Ex.no:7

Date:19/4/25

7.Write a servlet to program to store a user's preferences(like theme or language) using cookies.Retrive and display these preferences on subsequent visits.

Aim:

To Write a Servlet to demonstrate the difference between HTTP GET and POST By creating a form and handling requests accordingly.

PROGRAM

Cookie.html

```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<form method="post" action="http://localhost:7050/231801135Ramya/SetCookie">
  <label>Theme: </label>
    <input type="text" name="theme" required>
  >
    <label>Language: </label><br>
    <input type="radio" name="language" value="English" required> English<br/><br/>br>
    <input type="radio" name="language" value="Tamil"> Tamil<br/>
    <input type="radio" name="language" value="Hindi"> Hindi<br/>
```

```
<button type="submit">Submit</button>
</form>
</body>
</html>
eclipse-workspace - 231801135Ramya/src/main/webapp/Cookie.html - Eclipse IDE
File Edit Source Navigate Search Project Run Window Help
🖺 Project Explorer × 🕒 🕏 😯 🏿 😨 🗖 🖺 hotspot.html 🗎 user.html 🗓 DisplayUser.java 🖺 Cookie.html × 🖺 getCookie.jspv 📝 SetCookie.jspv
v 🐉 231801135Ramya
                                                1 <!DOCTYPE html>
                                               20 <html>
   > 🖥 Deployment Descriptor: 231801135Ramya
                                               3⊖ <head>
4 <meta charset="ISO-8859-1">
   > A JAX-WS Web Services
   Java Resources
                                                5 <title>Insert title here</title>
     v 👛 src/main/java
                                               6 </head>
        v # ramya
                                                7⊜ <body>
                                               80 <form method="post" action="http://localhost:7050/231801135Ramya/SetCookie">

   DisplayUser.java

          > 🗓 package-info.java
                                                      >
                                                           <label>Theme: </label>
<input type="text" name="theme" required>
                                              10
          > 

SetCookie.java
     > 🛋 Libraries
                                               12
                                                       > 🗁 build
                                                           <label>Language: </label><br/>tinput type="radio" name="Language" value="English" required> English<br/>tinput type="radio" name="Language" value="Tamil"> Tamil<br/>tor><input type="radio" name="Language" value="Hindi"> Hindithindi
Hindi
Hindi
Hindi
Hindi
   v 🥟 src
                                               14
     v 🗁 main
        > 🗁 java
                                              16
        webapp
          > > META-INF
                                                  <button type="submit">Submit
          > 🍅 WEB-INF
                                              20 </form>
21
            Cookie.html
             formvalidate.html
                                              22
23 </body>
24 </html>
            getCookie.jsp
            notspot.html
            style.css
            user.html
 > 😂 Application1
> 📂 bookstore management
```

getCookie.jsp

```
String language = null;
  if (cookies != null) {
    for (Cookie cookie : cookies) {
       if ("theme".equals(cookie.getName())) {
         theme = cookie.getValue();
       } else if ("language".equals(cookie.getName())) {
         language = cookie.getValue();
       }
     }
  if (theme != null && language != null) {
    out.println("Hi! Your theme is <b>" + theme + "</b> and preferred language is <b>" +
language + "</b>.");
  } else {
    out.println("No cookies found.");
  }
%>
</body>
</html>
```

```
eclipse-workspace - 231801135Ramya/src/main/webapp/getCookie.jsp - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer × □ $ 7 | № 8 □ □ hotspot.html ② user.html ② DisplayUser.java ② Cookie.html ③ getCookie.java

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1 (※ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%)

2 (IDOCTYPE html)
                                                       3⊖ <html>

→ A JAX-WS Web Services

                                                      v 🥦 Java Resources

w src/main/java

    DisplayUser.iava

                                                      8@ <body>
            > 🗓 package-info.java
                                                              Cookie[] cookies = request.getCookies();
            > 

SetCookie.java
        ■ Libraries
                                                              String language = null;
   > 🗁 build
                                                            if (cookies != null) {
  for (Cookie cookie : cookies) {
    if ("theme".equals(cookie.getName())) {
        theme = cookie.getValue();
    } else if ("language".equals(cookie.getName())) {
        language = cookie.getValue();
    }
}
   v 🗁 src
     v 🗁 main
        > 🗁 java
        v 🗁 webapp
           > > META-INF
            > 🗁 WEB-INF
             Cookie.html
                                                                 }
              formvalidate.html
                                                            }
             getCookie.jsp
                                                             if (theme != null && language != null) {
   out.println("Hi! Your theme is <b>" + theme + "</b> and preferred language is <b>" + language + "</b>.");
} else {
             style.css
              user.html
                                                                   out.println("No cookies found.");
 > 😂 Application1
                                                27
28 }
29 %>
30 </body>
31 </html>
  ≈ <del>6⊌</del> exam
 > 📂 ExpenseTrackers
> MvExpenseTracker
```

SetCookie.java

```
package ramya;
```

```
import jakarta.servlet.ServletException;
import jakarta.servlet.annotation.WebServlet;
import jakarta.servlet.http.Cookie;
import jakarta.servlet.http.HttpServlet;
import jakarta.servlet.http.HttpServletRequest;
import jakarta.servlet.http.HttpServletResponse;
import jakarta.servlet.http.HttpServletResponse;
import java.io.IOException;
```

```
* Servlet implementation class SetCookie

*/

@WebServlet("/SetCookie")

public class SetCookie extends HttpServlet {

    private static final long serialVersionUID = 1L;
```

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```
/**
   * @see HttpServlet()
   */
  public SetCookie() {
    super();
    // TODO Auto-generated constructor stub }
       * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse
response)
       */
       protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
              // TODO Auto-generated method stub
              response.getWriter().append("Served at: ").append(request.getContextPath());
       }/**
       * @ see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse
response)
       protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
    String theme = request.getParameter("theme");
    String lang = request.getParameter("language");
    // Check if values match specific criteria
    if ("nature".equalsIgnoreCase(theme) && "tamil".equalsIgnoreCase(lang)) {
       // Create cookie with proper name and value
       Cookie themeCookie = new Cookie("theme", theme);
       themeCookie.setMaxAge(60 * 60); // 1 hour
       themeCookie.setPath("/");
       response.addCookie(themeCookie);
```

```
Cookie languageCookie = new Cookie("language", lang);
languageCookie.setMaxAge(60 * 60);
languageCookie.setPath("/");
response.addCookie(languageCookie);

response.sendRedirect("getCookie.jsp");
} else {
response.getWriter().println("Invalid login!");
}
}
```

```
eclipse-workspace - 231801135Ramya/src/main/java/ramya/SetCookie.java - Eclipse IDE
/**

* @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)

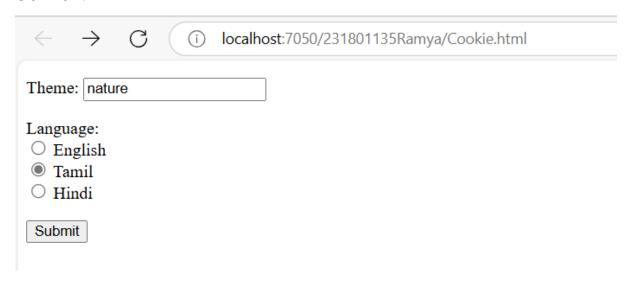
*/
                                                                protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
   String theme = request.getParameter("theme");
   String lang = request.getParameter("language");

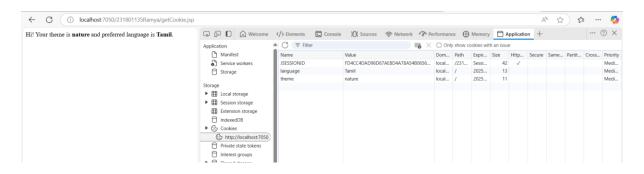
    → # ramya
    → DisplayUser.java
            >  package-info.java
>  SetCookie.java
                                                                     // Check if values match specific criteria
if ("nature".equalsIgnoreCase(theme) && "tamil".equalsIgnoreCase(lang)) {
   // Create cookie with proper name and value
   Cookie themeCookie = new Cookie("theme", theme);
   themeCookie.setMaxAge(60 * 60); // 1 hour
   themeCookie.setPakhf("");
   response.addCookie(themeCookie);
      > M Libraries
   > 🗁 build

v 🗁 src
      v 🗁 main
         > 🇀 java

v 🗀 webapp
                                                                          Cookie languageCookie = new Cookie("language", lang);
languageCookie.setMaxAge(60 * 60);
languageCookie.setPath("");
response.addCookie(languageCookie);
            > 🍅 META-INF
            > 🍅 WEB-INF
              Cookie.html
              formyalidate html
                                                                           response.sendRedirect("getCookie.jsp");
              hotspot.html
              style.css
user.html
                                                                           response.getWriter().println("Invalid login!");
                                                                     }
> 😂 Application1
                                                                          }
 > <code-block> exam</code>
 > # ExpenseTrackers
```

OUTPUT:





Result:

Thus Write a servlet to program to store a user's preferences(like theme or language) using cookies.Retrive and display these preferences on subsequent visits.

