

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
SUBJECT CODE: 19CS2107
ENTERPRISE PROGRAMMING WORKBOOK

SESSION HANDLING#7

Date of the Session: ___/___/___

Time of the Session: ___ to ___

Prerequisite:

- Basic idea on Session handling techniques.

Pre-Lab Task:

1. What is session tracking? Why is session tracking used?

HTTP is Stateless Protocol. It doesn't store state of any user sending request to server. It treats every user as new user for every user. Session tracking is way of maintain data of user. It contains details like session id, lifetime, etc..

2. What are different types of session tracking techniques? Write few real-life examples for each session tracking technique.

Types of Session Tracking techniques

- (a) Cookies - Gmail
- (b) Hidden form field - viewing items in shopping cart
- (c) URL rewriting - in any regular websites without any sensitive information
- (d) HTTP Session - used for online fund transactions

3. Understand how a cookie works. Write syntax to create a cookie and store values, access and delete them.

Cookie is a small piece of information which is used to identify every user sending req to server and sends req. We add some details like unique id, lifetime, etc., from server. It is added by default recognising as an old one.

```
create + Cookie ck = new Cookie("user id", "123");  
Response.addCookie(ck);
```

Use Cookie :

```
Cookie ck = new Cookie();  
Cookie c = request.getCookies();  
for (int i = 0; i < c.length; i++)  
    System.out.println(c[i].getName() + " " + c[i].getValue());
```

Delete Cookie :

```
Cookie ck = new Cookie("userid", "");  
ck.setMaxAge(0);  
Response.addCookie(ck);
```

In Lab Task:

1. Kamal needs to login to his Gmail account but he forgot his secret password. Create a login form where he enters his username and password. As password is wrong, show a message which says "Wrong Password" and forgot password link is shown. When user clicks it, use URL redirect method to display username entered in login form and change his password by displaying password field.

Writing space for the Problem:(For Student's use only)

index.html

<!DOCTYPE html>

<html>

<head>

<meta charset="ISO-8859-1">

<title> Insert title here </title>

</head>

<body>

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

username: <input type="text" name="uname"/>

password: <input type="text" name="pwd"/>

<input type="submit" value="login"/> </form> </body> </html>

Pwd Check.java

import java.io.IOException; import java.io.PrintWriter;

import java.servlet.*; import java.servlet.http.*;

public class PwdCheck extends HttpServlet {

private static final long serialVersionUID = 1L;

public PwdCheck() { super(); }

protected void doPost (HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

PrintWriter out = response.getWriter();

try { response.setContentType("text/html");

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

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

Writing space for the Problem: (For Student's use only)

```

out.println("Please enter new Password");
out.println("<form method = \"post\" action = \"Pwd check\">\n"+
newPassword <input type = \"text\" name = \"Pwd\"/>\n");
"<a href = \"index.html\" Submit <a>\n\n"+<form>");

```

```

}
catch (Exception e) {
out.println(e);
}
}
}

```

web.xml :-

```

<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema
instance" xmlns="http://java.sun.com/xml/ns/javaee" xsi:schemaLocation
="http://java.sun.com/xml/ns/javaee http://java.sun.com/xml/ns
java/web-app-2.5.xsd" id="webAPP-ID" version="2.5">
<display-name> or Rewriting </display-name>
<servlet>

```

```

<description> </description>
<display-name> Pwd check </display-name>
<servlet-name> Pwd check </servlet-name>
<servlet-class> Pwd check </servlet-class>
</servlet>
<servlet-mapping>
<servlet-name> Pwd check </servlet-name>
<url-pattern> Pwd check </url-pattern>
</servlet-mapping>

```

~~<description>~~

<Servlet-name> Password change </Servlet-name>.

<Servlet ->.

<url-pattern> Password change </url-pattern>.

</Servlet-mapping>.

<web-app> .

2. Udemmy is a site which gives online courses of various domains. This site chooses the cost of the course dependent on number of visits to the site from your account. If number of visits are more, cost is more. Discover number of times client tapped on any course from his account.

Writing space for the Problem: (For Student's use only)

Index.html

```
<html>
```

```
<head>
```

```
<meta charset = 'ISO-8859-1'>
```

```
</head>
```

```
<body>
```

```
<a href = "Hit Counter" > Click me </a>
```

```
</body>
```

```
</html>
```

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

```
Public class Hit (Counter extends HttpServlet {
```

```
    Private int y;
```

```
    Public void init (Servlet Config) throws Servlet Exception {
```

```
        int y;
```

```
        y=0;
```

```
    }
```

```
    Protected void doGet (HttpServlet Request request, HttpServletResponse Response response) throws Servlet Exception, IOException {
```

```
        y++;
```

```
        Print writer out = response. get writer();
```

```
        response. Set Content Type ("text/html");
```

```
        out. PrintLn ("No. of clicks = " + y); }
```

```
    Protected void doPost (HttpServlet Request request, HttpServletResponse Response response) throws Servlet Exception, IOException {
```

```
        do Get (request, response);
```

```
    }
```

Post Lab Task:

1. Sharan needs to pay his college fee on the web. So, he opens online banking site and logs in with right accreditations. In the wake of signing in, show another structure which contains fields like username, college name, amount to be paid. After that, put username, school name and amount to be paid in session scope. Show a message "You are paying to 'college name' Rs. 'amount' " and a continue button. If client clicks continue, show a bill and end the session.

Writing space for the Problem:(For Student's use only)

```

<html>
<head>
<meta charset="ISO-8859-1">
</head>
<body>
<form action="feeStore" method="Post">
    name: <input type="text" name="uname"/>
    Password: <input type="password" name="Pwd"/>
    <input type="Submit" value="login"/>
</form>
</body>
</html>

```

```

feeStore feeStore.java:
import java.io * ; import java.servlet * ; import java.servlet.http * ;

Public class feeStore extends HTTP Servlet {
    Private static final long serialVersionUID = 1L;

    Protected void doPost (HTTP Servlet Request request, HTTP Servlet
Response response) throws Servlet Exception, IOException {

    Print writeout = response.getWriter ();
    response.setContentType ("text/html");

    try {
        String name = request.getParameter ("uname");
        String Pwd = request.getParameter ("Pwd");
    }

```



```
if (name.equals("me")) {
```

```
if (Pwd.equals("my Password")) {
```

```
out.println("Welcome" + name + "\n please fill the details);
```

```
out.println("<form action = 'fee Session' method = 'post'>\n
```

```
"name<input type = 'text' name = 'id' />\n" + "amount<input type = 'text' name = 'amt' />\n" + "<input type = 'submit' value = 'Pay' />\n" +  
<form>";
```

```
}
```

```
}
```

```
else {
```

```
out.println("wrong Password try again\n");
```

```
out.println("<form action = 'fee Session' method = 'post'>\n" +
```

```
"name<input type = 'text' name = 'uname' />\n" +
```

```
"Password<input type = 'password' name = 'Pwd' />\n"
```

```
}
```

```
catch (Exception e) {
```

```
out.println(e);
```

```
}
```

```
}
```

```
}
```

```
fee Session.java
```

```
import java.io.*;
```

```
import java.servlet.*;
```

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

```
Public class feeSession extends HttpServlet {
```

```
Private static final long Serial Version UID=1L;
```

```
Protected void doPost (HTTP Servlet Exception IO Exception
```

```
response) throws Servlet Exception, IO Exception response.set (Content type("text/html"))
```

Writing space for the Problem:(For Student's use only)

try {

String name = request.getParameter("uname");

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

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

HttpSession = request.getSession();

Session.setAttribute("name", name);

Session.setAttribute("clg", clg);

Session.setAttribute("amt", amt);

out.println("you are going to Pay to " + clg + " an amount of " + amt);

out.println("\n Do you want to continue?");

+ "<input type = 'submit' value = 'yes' /> |
" + method "post" />

+ "<input type = 'submit' value = 'no' /> |
" + "</form>";

}

catch (Exception e) {

out.println(e);

}

}

}

import java.io.*;

import javax.servlet.*;

import javax.servlet.http.*;

Public class Bill extends HttpServlet {

Public static = final long Serial Version UID = 1L;

Protected void doPost(HttpServletRequest request; HttpServletResponse response)

throws ServletException, IOException {

Writing space for the Problem:(For Student's use only)

```

Print writer out = response.getWriter();
response.setContentType("text/html");
try { HttpSession session = request.getSession();
    out.println("Bill ");
    String name = (String) session.getAttribute("name");
    String clg = (String) session.getAttribute("clg");
    String amt = (String) session.getAttribute("amt");
    out.println("<br> Name: " + name);
    out.println("<br> COLLEGE: " + clg);
    out.println("<br> AMOUNT: " + amt);
    session.invalidate();
}
catch (Exception e) {
    out.println(e);
}
}
}
}

```

