Department of Computer Science and Engineering

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UCS1601 - Internet Programming

Assignment 5: Profile Servlet using Session and MySQL

Objective:

Implement Profile Servlet using Http Sessions.

Code:

HTML:

```
<!DOCTYPE html>
<html>
<head>
    <title>Profile Session</title>
    <meta charset="utf-8">
```

```
    <link rel="stylesheet" href="styles.css">
</head>

<body>
    <h1>Profile Login</h1>
    <hr><br>
    <table>
        <form id="loginform" action="http://localhost:8080/A05-ProfileServlet/LoginServlet">
            <tr>
                <td><label for="username">Username: </label></td>
                <td><input name="username" id="username" type="text" required></td>
            </tr>
            <tr>
                <td><label for="password">Password: </label></td>
                <td><input name="password" id="password" type="password" required></td>
            </tr>
            <tr>
                <td><input type="submit" value="Login" id="submit"></td>
                <td><input type="button" value="Reset" id="resetBtn" onclick="myReset()"></td>
            </tr>
        </form>
    </table>
    <script>
        function myReset(){
            document.getElementById("loginform").reset();
        }
    </script>
</body>
```

CSS:

```
body{
    font-size: 16pt;
    font-family: -apple-system, BlinkMacSystemFont, 'Segoe UI', 'Roboto', 'Oxygen',
```

```
    'Ubuntu', 'Cantarell', 'Fira Sans', 'Droid Sans', '
    Helvetica Neue',
    sans-serif;
    background: rgb(2,0,36);
    background: linear-gradient(90deg, rgba(2,0,36,1) 0%,
    rgba(9,9,121,1) 35%, rgba(0,212,255,1) 100%);
    color: white;
    height: 100vh;
}

h1{
    font-size: 50pt;
    text-align: center;
    color: white;
}

table{
    display: block;
    margin-left: auto;
    margin-right: auto;
    width: 25%;
    text-align: center;
    border-spacing: 25px;
}
```

Login Servlet:

Java:

```
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.sql.*;

public class LoginServlet extends HttpServlet {
    public void doGet(HttpServletRequest request,
    HttpServletResponse response) throws ServletException,
    IOException {

        String JDBC_DRIVER = "com.mysql.cj.jdbc.Driver";
```

```
11          String DB_URL = "jdbc:mysql://localhost:3306/mysql?
    autoReconnect=true&useSSL=false";
12
13          String USER = "shiva";
14          String PASS = "$$Shiva123";
15
16
17          PrintWriter out = response.getWriter();
18          String user = request.getParameter("username");
19          String pass = request.getParameter("password");
20
21          try {
22              Class.forName(JDBC_DRIVER);
23              Connection conn = DriverManager.getConnection(
    DB_URL, USER, PASS);
24              String sql = "SELECT password FROM Profile where
    username = '"+user+"'";
25              Statement pst = conn.createStatement();
26
27              ResultSet rs = pst.executeQuery(sql);
28
29              out.println("<!DOCTYPE html>");
30              out.println("<html><head><link rel='stylesheet'
    href='styles_login.css'></head><body style='font-size:15pt
    '>");
31
32              if(rs.next()) {
33                  response.setContentType("text/html");
34                  String word = rs.getString("password");
35
36                  if (pass.equals(word)) {
37                      HttpSession session = request.getSession
    ();
38                      session.setAttribute("user", user);
39                      out.println("<h1><B>Welcome " + user + "<
    B></h1><br>");
40                      out.println("<br><h2><a href='
    ProfileServlet'>View profile in detail</a></h2>");
41                  }
42                  else {
43                      out.println("Invalid login");
44                      RequestDispatcher rd = request.
    getRequestDispatcher("/index.html");
45                      rd.forward(request, response);
46                  }
```

```
47              }
48              pst.close();
49              conn.close();
50
51          } catch (SQLException sql) {
52              sql.printStackTrace();
53              out.println(sql);
54          } catch (Exception e) {
55              e.printStackTrace();
56              out.println(e);
57          }
58      }
59  }
```

Java stylesheet:

```
1  body{
2      font-size: 16pt;
3      font-family: -apple-system, BlinkMacSystemFont, 'Segoe UI
       ', 'Roboto', 'Oxygen',
4      'Ubuntu', 'Cantarell', 'Fira Sans', 'Droid Sans', '
       Helvetica Neue',
5      sans-serif;
6      background: rgb(87,10,10);
7      background: linear-gradient(90deg, rgba(87,10,10,1) 0%,
       rgba(125,24,24,1) 44%, rgba(245,65,98,1) 100%);
8      color: white;
9      height: 100vh;
10     text-align: center;
11 }
12
13 h1{
14     font-size: 50pt;
15     text-align: center;
16     color: white;
17 }
18
19 table{
20     font-size: 20pt;
21     display: block;
22     margin-left: auto;
23     margin-right: auto;
```

```
    width: 25%;
    text-align: center;
    border-spacing: 25px;
}

a{
    color: white;
}
```

Profile Servlet:

Java:

```
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.sql.*;

public class ProfileServlet extends HttpServlet{
    public void doGet(HttpServletRequest request,
    HttpServletResponse response) throws ServletException,
    IOException {

        String JDBC_DRIVER = "com.mysql.cj.jdbc.Driver";
        String DB_URL = "jdbc:mysql://localhost:3306/mysql?
    autoReconnect=true&useSSL=false";

        String USER = "shiva";
        String PASS = "$$Shiva123";


        PrintWriter out = response.getWriter();
        HttpSession session = request.getSession();
        String name = (String) session.getAttribute("user");

        try {
            Class.forName(JDBC_DRIVER);
            Connection conn = DriverManager.getConnection(
    DB_URL, USER, PASS);
            Statement stmt = conn.createStatement();
```

```
25              String sql = "SELECT * FROM Profile where
    username = '"+name+"'";
26              Statement pst = conn.createStatement();
27
28              ResultSet rs = pst.executeQuery(sql);
29              out.println("<!DOCTYPE html>");
30              out.println("<html><head><link rel='stylesheet'
    href='styles_profile.css'></head><body>");
31              out.println("<h1><B>Welcome " + name + " to the
    profile page!!</B></h1>");
32              out.println("<br><br>");
33              out.println("<table>");
34              while (rs.next()) {
35                  response.setContentType("text/html");
36                  int id = rs.getInt("id");
37                  int age = rs.getInt("age");
38                  String pro_name = rs.getString("name");
39                  String addr = rs.getString("address");
40
41                  out.println("<tr><th>Name: </th><td>" +
    pro_name + "</td></tr>");
42                  out.println("<tr><th>Age: </th><td>" + age +
    "</td></tr>");
43                  out.println("<tr><th>ID: </th><td>" + id + "
    </td></tr>");
44                  out.println("<tr><th>Address: </th><td>" +
    addr + "</td></tr>");
45              }
46              out.println("</table></body></html>");
47
48              out.println("<form id='logoutform' action='http
    ://localhost:8080/A05-ProfileServlet/LogoutServlet'>");
49              out.println("<input type='submit' value='Logout'
    id='submit'>");
50              out.println("</form>");
51
52              pst.close();
53              conn.close();
54
55
56          } catch (SQLException sql) {
57              sql.printStackTrace();
58              out.println(sql);
59          } catch (Exception e) {
60              e.printStackTrace();
```

```
61              out.println(e);
62          }
63      }
64  }
```

Java stylesheet:

```
1  body{
2      font-size: 16pt;
3      font-family: -apple-system, BlinkMacSystemFont, 'Segoe UI
       ', 'Roboto', 'Oxygen',
4      'Ubuntu', 'Cantarell', 'Fira Sans', 'Droid Sans', '
       Helvetica Neue',
5      sans-serif;
6      background: rgb(21,27,14);
7      background: linear-gradient(90deg, rgba(21,27,14,1) 0%,
       rgba(4,65,5,1) 44%, rgba(7,196,38,1) 100%);
8      color: white;
9      height: 100vh;
10     text-align: center;
11 }
12
13 h1{
14     font-size: 50pt;
15     text-align: center;
16     color: white;
17 }
18
19 table{
20     font-size: 20pt;
21     display: block;
22     margin-left: auto;
23     margin-right: auto;
24     width: 25%;
25     text-align: center;
26     border-spacing: 25px;
27 }
28
29 a{
30     color: white;
31 }
```

Logout Servlet:

Java:

```
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.sql.*;

public class LogoutServlet extends HttpServlet {
    public void doGet(HttpServletRequest request,
    HttpServletResponse response) throws ServletException,
    IOException {

        PrintWriter out = response.getWriter();

        out.println("<!DOCTYPE html>");
        out.println("<html><head><link rel='stylesheet' href
    ='styles_logout.css'></head><body>");
        try {
            HttpSession session = request.getSession();
            if (session.getAttribute("user") != null) {
                String name = (String) session.getAttribute("
    user");
                session.invalidate();
                out.println("<h1><B>Logged " + name + " out
    succesfully!!<B></h1><br>");
            }

        } catch (Exception e) {
            e.printStackTrace();
            out.println(e);
        }
        out.println("<h3 id='timer'></h3>");
        out.println("<script src='logout.js'></script>");
    }
}
```

Java stylesheet:

```
body{
    font-size: 16pt;
    font-family: -apple-system, BlinkMacSystemFont, 'Segoe UI', 'Roboto', 'Oxygen',
    'Ubuntu', 'Cantarell', 'Fira Sans', 'Droid Sans', 'Helvetica Neue',
    sans-serif;
    background: rgb(21,27,14);
    background: linear-gradient(90deg, rgba(21,27,14,1) 0%, rgba(40,4,65,1) 44%, rgba(61,7,196,1) 100%);
    color: white;
    height: 100vh;
    text-align: center;
}

h1{
    font-size: 50pt;
    text-align: center;
    color: white;
}

table{
    font-size: 20pt;
    display: block;
    margin-left: auto;
    margin-right: auto;
    width: 25%;
    text-align: center;
    border-spacing: 25px;
}

a{
    color: white;
}
```

Java script file:

```
time = 5;
var x = setInterval(function() {
    document.getElementById("timer").innerHTML = "Redirecting to login page in : " + time + " s ";
```

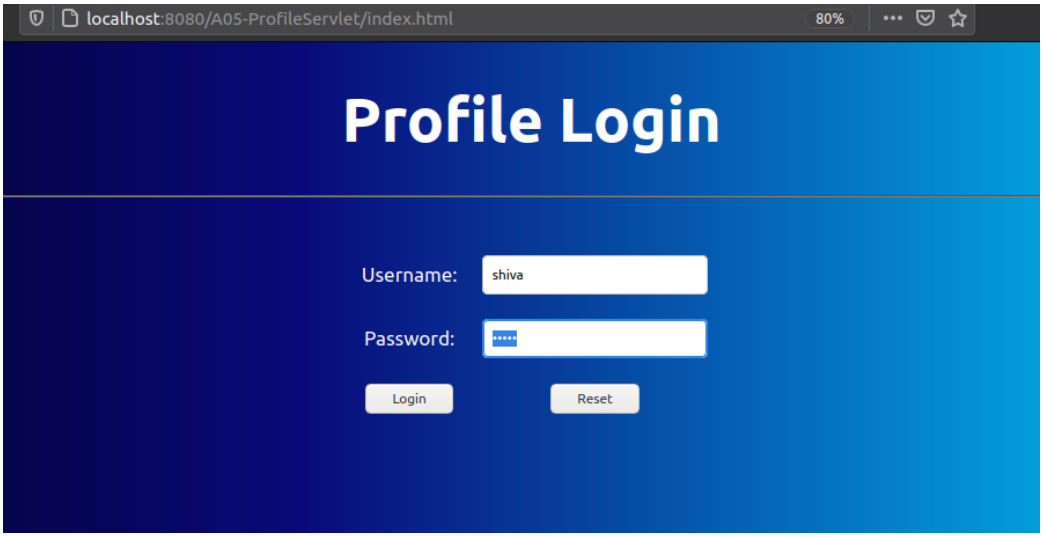
```
    time -= 1;
    if(time < 0){
        clearInterval(x);
        location.href="index.html";
    }
}, 1000);
```

XML:

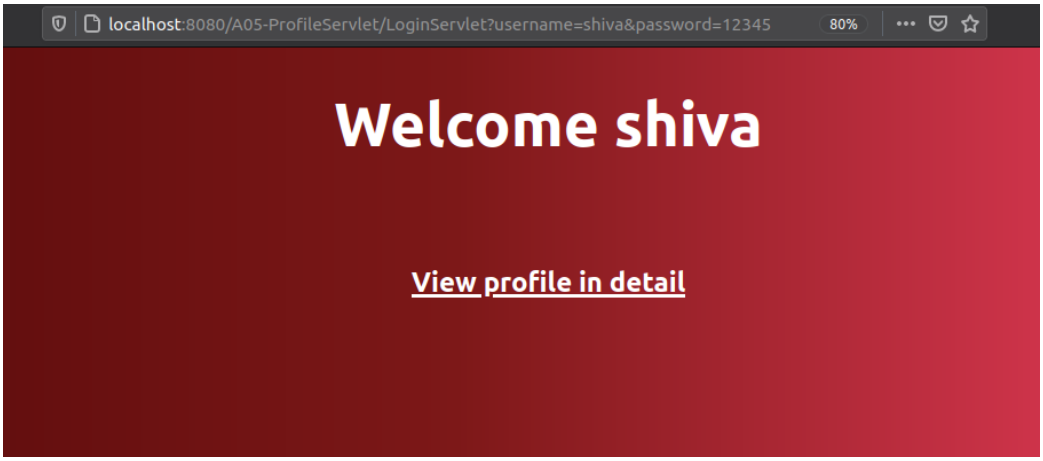
```
<web-app>
    <servlet>
        <servlet-name>LoginServlet</servlet-name>
        <servlet-class>LoginServlet</servlet-class>
</servlet>
<servlet-mapping>
    <servlet-name>LoginServlet</servlet-name>
    <url-pattern>/LoginServlet</url-pattern>
</servlet-mapping>

<servlet>
    <servlet-name>ProfileServlet</servlet-name>
    <servlet-class>ProfileServlet</servlet-class>
</servlet>
<servlet-mapping>
    <servlet-name>ProfileServlet</servlet-name>
    <url-pattern>/ProfileServlet</url-pattern>
</servlet-mapping>

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

Output:

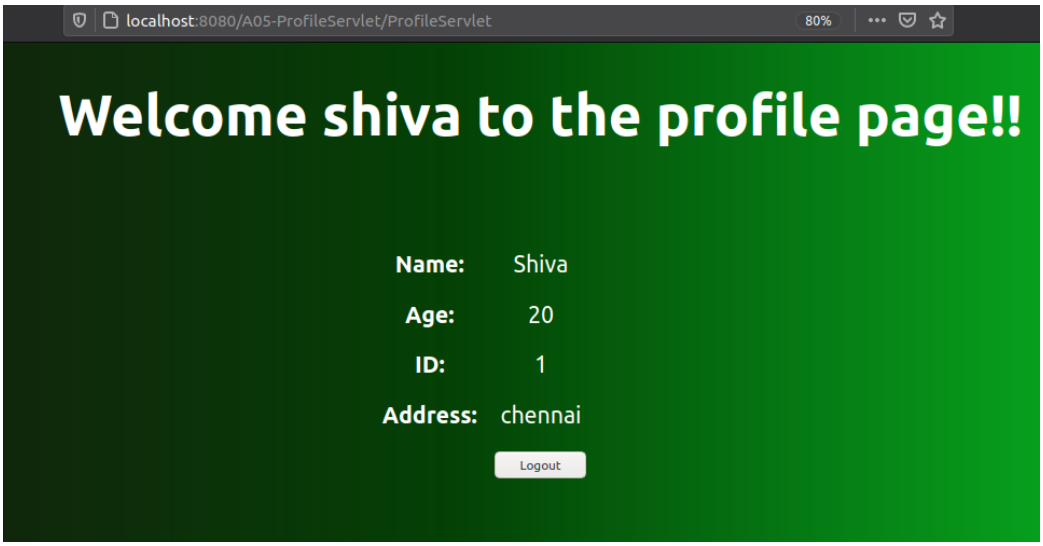
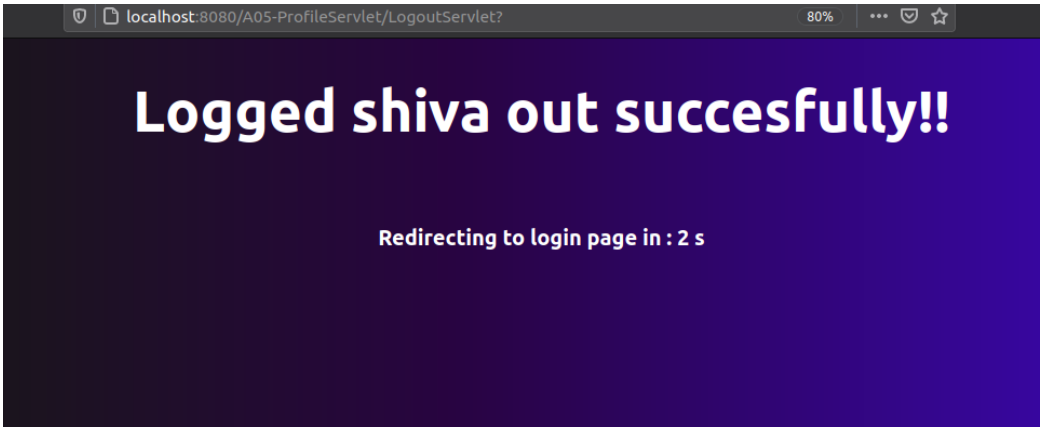
Login:



Login Servlet:



Profile Servlet:



Logout Servlet: