**WEB TECHNOLOGY AND MOBILE APPLICATIONS**

**EXPERIMENT-6**

**AIM:**

To implement a simple login system using HttpSession to track user sessions in a Java Servlet.

**ALGORITHM:**

Step 1: Create an HTML Login Form to take username & password as input.

Step 2: Develop a Servlet (LoginServlet.java) to handle login requests.

Step 3: Validate the user credentials and start an HttpSession.

Step 4: Redirect users to the DashboardServlet, where session details are displayed.

Step 5: Provide a LogoutServlet to end the session.

Step 6: Run the server and test session tracking

**CODE:**

**Login.html**

<!DOCTYPE html>

<html>

<head>

<title>Login</title>

</head>

<body style="font-family:sans-serif; text-align:center; margin-top:100px;">

<h2>Simple Login Page</h2>

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

<input type="text" name="username" placeholder="Username" required><br><br>

<input type="password" name="password" placeholder="Password" required><br><br>

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

</form>

</body>

</html>

**Login.java**

import java.io.\*;

import javax.servlet.\*;

import javax.servlet.http.\*;

public class LoginServlet extends HttpServlet {

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

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

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

// Dummy login check: user=admin, pass=1234

if ("admin".equals(username) && "1234".equals(password)) {

HttpSession session = request.getSession();

session.setAttribute("username", username);

response.sendRedirect("WelcomeServlet");

} else {

response.setContentType("text/html");

PrintWriter out = response.getWriter();

out.println("<html><body style='text-align:center;'>");

out.println("<h3>Invalid username or password!</h3>");

out.println("<a href='login.html'>Try Again</a>");

out.println("</body></html>");

}

}

}

**Welcome.java**

import java.io.\*;

import javax.servlet.\*;

import javax.servlet.http.\*;

public class WelcomeServlet extends HttpServlet {

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

HttpSession session = request.getSession(false);

String username = (session != null) ? (String) session.getAttribute("username") : null;

response.setContentType("text/html");

PrintWriter out = response.getWriter();

if (username != null) {

out.println("<html><body style='text-align:center;'>");

out.println("<h2>Welcome, " + username + " 🎉</h2>");

out.println("<form action='LogoutServlet' method='post'>");

out.println("<input type='submit' value='Logout'>");

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

out.println("</body></html>");

} else {

response.sendRedirect("login.html");

}

}

}

**Logout.java**

import java.io.\*;

import javax.servlet.\*;

import javax.servlet.http.\*;

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(); // Ends session

}

response.sendRedirect("login.html");

}

}

**Web.xml**

<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>WelcomeServlet</servlet-name>

<servlet-class>WelcomeServlet</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>WelcomeServlet</servlet-name>

<url-pattern>/WelcomeServlet</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>

**OUTPUT:**

**A screenshot of a login page

AI-generated content may be incorrect.**

**Result**: : The Session Tracking using HttpSession were executed successfully.