TRINITY INTERNATIONAL COLLEGE

(Tribhuvan University Affiliated)

Lab Report:7 Servlet and JSP

Submitted by: **Submitted to:**

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Unit 7: Servlets and Java Server Pages

8. Write a Servlet program to show how to create and retrieve the value of a cookie.

Program :

CookieHelper.java
```java
import javax.servlet.http.*;

public class CookieHelper {
    public static void addCookie(HttpServletResponse response,
            String name, String value) {
        Cookie cookie = new Cookie(name, value);
        cookie.setMaxAge(7 * 24 * 60 * 60);
        response.addCookie(cookie);
    }

    public static String getCookie(HttpServletRequest request,
        String name) {
        Cookie[] cookies = request.getCookies();
        if(cookies == null) return null;
        for(Cookie cookie: cookies) {
            if(cookie.getName().equals(name))
                return cookie.getValue();
        }
        return null;
    }
}
```

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

@WebServlet(urlPatterns = {"/NameServlet"})
public class NameServlet extends HttpServlet {

@Override
protected void doGet(HttpServletRequest request,
HttpServletResponse response)
throws ServletException, IOException {
String nameInCookie = CookieHelper.getCookie(request, "name");
if(nameInCookie != null) {
showWelcomePage(response, nameInCookie);
return;
```

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```
    }

    String submit = request.getParameter("submit");
    if(submit != null) {
    String name = request.getParameter("name");
    CookieHelper.addCookie(response, "name", name);
    showWelcomePage(response, name);
    return;
    }

    showNameForm(response);
    }

    private void showWelcomePage(HttpServletResponse response,
    String name)
    throws ServletException, IOException {
    String html = String.format("<p>Welcome %s</p>", name);
    send(response, html);
    }

    private void showNameForm(HttpServletResponse response)
    throws ServletException, IOException {
    String html = "<form action='NameServlet' method='GET'>"
    + "Name: <input type='text' name='name'>"
    + "<input type='submit' value='Submit' name='submit'>"
    + "</form>";
    send(response, html);
    }

    private void send(HttpServletResponse response, String html)
    throws ServletException, IOException  {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
    out.println("<!DOCTYPE html>");
    out.println("<html>");
    out.println("<head>");
    out.println("<title>NameServlet</title>");
    out.println("</head>");
    out.println("<body>");
    out.println(html);
    out.println("</body>");
    out.println("</html>");
    }
    }
    }
```
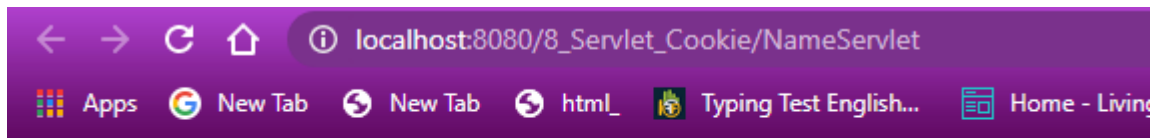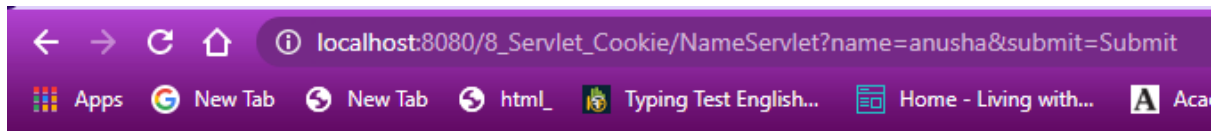
Output :

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9. Write a JSP program to demonstrate login, logout and secure admin page.

Program:

Loginform.jsp

```
<%--
Document     : 1_loginform
Created on : 26-Jun-2020, 10:34:42
Author       : user
--%>



<html>
<head>
<title>Login Form</title>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-
scale=1.0">
</head>
<body>
<h1>Welcome to Login Page !!!!</h1>

<form action="1_loginform_validate.jsp" method="POST">
Username:<input type="text" name="username">
<br/>
Password:<input type="password" name="password">
<br/>
<input type="submit" value="Submit">
</form>
</body>
</html>
```

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Loginform_validate.jsp

```jsp
<%

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

if (username.equalsIgnoreCase("anusha") &&
password.equalsIgnoreCase("anusha")) {
session.setAttribute("user", username);

response.sendRedirect("1_admin.jsp");
} else {

response.sendRedirect("1_loginform.jsp");
}
%>
```

Admin.jsp

```jsp
<%--
Document    : 1_admin
Created on : 26-Jun-2020, 10:40:43
Author      : user
--%>

<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html;
charset=UTF-8">
<title>Welcome</title>
</head>
<body>
<%
String username = (String) session.getAttribute("user");

if (username == null ) {
%>
<jsp:forward page="1_loginform.jsp"/>
<%        } else {
out.println("<h1>Welcome To Java Class," + username +
"</h1>");

%>
<a href="1_logout.jsp">Logout</a>
<%              }
```

```
%>

</body>
</html>
```

Logout.jsp

```
<%--
Document   : 1_logout
Created on : 28-Jun-2020, 08:34:09
Author     : user
--%>

<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html;
charset=UTF-8">
<title>Login System</title>
</head>
<body>
<% session.invalidate();%> <!-- HERE WE ARE INVALIDATE THE
SESSION, SO THAT NO VALUES WILL BE PRESENT IN SESSION -->
<jsp:forward page="1_loginform.jsp"/>

</body>
</html>
```

Output :

Welcome To Java Class,anusha

Logout

10. Write a JSP program to show how to use custom error page.

Program :

Error.jsp
```jsp
<%@page isErrorPage="true" %>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html;
charset=UTF-8">
<title>Error</title>
</head>
<body>
<h1>Error</h1>
<p><%= exception.getMessage() %></p>
</body>
</html>
```

Index.jsp
```jsp
<%@page errorPage="error.jsp" %>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html;
charset=UTF-8">
<title>Error Demo</title>
</head>
<body>
<h1>Division</h1>
<%
if(true)
throw new RuntimeException("Hello error page!");
%>
</body>
</html>
```

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