

Assignment No: 03

Module 3: Client and Server Side Programming

Code:

LoginServlet.java

```
package ass3;
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
@WebServlet("/LoginServlet")
public class LoginServlet extends HttpServlet {
    private static final String DB_URL =
"jdbc:mysql://localhost:3306/collegeDB";
    private static final String DB_USER = "root";
    private static final String DB_PASSWORD = "root";
```

```

protected void doPost(HttpServletRequest request,
HttpServletRequest response)
    throws ServletException, IOException {

    response.setContentType("text/html");
    PrintWriter out = response.getWriter();
    String username = request.getParameter("username");
    String password = request.getParameter("password");
    try {
        Class.forName("com.mysql.cj.jdbc.Driver");
        Connection conn =
DriverManager.getConnection(DB_URL, DB_USER,
DB_PASSWORD);
        String sql = "SELECT * FROM users WHERE username
= ? AND password = ?";
        PreparedStatement stmt =
conn.prepareStatement(sql);
        stmt.setString(1, username);
        stmt.setString(2, password);
        ResultSet rs = stmt.executeQuery();
        if (rs.next()) {
            // Successful login
            HttpSession session = request.getSession();
            session.setAttribute("username", username);
            response.sendRedirect("welcome.jsp");
        } else {
            out.println("<h3>Invalid username or
password!</h3>");
            out.println("<a href='login.html'>Try again</a>");
        }
    }
}

```

```

        conn.close();
    } catch (Exception e) {
        e.printStackTrace();
        out.println("<h3>Error: " + e.getMessage() + "</h3>");
    }
}
}

```

LogoutServlet.java

```

package ass3;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.*;
@WebServlet("/LogoutServlet")
public class LogoutServlet extends HttpServlet {
    protected void doPost(HttpServletRequest request,
        HttpServletResponse response)
        throws ServletException, IOException {

        HttpSession session = request.getSession(false);
        if (session != null) {
            session.invalidate();
        }
    }
}

```

```
    }  
    response.sendRedirect("login.html");  
  }  
}
```

login.html

```
<!DOCTYPE html>  
<html lang="en">  
<head>  
  <meta charset="UTF-8" />  
  <title>Login Page</title>  
</head>  
<body>  
  <h2>Login</h2>  
  <form action="LoginServlet" method="post">  
    <label for="username">Username:</label>  
    <input type="text" name="username" id="username"  
required /><br><br>  
    <label for="password">Password:</label>  
    <input type="password" name="password"  
id="password" required /><br><br>  
    <input type="submit" value="Login" />  
  </form>  
</body>  
</html>
```

welcome.jsp

```
<%@ page session="true" %>
<%
    String username = (String)
    session.getAttribute("username");
    if (username == null) {
        response.sendRedirect("login.html");
    }
%>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8" />
    <title>Welcome</title>
</head>
<body>
    <h2>Welcome, <%= username %>!</h2>
    <p>You are successfully logged in.</p>
    <form action="LogoutServlet" method="post">
        <input type="submit" value="Logout" />
    </form>
</body>
</html>
```

web.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns="http://xmlns.jcp.org/xml/ns/javaee"
xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee
http://xmlns.jcp.org/xml/ns/javaee/web-app_4_0.xsd"
id="WebApp_ID" version="4.0">
  <display-name>ass3</display-name>
  <welcome-file-list>
    <welcome-file>index.html</welcome-file>
    <welcome-file>index.jsp</welcome-file>
    <welcome-file>index.htm</welcome-file>
    <welcome-file>index.xhtml</welcome-file>
    <welcome-file>default.html</welcome-file>
    <welcome-file>default.jsp</welcome-file>
    <welcome-file>default.htm</welcome-file>
    <welcome-file>default.xhtml</welcome-file>
  </welcome-file-list>
</web-app>
```

database.sql

```
CREATE DATABASE collegeDB;
```

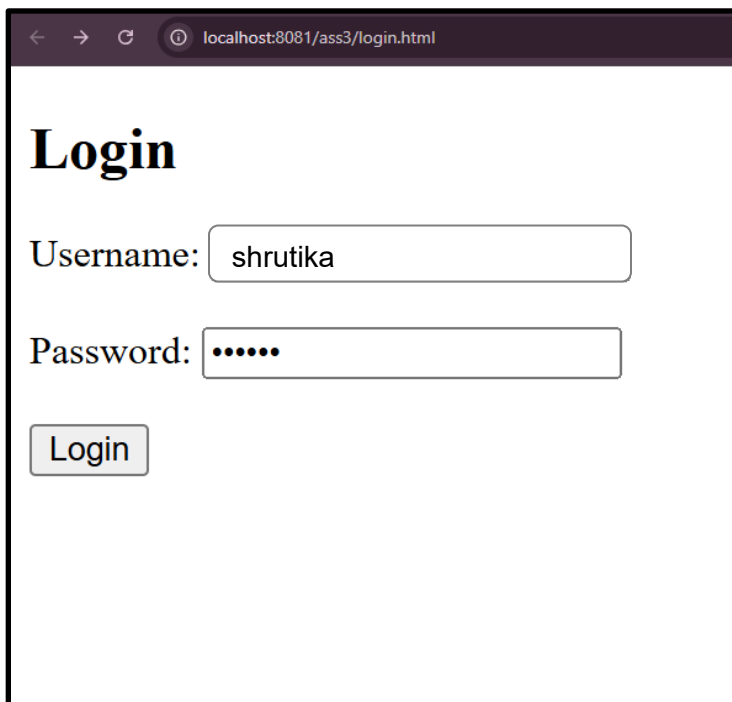
```
USE collegeDB;
```

```
CREATE TABLE users (  
  id INT AUTO_INCREMENT PRIMARY KEY,  
  username VARCHAR(50) NOT NULL UNIQUE,  
  password VARCHAR(50) NOT NULL  
);
```

```
INSERT INTO users (username, password) VALUES ('admin',  
'admin123');
```

```
INSERT INTO users (username, password) VALUES ('shrutika',  
'shrutika62');
```

Output:



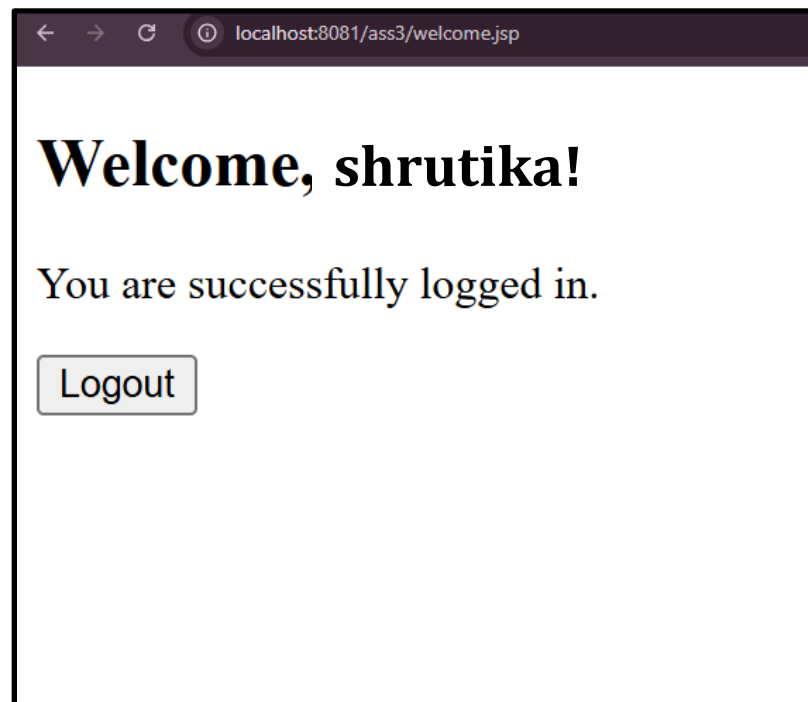
← → ↻ ⓘ localhost:8081/ass3/login.html

Login

Username:

Password:

Login



← → ↻ ⓘ localhost:8081/ass3/welcome.jsp

Welcome, shrutika!

You are successfully logged in.

Logout