

Have you seen a message like this?

"This website stores cookies on your computer. These cookies are used to collect information about how you interact with our website and allow us to remember you. We use this information in order to improve and customize your browsing experience and for analytics and metrics about our visitors both on this website and other media. To find out more about the cookies we use, see our Privacy Policy. If you decline, your information won't be tracked when you visit this website. A single cookie will be used in your browser to remember your preference not to be tracked."

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What are cookies?

Cookies

- Think of it as a small text file
- Stored in the user's browser
- Sent between client and server with every request
- Helps the server "remember" each visitor

```
GET /sample_page.html HTTP/2.0

Host: www.example.org

Cookie: yummy_cookie=choco; tasty_cookie=strawberry
```

image from Mozilla (https://developer.mozilla.org/en-US/docs/Web/HTTP/Cookies)



How is this useful?

Using Cookies

Some common use cases for cookies:

- Website shopping cart
- Authorization (login session)
- Analytics (counting visitors, unique hits on pages)



Why do websites ask for permission?

Privacy Concerns

- Cookies are pieces of information saved about an online user
- Track and identify user while browsing
- Companies need your consent to collect your data
- Cookies can be vulnerable to third parties
- Do not store sensitive data like passwords in cookies



How are cookies different from localStorage?

Cookies vs. localStorage

01

Cookies

- Stored on client and read by server
- Allow server to tailor pages to user
- Limited size (varies per browser; ~5-8kb)
- Increased size of request/response
- Use when server needs data with every request

02

Local Storage

- Client side only
- Not shared with server
- Larger amount of data (5 mb)
- Reduced request/response size
- Use when data only needed by client



How will we be using cookies today?

To remember logged in status

