Department of Computer Science and Engineering

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UCS1601 - Internet Programming

Assignment 4: Session Tracking

Objective:

Write a servlet program to track multiple users. Set a time limit for auser's session. Compare the session id's before and after the session expiration.

Code:

HTML:

```
7 </head>
9 <body>
      \frac{h1}{Welcome} to the Session session!\frac{h1}{m}
      <hr><<br><<br>></pr></pr>
11
      <form action="http://localhost:8080/A4/Session" method="</pre>
     GET">
          <input type="text" name="username">
13
           <br><br><
14
           <input type="submit" value="Start">
      </form>
17 </body>
18 </html>
  CSS:
1 body{
      font-size: 16pt;
      font-family: -apple-system, BlinkMacSystemFont, 'Segoe UI
     ', 'Roboto', 'Oxygen',
      'Ubuntu', 'Cantarell', 'Fira Sans', 'Droid Sans', '
     Helvetica Neue',
      sans-serif;
7 }
10 h1{
      font-size: 50pt;
12
      text-align: center;
      color: blue;
13
14 }
15
16 table, td, th, tr{
      border: 2px solid black;
      text-align: center;
18
      width: 75%;
      border-collapse: collapse;
20
```

21 }

Java:

```
1 import java.io.*;
2 import javax.servlet.*;
3 import javax.servlet.http.*;
5 //Tomcat 10 or later: change imports from "javax.x" to "
     jakarta.x"
7 //Reference: https://www3.ntu.edu.sg/home/ehchua/programming/
     java/JavaServlets.html
9 public class Session extends HttpServlet{
      public void doGet(HttpServletRequest request,
     HttpServletResponse response)
          throws ServletException, IOException{
11
              response.setContentType("text/html;");
12
              try{
13
                   int count;
14
                   PrintWriter out = response.getWriter();
15
                   HttpSession session = request.getSession();
16
17
                   session.setMaxInactiveInterval(10);
18
                   if(session.getAttribute("count") != null){
19
                       count = (int)session.getAttribute("count"
20
     );
                   }
21
                   else{
22
                       count = 0;
23
                   }
24
                   count++;
25
                   session.setAttribute("count", count);
26
                   out.println("Session ID: "+session.getId()+"<
     br>");
                   out.println("Count: "+count);
              }
29
               catch(Exception e){
                   System.out.println(e);
31
              }
33
          }
34
35 }
```

XML:

```
1 <web-app>
      <servlet>
          <servlet -name>Session</servlet -name>
          <servlet-class>Session</servlet-class>
4
      </servlet>
      <servlet-mapping>
          <servlet -name>Session</servlet -name>
          <url -pattern > / Session < /url -pattern >
9
      </servlet-mapping>
10
11
      <welcome-file-list>
12
          <welcome-file>index.html</welcome-file>
13
      </welcome-file-list>
15 </web-app>
```

Output:

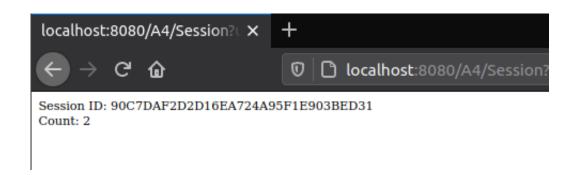


Session ID: 764D19627EF8D35937D280989AD3FC29 Count: 1

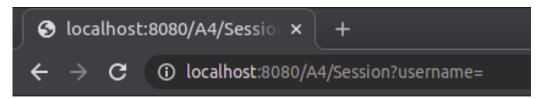
After session expiry:



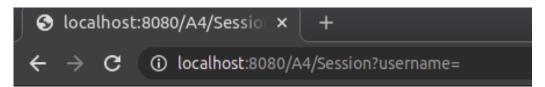
Session ID: 90C7DAF2D2D16EA724A95F1E903BED31 Count: 1



Different browser:



Session ID: 4FB5B0D4962E38E5C9AD085FCBE0E99E Count: 1



Session ID: 4FB5B0D4962E38E5C9AD085FCBE0E99E Count: 2

After session expiry:

