

Cookies

A cookie is a piece of data from a website that is stored within a web browser that the website can retrieve at a later time. Cookies are used to tell the server that users have returned to a particular website. When users return to a website, a cookie provides information and allows the site to display selected settings and targeted content. Cookies also store information such as user preferences. This is done so that when users revisit sites, any information that was provided in a previous session or any set preferences can be easily retrieved.

Type of Cookies:

Session cookie

Session cookies are also known as transient cookies or per-session cookies. Session cookies store information while the user is visiting the website. These cookies are deleted once the user closes the session.

Persistent cookie

Persistent cookies are stored for a specific length of time. These cookies remain on your device until they expire or are deleted. Persistent cookies are sometimes called tracking cookies because they are used to collect user information such as browsing habits and preferences.

First-party and third-party cookies

First-party cookies are cookies set by websites that users directly visit. These cookies often store information that is relevant or related to the site, such as preferred settings or user location. Third-party cookies are cookies that come alongside third-party content, such as embedded videos, ads, web banners, and scripts, on a visited website that users visit. Advertisers often use third-party cookies to track user behavior.

Advantages of Cookies:

1. Simple to use and easy to implement.
2. Since cookies are stored on the client computers hence it does not create any extra load on the server.
3. With the help of cookies some user data such as browsing history, last page visited can be stored and it can help the user to access those data quickly.

Disadvantages of Cookies:

1. The cookies are not secure as they are stored in a clear text and no sensitive information should be stored in cookies.
2. The cookies can not store complex information as they are limited to simple textual information.

Cookie class in Java:

The javax.servlet.http.Cookie class provides the functionality of using cookies. It provides a lot of useful methods for cookies.

The constructor of the Cookie class:

Cookie() - Used for constructing a cookie.

Cookie(String name, String value) - constructs a cookie with a specified name and value.

Methods:

public void addCookie(Cookie ck) - It is a method of HttpServletResponse interface is used to add cookie in response objects.

public Cookie[] getCookies() - It is a method of HttpServletRequest interface is used to return all the cookies from the browser.

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.