

Experiment no 11

Program:

Login Page:

```
<!DOCTYPE html>

<html>

<head>

<meta charset="ISO-8859-1">

<title>Login Page</title>

</head>

<body>

    <h2>Login</h2>

    <form action="LoginServlet" method="post">

        <label for="username">Username:</label><br>

        <input type="text" id="username" name="username"><br><br>

        <label for="password">Password:</label><br>

        <input type="password" id="password" name="password"><br><br>

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

    </form>

</body>

</html>
```

Profile Page:

```
<!DOCTYPE html>

<html>

<head>

<meta charset="ISO-8859-1">

<title>Profile Page</title>

</head>

<body>

    <body>

    <h2>Welcome, User!</h2>

    <!-- Display user profile information here -->


    <br><br>

    <a href="logout.html">Logout</a>

</body>

</html>
```

Logout Page:

```
<!DOCTYPE html>

<html>

<head>

<meta charset="ISO-8859-1">

<title>Logout Page</title>

</head>

<body>

    <h2>Logout Successful</h2>
```

```
<p>You have been logged out.</p>
</body>
</html>
```

Login Servlet :

```
import jakarta.servlet.ServletException; import
jakarta.servlet.annotation.WebServlet; import
jakarta.servlet.http.HttpServlet; import
jakarta.servlet.http.HttpServletRequest; import
jakarta.servlet.http.HttpServletResponse;
import jakarta.servlet.http.HttpSession;

import java.io.IOException;
import java.sql.*;

/**
 * Servlet implementation class LogiServlet
 */
public class LoginServlet extends HttpServlet {
    private static final long serialVersionUID = 1L;

    // JDBC database URL, username, and password
    private static final String JDBC_URL = "jdbc:mysql://localhost:3306/exp11";
    private static final String DB_USER = "root";    private static final String
    DB_PASSWORD = "Avish@101";

    /**
     * Default constructor.
```

```

    */

    public LoginServlet() {
super();

        // TODO Auto-generated constructor stub
    }

    /**
 * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse
 response)
 */
    protected void doGet(HttpServletRequest request, HttpServletResponse
 response) throws ServletException, IOException {
        // TODO Auto-generated method stub
response.getWriter().append("Served at:
").append(request.getContextPath());
    }

    /**
 * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse
 response)
 */
    protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
        // TODO Auto-generated method stub

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

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

```

```

        // Check if username and password are valid (for demo, hardcoded
validation)

        if (validateLogin(username, password)) {

            // Create a session if valid

            HttpSession session = request.getSession();
session.setAttribute("username", username);


            // Redirect to Home menu
response.sendRedirect("profile.html");

        } else {

            // Redirect back to login page with error message
response.sendRedirect("login.html?error=invalid");

        }

    }

    private boolean validateLogin(String username, String password) {
try {

    // Load the MySQL JDBC driver
    Class.forName("com.mysql.cj.jdbc.Driver");


    // Establish a connection

    Connection conn = DriverManager.getConnection(JDBC_URL, DB_USER,
DB_PASSWORD);


    // Prepare a SQL query to retrieve the password for the provided
username

```

```
String sql = "SELECT password FROM userInfo WHERE username = ?";
PreparedStatement statement = conn.prepareStatement(sql);
statement.setString(1, username);

// Execute the query
ResultSet resultSet = statement.executeQuery();

// If a matching record is found and passwords match, return true
if (resultSet.next()) {
    String dbPassword = resultSet.getString("password");
    return password.equals(dbPassword);
}

// Close resources
resultSet.close();
statement.close();
conn.close();
} catch (ClassNotFoundException | SQLException e) {
    e.printStackTrace();
}
return false;
}
}
```

Logout Servlet: import

jakarta.servlet.ServletException; import

jakarta.servlet.annotation.WebServlet; import

jakarta.servlet.http.HttpServlet; import

jakarta.servlet.http.HttpServletRequest; import

jakarta.servlet.http.HttpServletResponse;

import jakarta.servlet.http.HttpSession;

import java.io.IOException;

/**

* Servlet implementation class LogoServlet

*/

public class LogoutServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

/**

* @see HttpServlet#HttpServlet()

*/

public LogoutServlet() {

super();

// TODO Auto-generated constructor stub

}

/**

* @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)

```

        */

        protected void doGet(HttpServletRequest request,
HttpServletRequest response) throws ServletException, IOException {
        processLogout(request, response);

        }

        /**
* @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse
response)
*/

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

                // TODO Auto-generated method stub
doGet(request, response);

        }

        private void processLogout(HttpServletRequest request,
HttpServletRequest response)

                throws ServletException, IOException {

                // Invalidate session and redirect to login page
HttpSession session = request.getSession(false);
if (session != null) {

                session.invalidate(); // Invalidate the session

        }

        response.sendRedirect("login.html");

        }

}

```

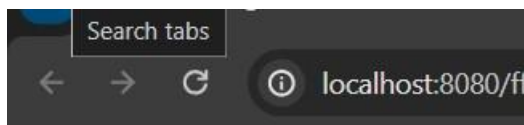

Mysql program and table:

```
1 • create database exp11;  
2 • use exp11;  
3 • create table userInfo (username varchar(10), password varchar(10));  
4 • insert into userInfo values("avish","av101");  
5 • select * from userInfo;
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
username	password			
avish	av101			

Output:

Login Page:



Login

Username:

Password:

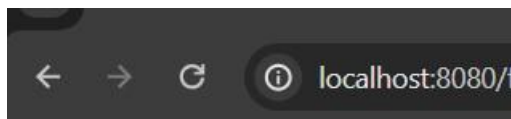
Profile Page:



Welcome, User!

[Logout](#)

Logout Page:



Logout Successful

You have been logged out.