



SLIDE

# Cookies, Cookie value

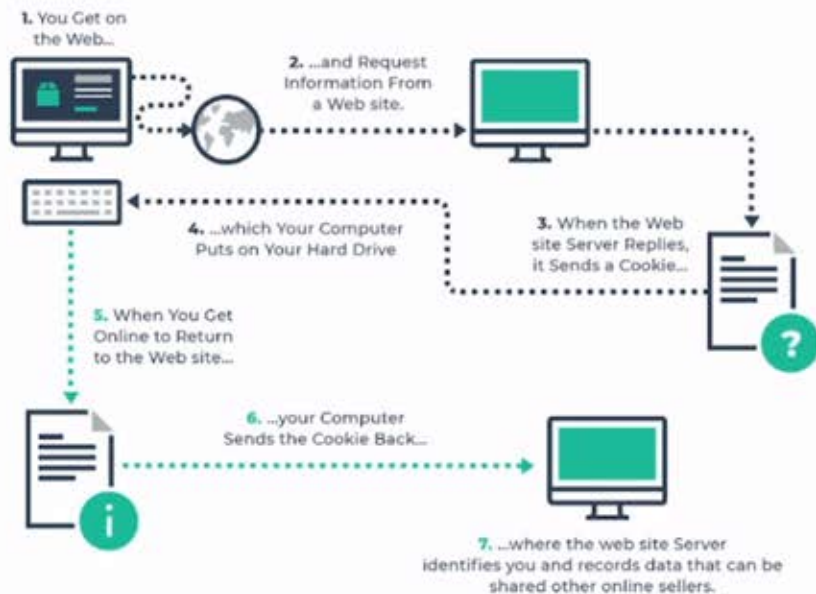


# What is Cookie?

- 1) Data stored in small text file.
- 2) Naturally sent by visited websites.
- 3) Sent to users computer through browser.
- 4) Is not a program, doesn't perform any function.
- 5) Stored in key-value pair.



# How does a Cookie work?



## Purposes of Cookie

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- **Session management** – cookies allow you to manage any information that the server should remember. For example, logins, shopping carts, etc.
- **Personalization** – cookies allow you to store user preferences, themes, and setting specific to a user.
- **Tracking** – cookies help record and analyze user behaviors in advertising.

## Example of Cookie

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```
HTTP/1.1 200 OK
Content-type: text/html
Set-Cookie: user=programming-hero
; expire=Tue, 12-December-2030 12:10:00 GMT; domain=example.com; path=/dom; secure
...
```

## Parts of Cookie

**Name** – a unique name that identifies the cookie. The cookie names are case-insensitive. It means that Username and username are the same cookies.

**Secure flag** – if specified, the web browser only sends the cookie to the server only via an SSL connection (https, not http)

**Path** – path without the domain for which the cookie should be sent to the server. For example, you can specify that the cookie is accessible only from the <https://www.example.com/dom/> so pages at <https://www.example.com/> won't send the cookie information.

**Expiration** – timestamp that indicates when the web browser should delete the cookie (or when the browser should stop sending the cookie to the server).👉

**Value** – string value of the cookie. It must be URL-encoded.

**Domain** – a domain for which the cookie is valid.

# Types of Cookie

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## 1) First Party Cookie:

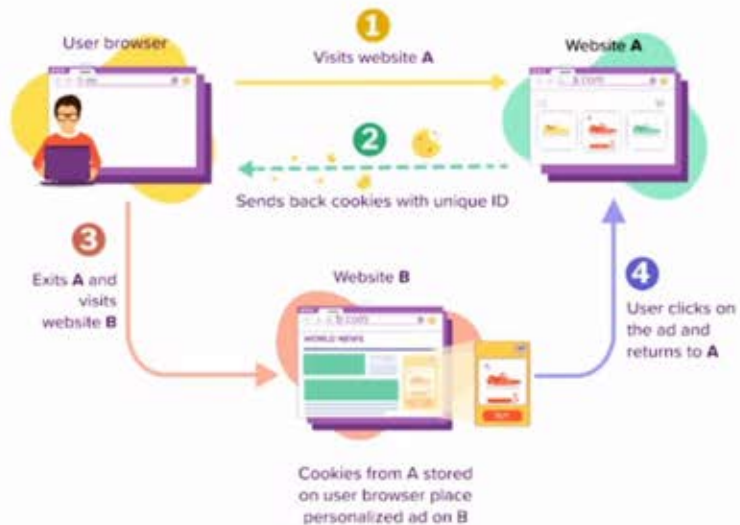
- Created by the website you are currently visiting.
- Purpose is to save your preferences for that website.
- Saving your last shopping cart for an website can be an example of it.

## 2) Third Party Cookie:

- Created by a different website than the website you are currently visiting.
- Creating ads and sending cookie can be an example of it.

# 3<sup>rd</sup> Party Cookie vs 1<sup>st</sup> Party Cookie

## 3rd Party Data



## 1st Party Data



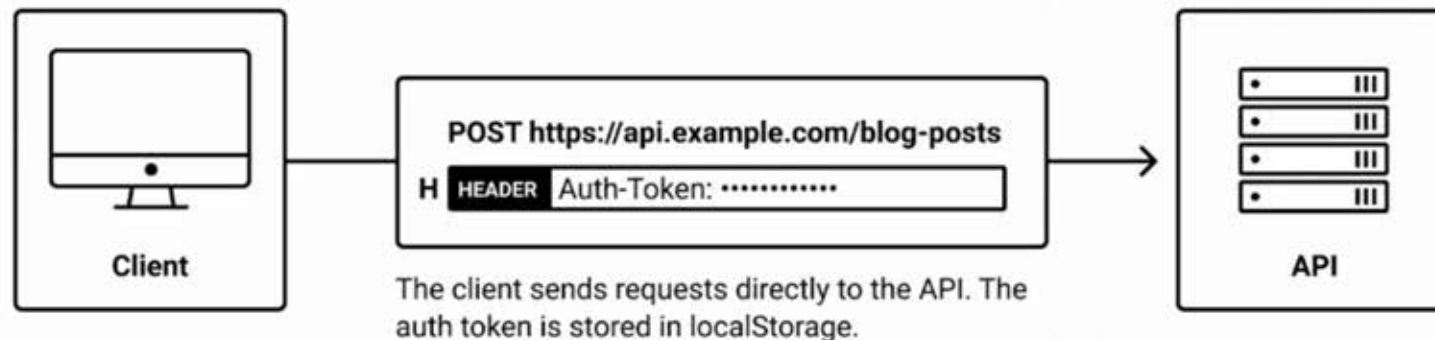


## What is Http only cookie?



- A tag added to a browser cookie.
- Prevents client-side scripts from accessing data.
- Provides a gate that prevents the specialized cookie from being accessed by anything other than the server.

## Http only cookie for securing authentication



## Get Cookie value

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```
//get cookie value from browser  
document.cookie  
  
//get cookie value as array  
document.cookie.split('; ')  
  
//get cookie value in key-value pair  
document.cookie.split('; ').map(c => console.log(c))
```



# Thank you!