Advanced Java Lab

Week-6

Roll Number: 248W5A1213

1. Track user session using Cookies and HttpSession.

Code:

LoginServlet.java:

```java
package com.mycompany.servlets;

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.*;
import javax.servlet.http.*;

public class LoginServlet extends HttpServlet {

    @Override
    protected void doGet(HttpServletRequest req, HttpServletResponse res)
            throws ServletException, IOException {

        res.setContentType("text/html");
        PrintWriter out = res.getWriter();

        String user = req.getParameter("user");

        // Create cookie
        Cookie c = new Cookie("username", user);
        c.setMaxAge(60 * 5);    // 5 min
        res.addCookie(c);

        out.println("<h2>Login Successful!</h2>");
        out.println("<a href='welcomeCookie'>Go to Welcome Page</a>");
    }
}
```

WelcomeCookieServlet.java:

```java
package com.mycompany.servlets;

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.*;
import javax.servlet.http.*;
```

```java
public class WelcomeCookieServlet extends HttpServlet {

    @Override
    protected void doGet(HttpServletRequest req, HttpServletResponse res)
            throws ServletException, IOException {

        res.setContentType("text/html");
        PrintWriter out = res.getWriter();

        Cookie[] cookies = req.getCookies();
        String name = "Guest";

        if (cookies != null) {
            for (Cookie ck : cookies) {
                if (ck.getName().equals("username")) {
                    name = ck.getValue();
                }
            }
        }

        out.println("<h2>Welcome " + name + " (From Cookies)</h2>");
    }
}
```

Output:

Login Successful!

Go to Welcome Page

Welcome Bharath (From Cookies)

2. **Demonstrate session tracking using Hidden Form Fields and URL rewriting.**

Code:

UserFormServlet.java:

package com.mycompany.servlets;

```java
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.*;
import javax.servlet.http.*;

public class UserFormServlet extends HttpServlet {

    @Override
    protected void doGet(HttpServletRequest req, HttpServletResponse res)
            throws ServletException, IOException {

        res.setContentType("text/html");
        PrintWriter out = res.getWriter();

        String user = req.getParameter("user");

        out.println("<form action='hiddenNext'>");
        out.println("<input type='hidden' name='username' value='" + user + "'>");
        out.println("<button type='submit'>Next Page</button>");
        out.println("</form>");
    }
}
```

HiddenNextServlet.java:

```java
package com.mycompany.servlets;

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.*;
import javax.servlet.http.*;

public class HiddenNextServlet extends HttpServlet {

    @Override
    protected void doGet(HttpServletRequest req, HttpServletResponse res)
            throws ServletException, IOException {

        res.setContentType("text/html");
        PrintWriter out = res.getWriter();

        String name = req.getParameter("username");

        out.println("<h2>Using Hidden Form Field</h2>");
        out.println("<p>User = " + name + "</p>");
    }
}
```
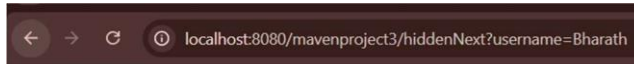
Output:

localhost:8080/mavenproject3/hiddenForm?user=Bharath

Next Page

localhost:8080/mavenproject3/hiddenNext?username=Bharath

Using Hidden Form Field

User = Bharath