

## EXP 6 Demonstrate Session Tracking using HttpSession

### 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.

### PROGRAM:

#### [index.html \(Login Page\)](#)

```
html
CopyEdit
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Login
Page</title>
  <link rel="stylesheet" href="styles.css"> </head>
<body>
  <div class="container">
    <h2>Login System with Session Tracking</h2>
    <form action="LoginServlet" method="POST">
      <input type="text" name="username" placeholder="Enter Username" required>
      <input type="password" name="password" placeholder="Enter Password" required>
      <button type="submit">Login</button>
    </form>
  </div>
</body>
</html>
```

```
css CopyEdit
body { font-
family:
'Poppins',
sans-serif;
background: linear-gradient(to right, #fbc2eb, #a6c1ee); text-align:
center; display: flex; justify-content: center; align-items: center;
height: 100vh; margin: 0;
}

.container { background:
#fff; padding: 20px;
border-radius: 15px;
box-shadow: 0 4px 8px rgba(0, 0, 0, 0.2); width: 300px;
} h2
{
color: #5B86E5;
} input { width: 90%; padding:
10px; margin: 10px 0; border:
1px solid #5B86E5; border-radius:
8px; text-align: center;
} button {
background: #36D1DC;
color: white; border: none;
padding: 10px 15px; border-
radius: 8px; cursor: pointer;
transition: 0.3s;
}
button:hover {
background: #1e6e8c;
}
```

---

## LoginServlet.java (Login & Session Creation)

```
java CopyEdit
import java.io.IOException; import java.io.PrintWriter;
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 {
```

```
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {    response.setContentType("text/html");
PrintWriter out = response.getWriter();
```

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

```
    // Simple validation (In real apps, use a database)
    if(username.equals("admin") && password.equals("password")) {
        HttpSession session = request.getSession();    session.setAttribute("user",
username);
        response.sendRedirect("DashboardServlet"); // Redirect to
Dashboard    }
    else {
        out.println("<h3>Invalid Credentials! Try Again.</h3>");
        request.getRequestDispatcher("index.html").include(request, response);
    }
}
}
```

---

## DashboardServlet.java (Session Tracking & Dashboard)

java CopyEdit

```
import java.io.IOException; import java.io.PrintWriter;
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("/DashboardServlet")
```

```
public class DashboardServlet extends HttpServlet {
```

```
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {    response.setContentType("text/html");
PrintWriter out = response.getWriter();
```

```
        HttpSession session = request.getSession(false); // Get session without creating a new
one
```

```
        if (session != null && session.getAttribute("user") != null) {    String username =
(String) session.getAttribute("user");    out.println("<h2>Welcome, " + username +
"!</h2>");    out.println("<a href='LogoutServlet'>Logout</a>");
```

```
        } else {
            out.println("<h3>Session expired! Please login again.</h3>");
            request.getRequestDispatcher("index.html").include(request, response);
        }
    }
}
```

---

## LogoutServlet.java (Session Invalidation)

```
java CopyEdit
import
java.io.IOException; import
java.io.PrintWriter; import
javax.servlet.ServletException;
import
javax.servlet.annotation.WebServlet; import
javax.servlet.http.HttpServlet;
import
javax.servlet.http.HttpServletRe
quest; import
javax.servlet.http.HttpServletRe
sponse; import
javax.servlet.http.HttpSession;

@WebServlet("/LogoutServlet")
public class LogoutServlet extends HttpServlet {
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {        response.setContentType("text/html");
PrintWriter out = response.getWriter();

        HttpSession session = request.getSession(false);        if (session !=
null) {
            session.invalidate(); // Destroy session
        }
        out.println("<h3>You have been logged out successfully.</h3>");
request.getRequestDispatcher("index.html").include(request, response);
    }
}
```

---

## web.xml (Servlet Configuration)

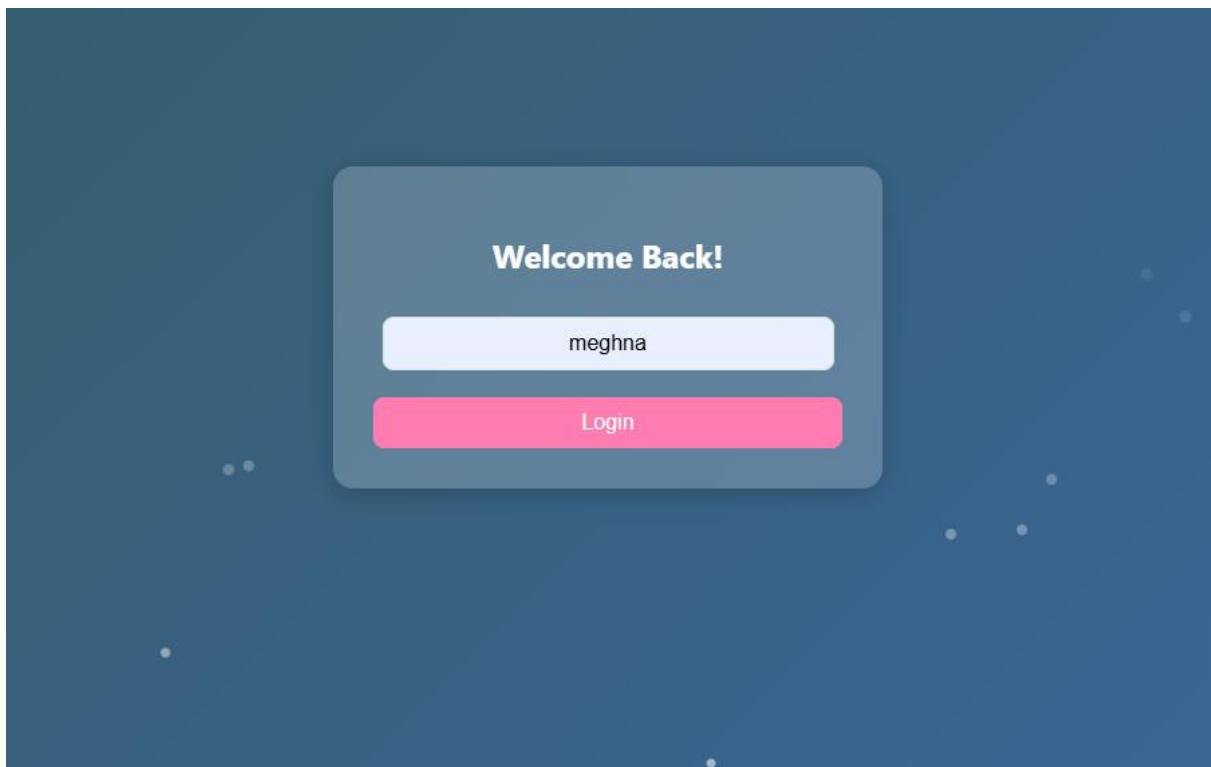
```
xml CopyEdit
<web-app xmlns="http://java.sun.com/xml/ns/javaee" version="3.0">
    <servlet>
        <servlet-name>LoginServlet</servlet-name>        <servlet-class>LoginServlet</servlet-
class>
```

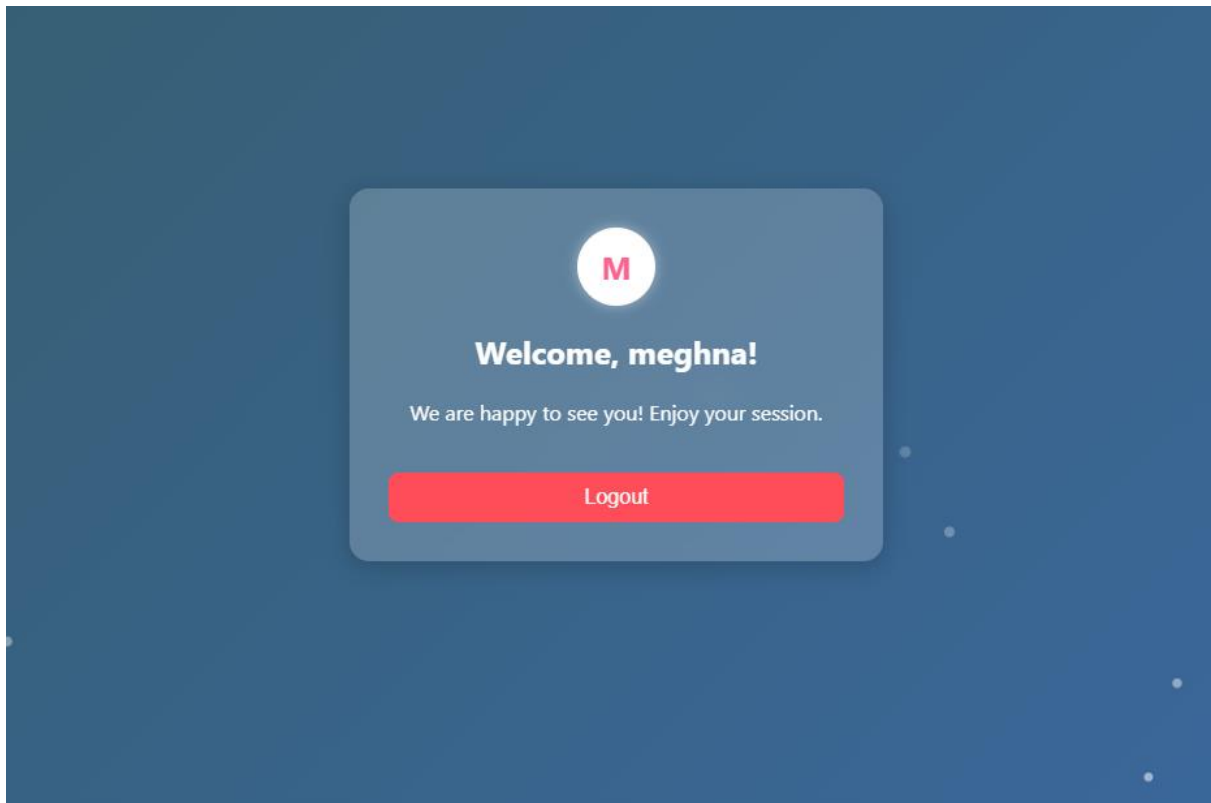
```
</servlet>
<servlet-mapping>
  <servlet-name>LoginServlet</servlet-name>    <url-pattern>/LoginServlet</url-
pattern>
</servlet-mapping>

<servlet>
  <servlet-name>DashboardServlet</servlet-name>    <servlet-
class>DashboardServlet</servlet-class>    </servlet>
<servlet-mapping>
  <servlet-name>DashboardServlet</servlet-name>
  <url-pattern>/DashboardServlet</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:





**RESULT:** The Session Tracking using Http Session were executed successfully.