**14.Cookie:**

* A **cookie** is a small piece of information that is persisted between the multiple client requests.
* A cookie has a name, a single value, and optional attributes such as a comment, path and domain qualifiers, a maximum age, and a version number.
* By default, each request is considered as a new request.
* In cookies technique, we add cookie with response from the servlet.
* So cookie is stored in the cache of the browser.
* After that if request is sent by the user, cookie is added with request by default. Thus, we recognize the user as the old user.

**Types of Cookie:**

1. Non-persistent cookie
2. Persistent cookie

### 1)Non-persistent cookie:

* It is **valid for single session** only.
* It is removed each time when user closes the browser.

### 2)Persistent cookie:

* It is **valid for multiple session** .
* It is not removed each time when user closes the browser. It is removed only if user logout or signout.

### Advantage of Cookies:

* Simplest technique of maintaining the state.
* Cookies are maintained at client side.

### Disadvantage of Cookies:

* It will not work if cookie is disabled from the browser.
* Only textual information can be set in Cookie object.

### Useful Methods of Cookie class:

|  |  |
| --- | --- |
| **Method** | **Description** |
| public void setMaxAge(int expiry) | Sets the maximum age of the cookie in seconds. |
| public String getName() | Returns the name of the cookie. The name cannot be changed after creation. |
| public String getValue() | Returns the value of the cookie. |
| public void setName(String name) | changes the name of the cookie. |
| public void setValue(String value) | changes the value of the cookie. |

### Example:

### index.html

### <html>

### <body>

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

Name:<input type="text" name="userName"/><br/>

<input type="submit" value="go"/>

</form>

### </body>

### </html>

### FirstServlet.java

**import** java.io.\*;

**import** javax.servlet.\*;

**import** javax.servlet.http.\*;

**public** **class** FirstServlet **extends** HttpServlet {

**public** **void** doPost(HttpServletRequest request, HttpServletResponse response){

**try**{

response.setContentType("text/html");

PrintWriter out = response.getWriter();

String n=request.getParameter("userName");

out.print("Welcome "+n);

Cookie ck=**new** Cookie("uname",n);//creating cookie object

response.addCookie(ck);//adding cookie in the response

//creating submit button

out.print("<form action= SecondServlet >");

out.print("<input type='submit' value='go'>");

out.print("</form>");

out.close();

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

}

}

### SecondServlet.java

**import** java.io.\*;

**import** javax.servlet.\*;

**import** javax.servlet.http.\*;

**public** **class** SecondServlet **extends** HttpServlet {

**public** **void** doPost(HttpServletRequest request, HttpServletResponse response){

**try**{

response.setContentType("text/html");

PrintWriter out = response.getWriter();

Cookie ck[]=request.getCookies();

out.print("Hello "+ck[0].getValue());

out.close();

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

}

}

web.xml

<web-app>

<servlet>

<servlet-name>s1</servlet-name>

<servlet-**class**>FirstServlet</servlet-**class**>

</servlet>

<servlet-mapping>

<servlet-name>s1</servlet-name>

<url-pattern>/servlet1</url-pattern>

</servlet-mapping>

<servlet>

<servlet-name>s2</servlet-name>

<servlet-**class**>SecondServlet</servlet-**class**>

</servlet>

<servlet-mapping>

<servlet-name>s2</servlet-name>

<url-pattern>/servlet2</url-pattern>

</servlet-mapping>

</web-app>