

## ASSIGNMENT NO. 7

### 7. Problem Statement: Simple Servlet Application for Session Management

#### **LoginServlet.java**

```
package EXP;

import java.io.*;
import javax.servlet.*;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.*;

@WebServlet("/LoginServlet")
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");
        // Hardcoded credentials
        String validUsername = "admin";
        String validPassword = "password123";
        if (username != null && username.equals(validUsername) &&
            password != null && password.equals(validPassword)) {
            // Create session
            HttpSession session = request.getSession();
            session.setAttribute("username", username);
            // Redirect to welcome page
            response.sendRedirect("WelcomeServlet");
        }
    }
}
```

```
        } else {
            // Invalid credentials
            request.setAttribute("error", "Invalid username or password.");
            RequestDispatcher rd = request.getRequestDispatcher("login.jsp");
            rd.forward(request, response);
        }
    }
}
```

### **WelcomeServlet.java**

```
package EXP;

import java.io.*;
import javax.servlet.*;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.*;

@WebServlet("/WelcomeServlet")
public class WelcomeServlet extends HttpServlet {
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        PrintWriter out = response.getWriter();
        // Retrieve session (false means: don't create a new one if it doesn't exist)
        HttpSession session = request.getSession(false);
        if (session == null || session.getAttribute("username") == null) {
            // Not logged in, redirect to login page
            response.sendRedirect("login.jsp");
        }
    }
}
```

```

    return;
}

String username = (String) session.getAttribute("username");

out.println("<!DOCTYPE html>");
out.println("<html>");
out.println("<head>");
out.println("<title>Welcome Page</title>");
out.println("<style>");
out.println("body { font-family: Arial, sans-serif; margin: 40px; }");
out.println(".container { max-width: 600px; margin: 0 auto; padding: 20px; border: 1px solid #ccc; border-radius: 5px; }");
out.println(".logout { margin-top: 20px; }");
out.println("</style>");
out.println("</head>");
out.println("<body>");
out.println("<div class='container'>");
out.println("<h2>Welcome, " + username + "</h2>");
out.println("<p>You have successfully logged in.</p>");
out.println("<div class='logout'>");
out.println("<a href='LogoutServlet'>Logout</a>");
out.println("</div>");
out.println("</div>");
out.println("</body>");
out.println("</html>");

}
}

```

### LogoutServlet.java

```
package EXP;
```

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.*;

@WebServlet("/LogoutServlet")
public class LogoutServlet extends HttpServlet {
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        HttpSession session = request.getSession(false);
        if (session != null) {
            session.invalidate(); // Destroys the session
        }
        // Redirect to login page
        response.sendRedirect("login.jsp");
    }
}
```

### Login.jsp

```
<!DOCTYPE html>
<html>
<head>
    <title>Login Page</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            margin: 40px;
        }
    </style>

```

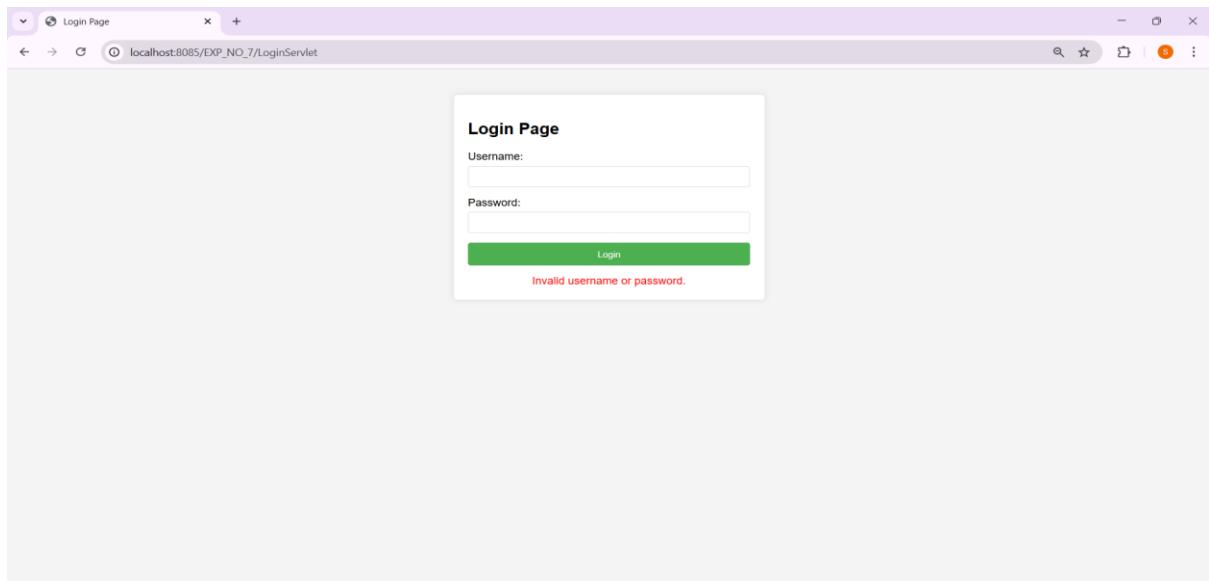
```
background-color: #f4f4f4;  
}  
  
.login-container {  
    max-width: 400px;  
    margin: 0 auto;  
    padding: 20px;  
    background: white;  
    border-radius: 5px;  
    box-shadow: 0 0 10px rgba(0,0,0,0.1);  
}  
  
.form-group {  
    margin-bottom: 15px;  
}  
  
.label {  
    display: block;  
    margin-bottom: 5px;  
}  
  
.input[type="text"],  
.input[type="password"] {  
    width: 100%;  
    padding: 8px;  
    border: 1px solid #ddd;  
    border-radius: 4px;  
    box-sizing: border-box;  
}  
  
.input[type="submit"] {  
    background-color: #4CAF50;  
    color: white;  
    padding: 10px 15px;  
    border: none;  
    border-radius: 4px;
```

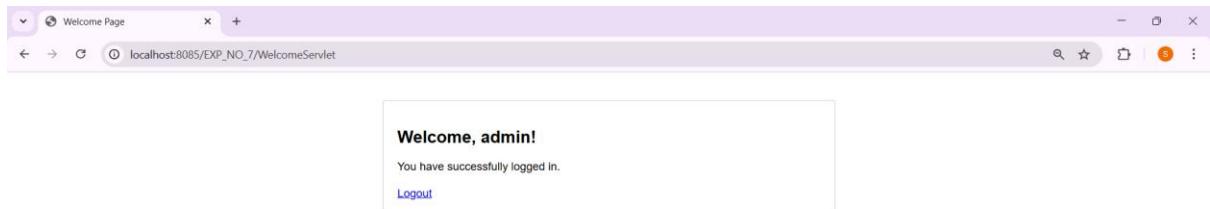
```
        cursor: pointer;
        width: 100%;

    }


```

```
<div class="error">
<%
    String error = (String) request.getAttribute("error");
    if (error != null) {
        out.print(error);
    }
%>
</div>
</div>
</body>
</html>
```





**Welcome, admin!**

You have successfully logged in.

[Logout](#)