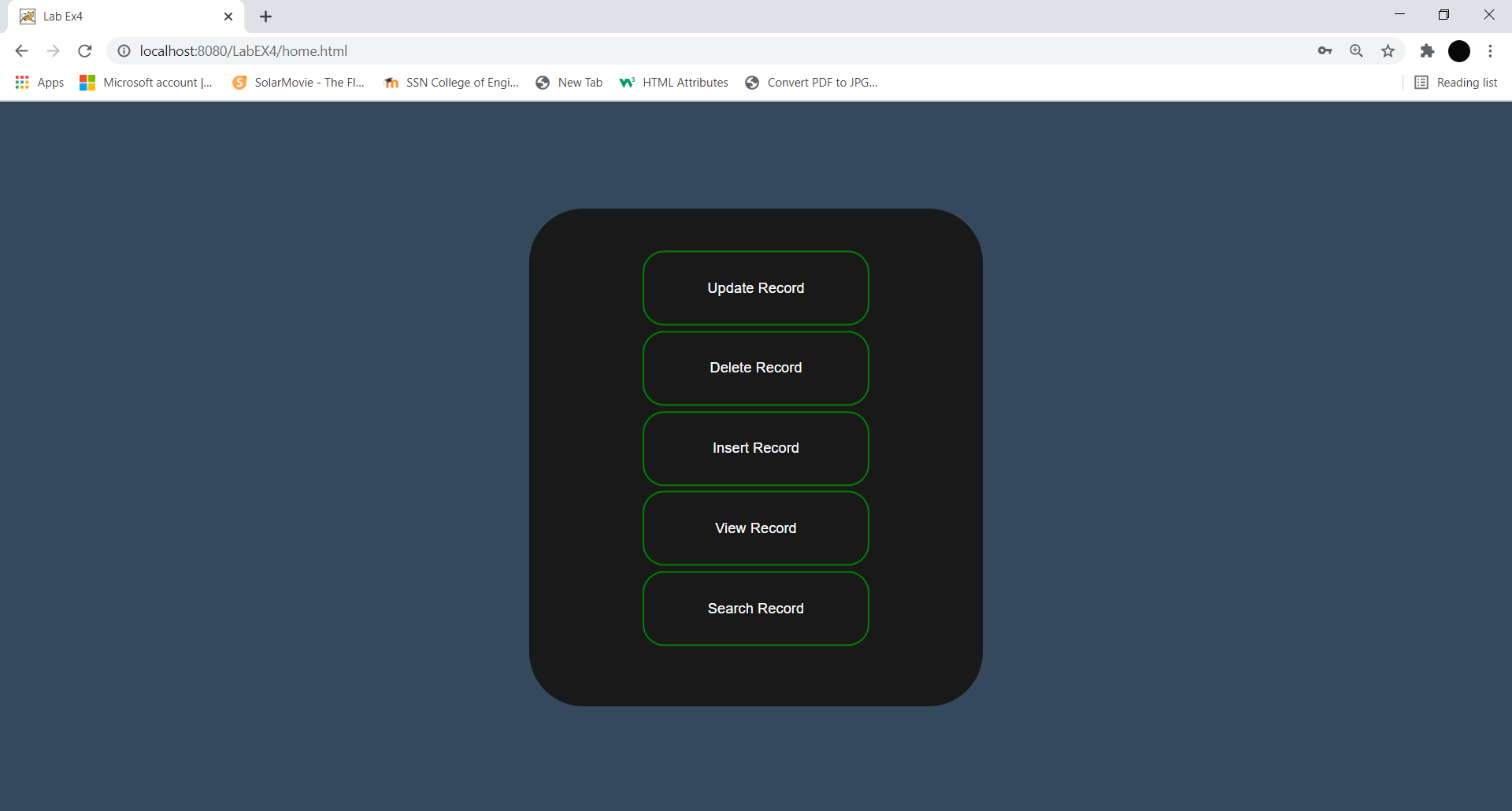
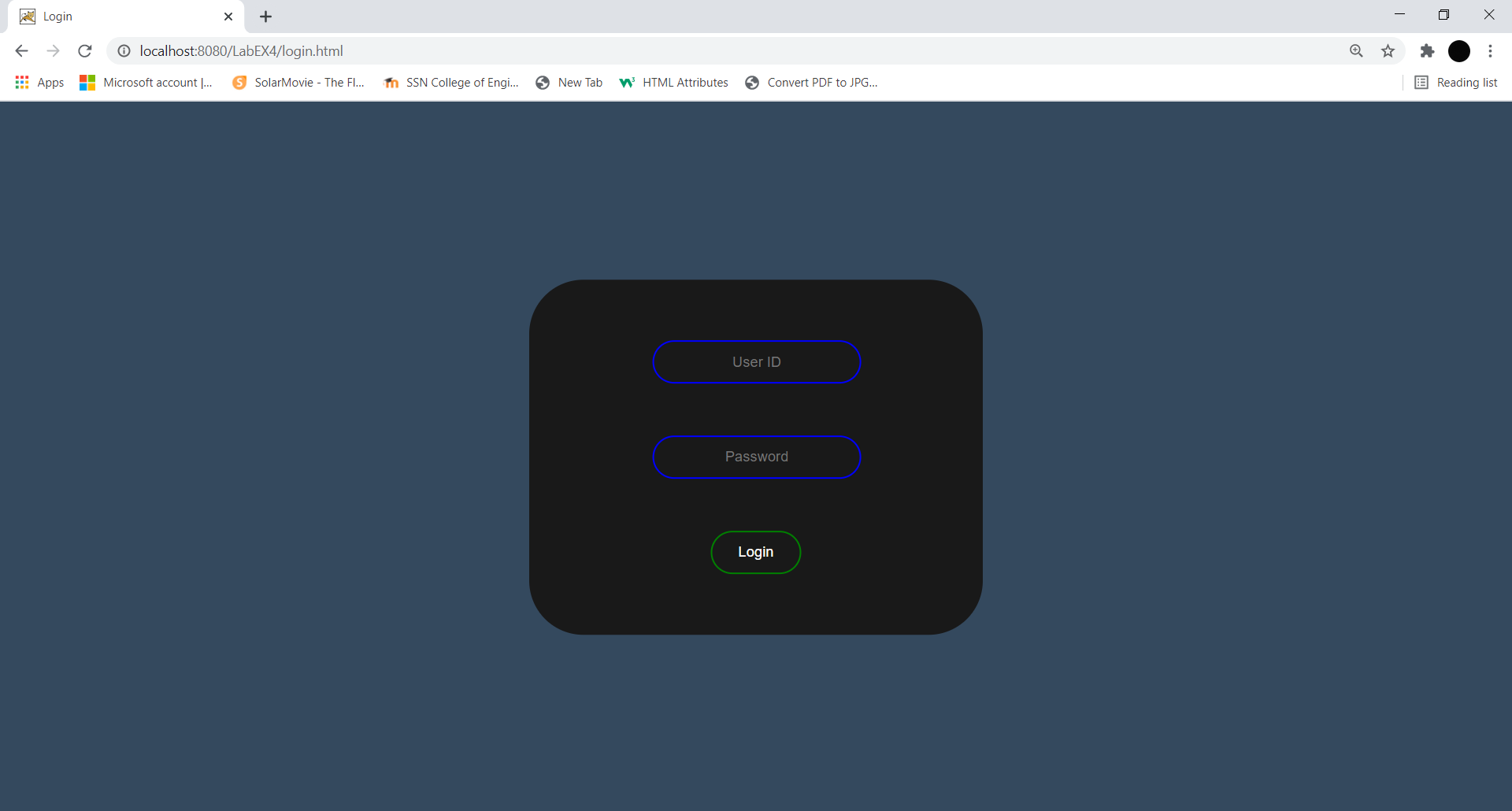
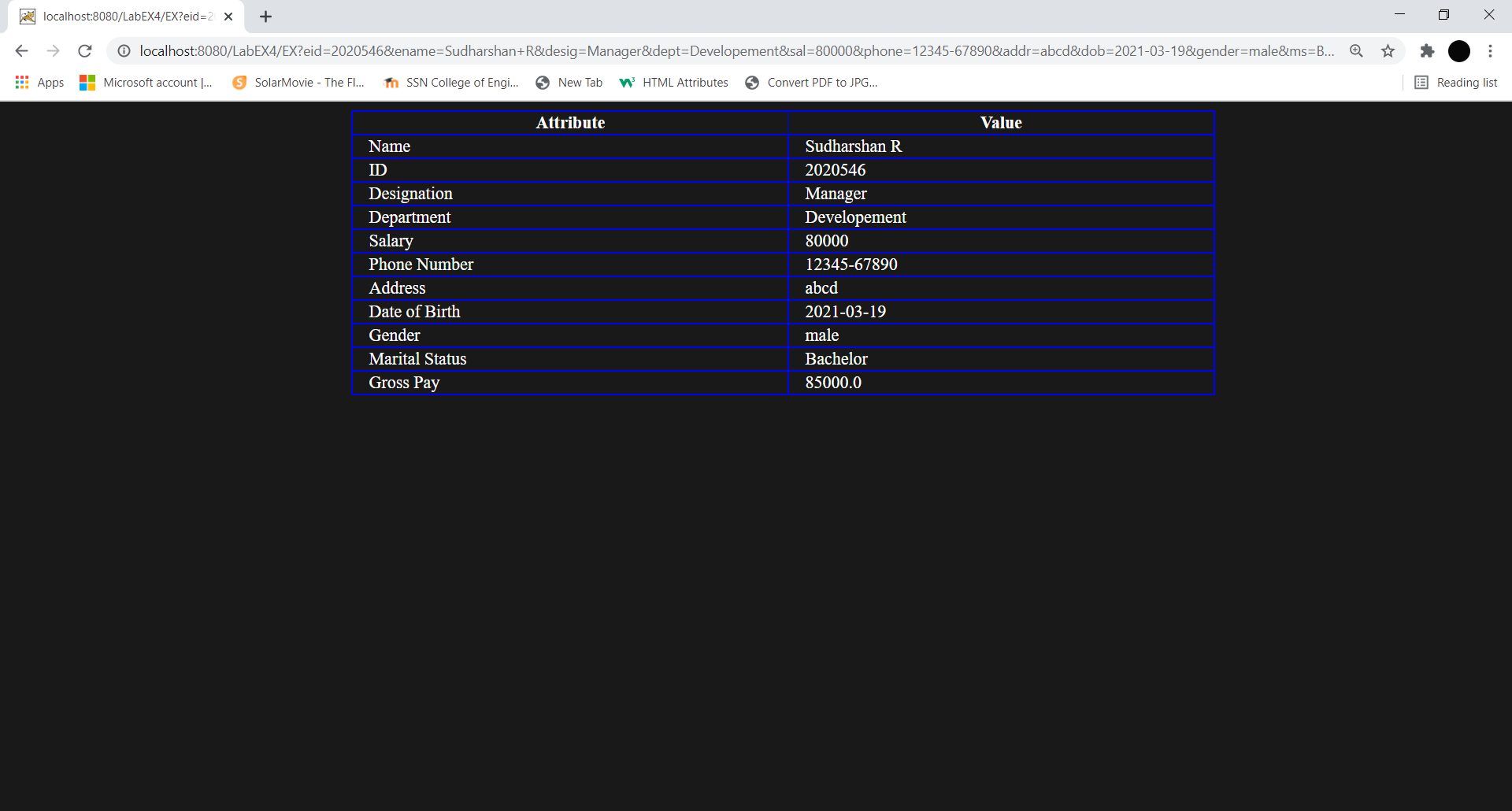
<url-pattern>/upd1</url-pattern>

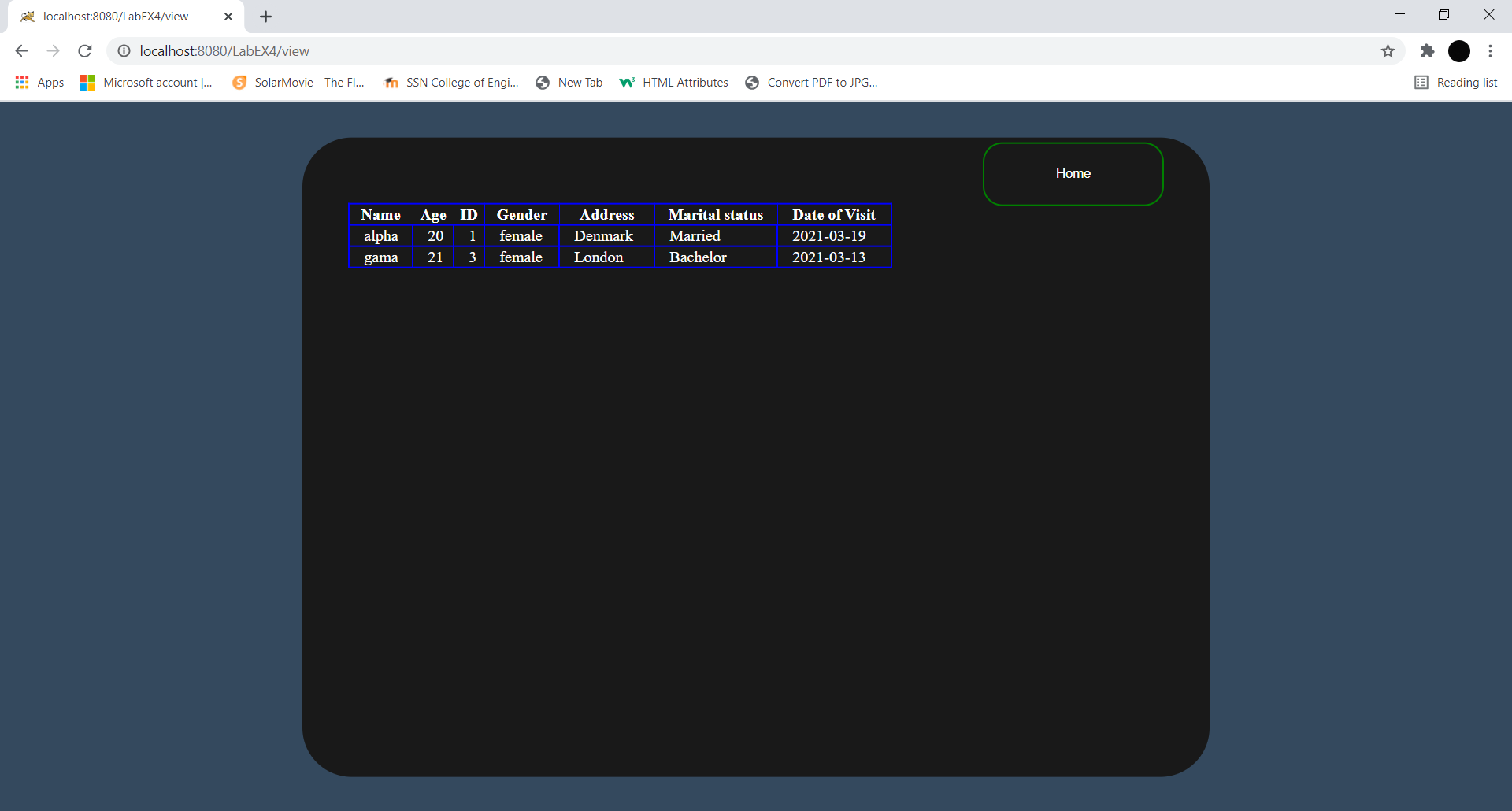
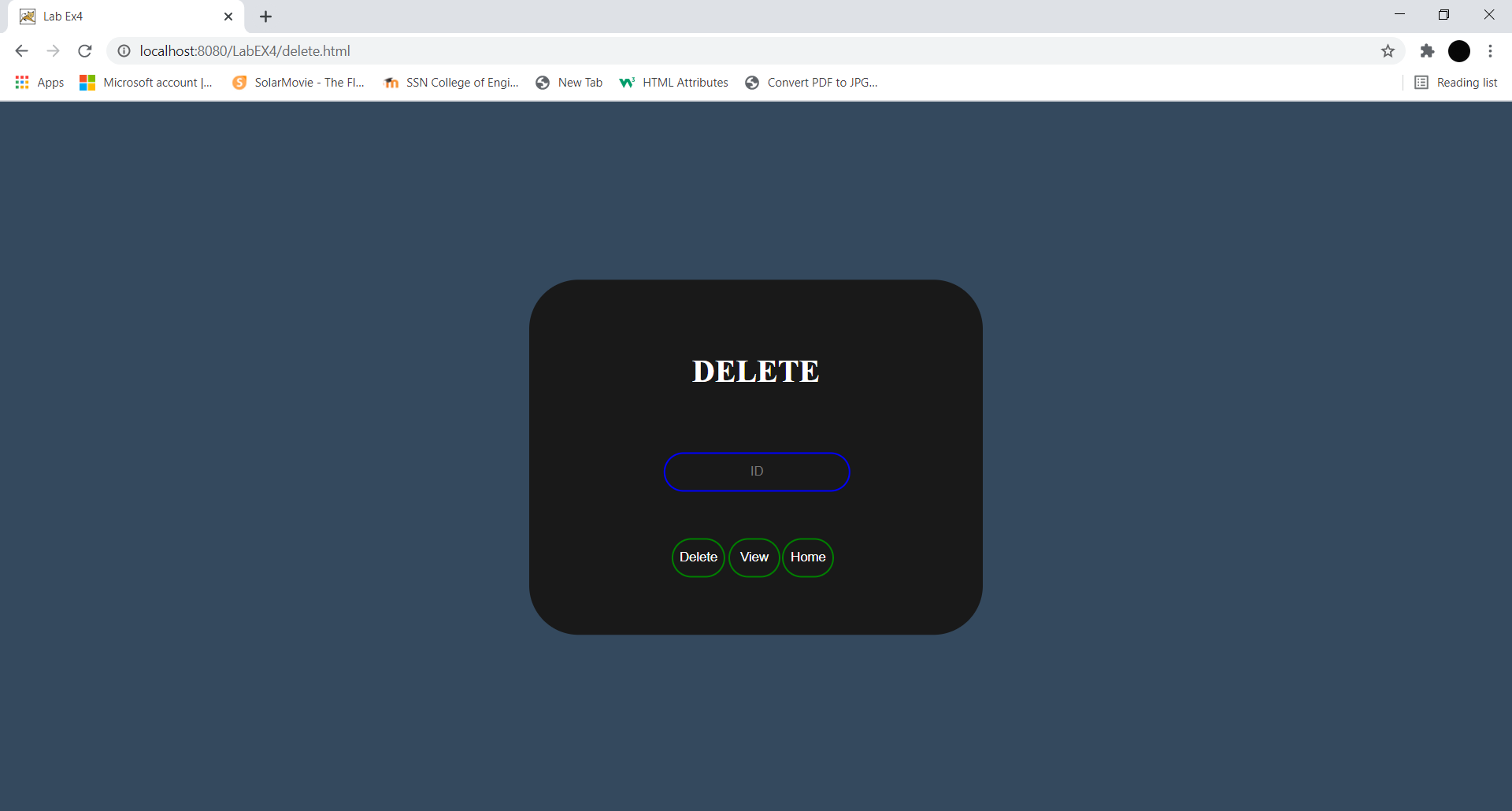
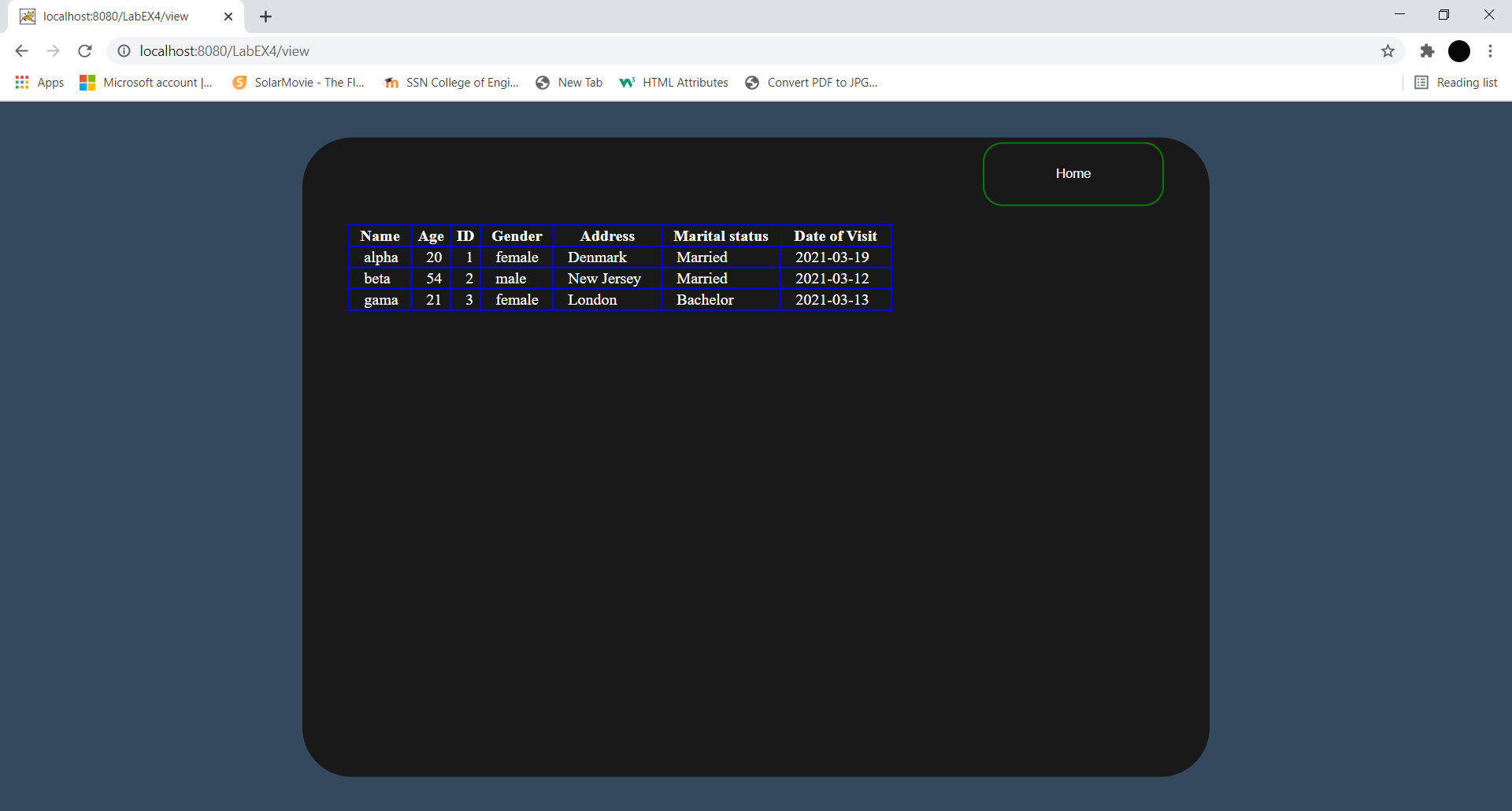
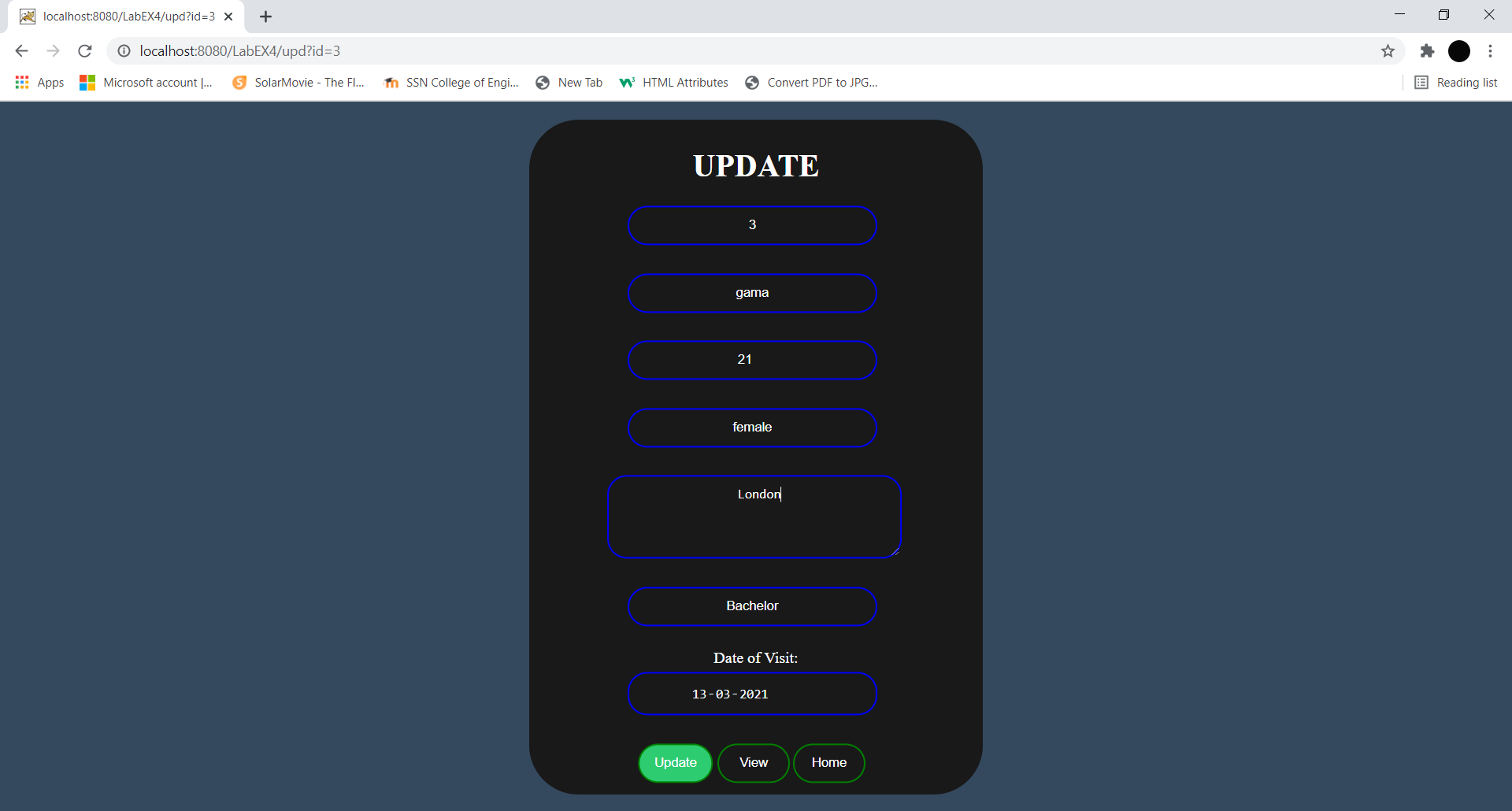
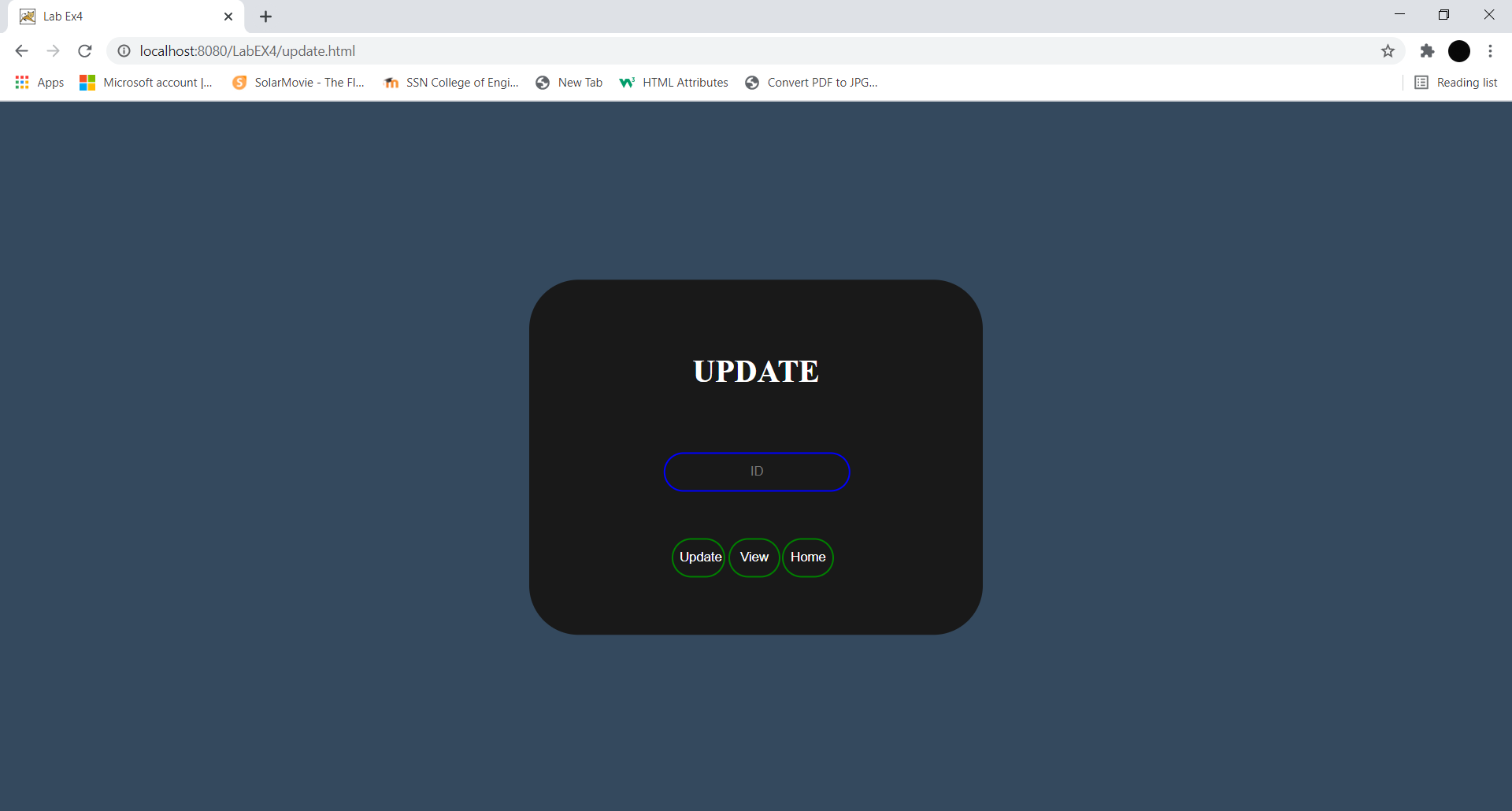
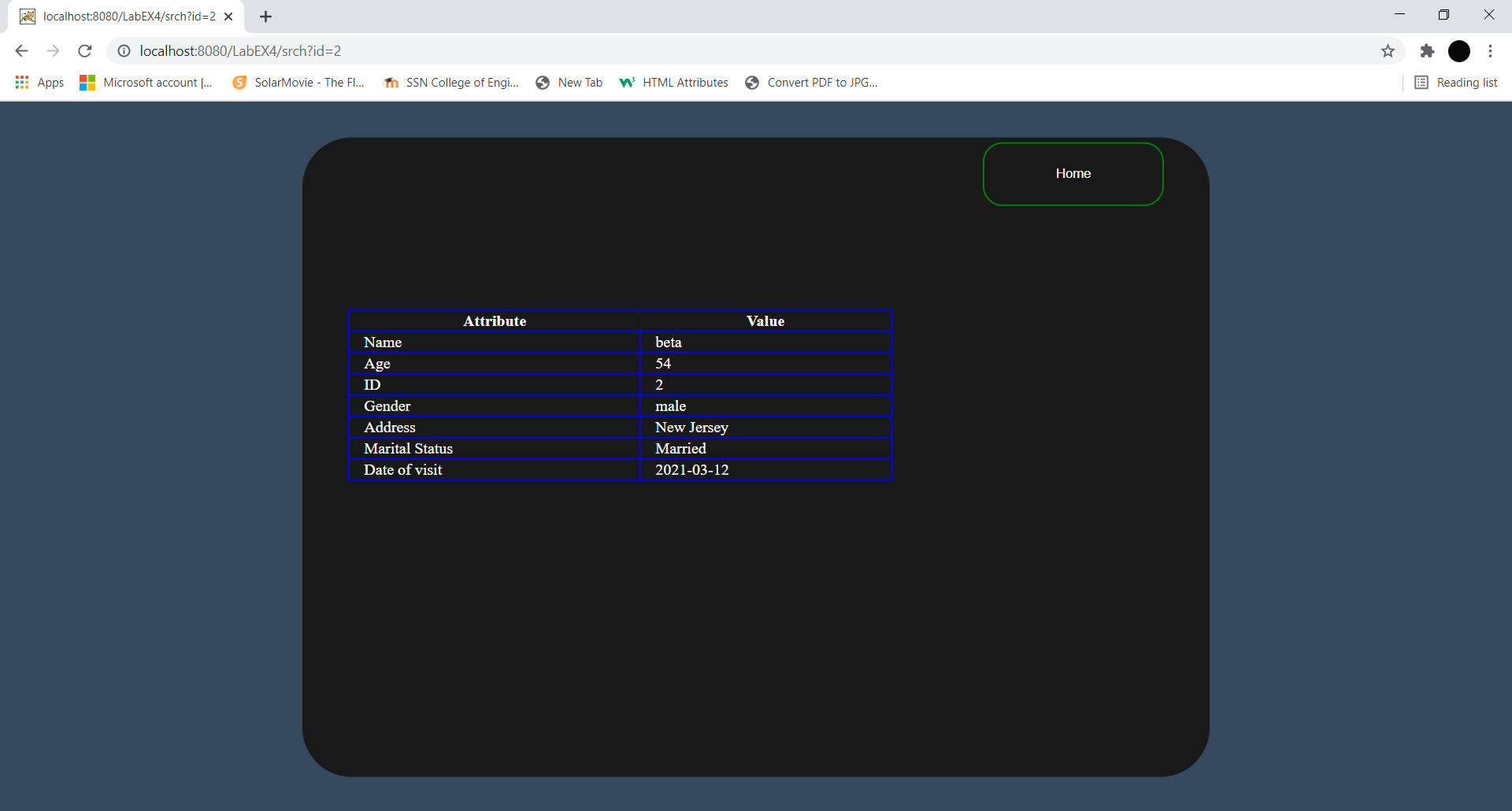
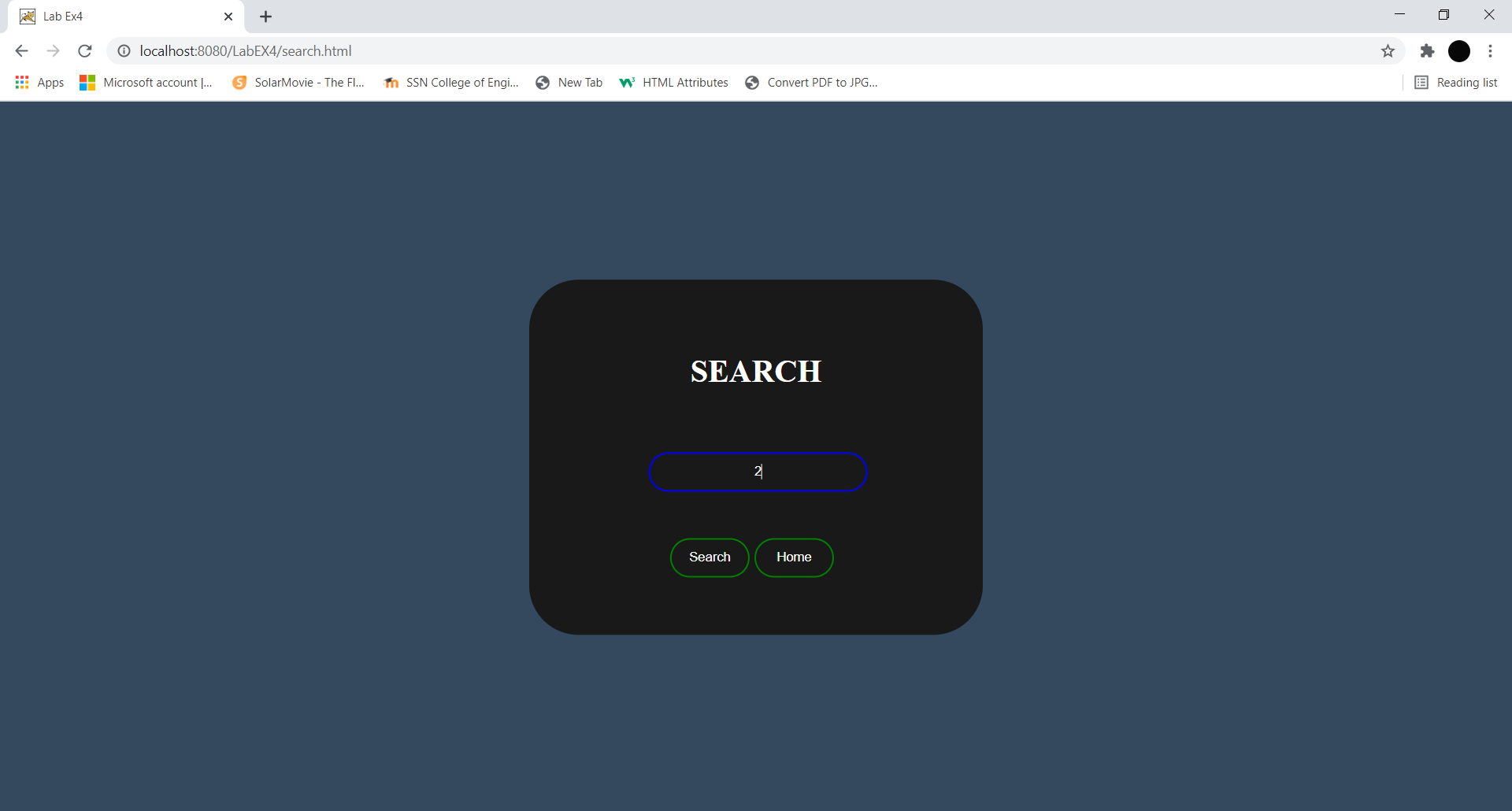
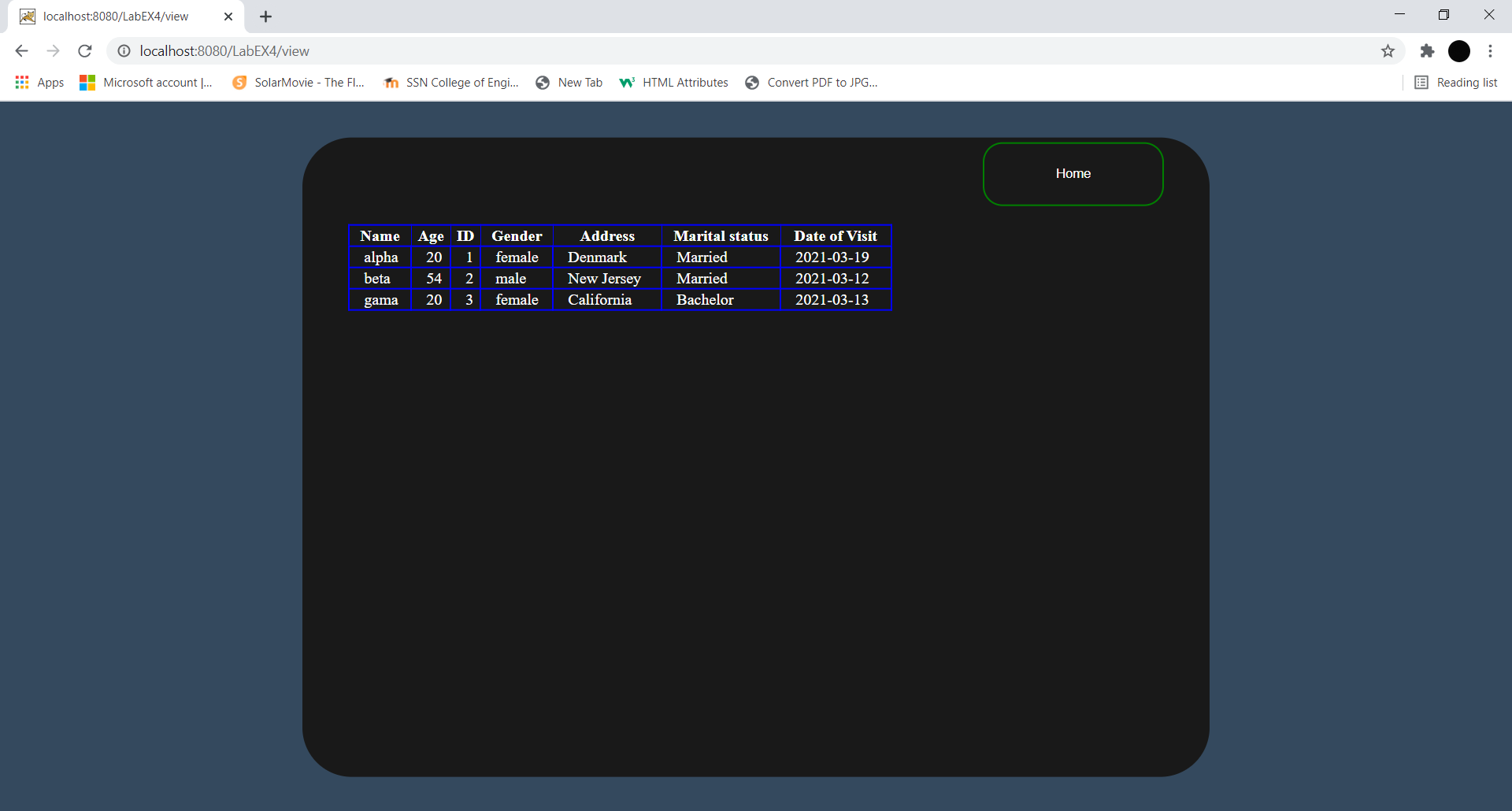
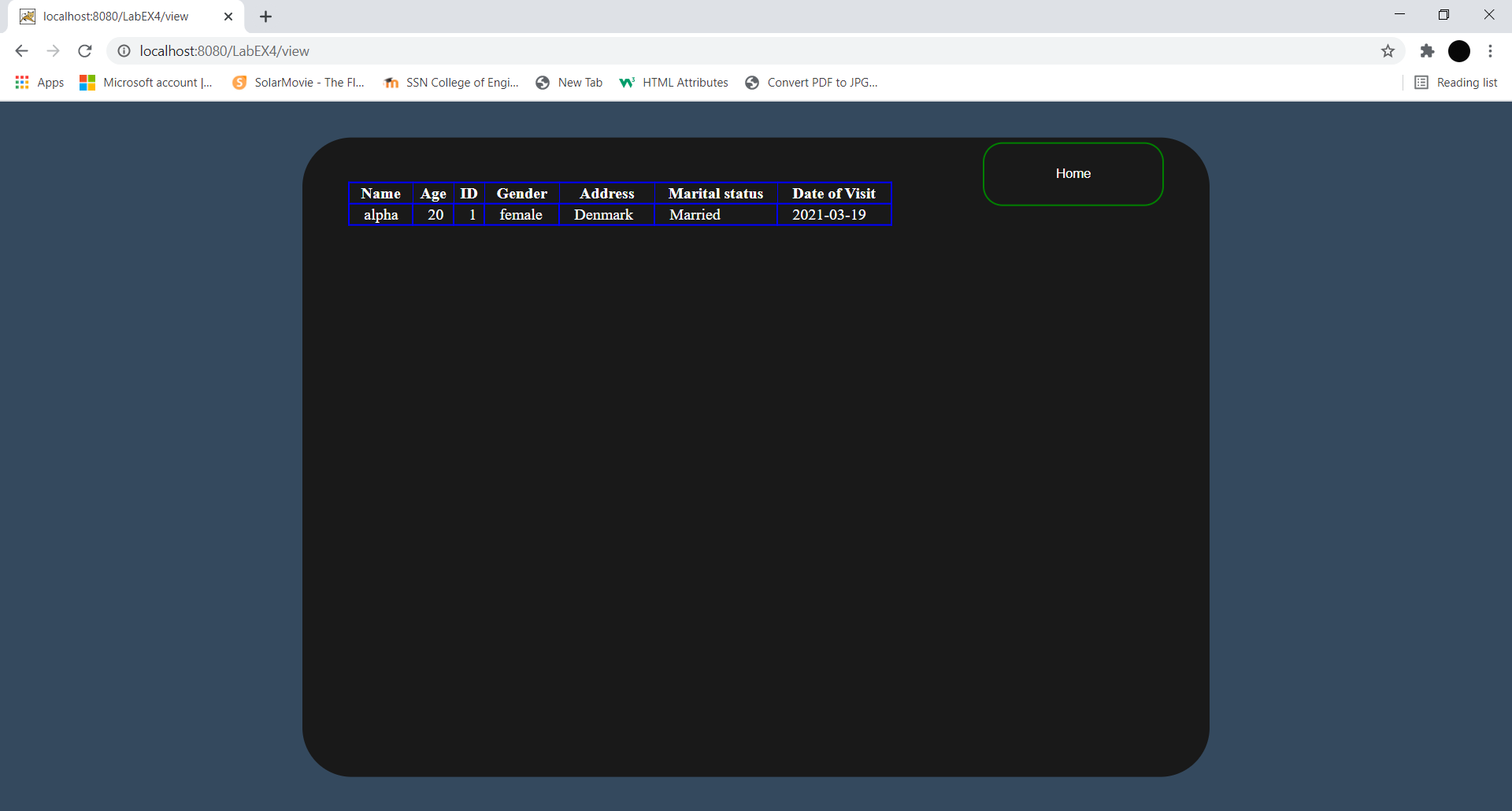
</servlet-mapping>

</web-app>

**OUTPUT SCREENSHOTS:**







**Learning Outcome:**

• I learnt about servlets and servelet mapping.

• Also learnt to implement JDBC and how to add it to code.

• Understood the usage of JDBC con statement event elements.

• Understood html input read only and flex style display .

• Learnt about the absolute and relative positioning.

• Learnt on how to validate form elements and pass them on a servlet.