LEARN WEB

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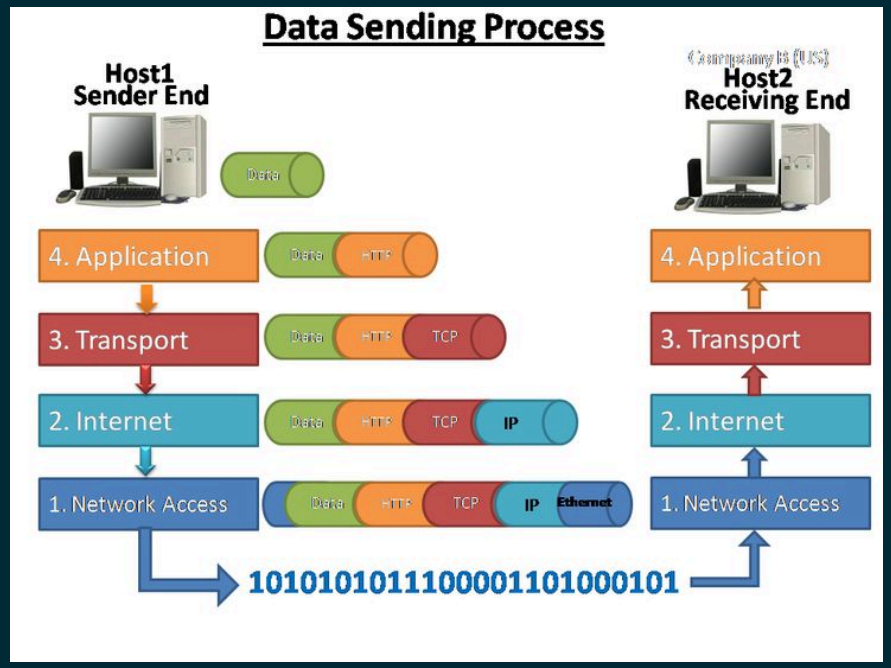
github.com/ale66/learn-web

COOKIES

THE HTTP(S) PROTOCOL

HTML files become *web pages* when they become accessible online, not just locally

This is possible thanks to a *stack* of communication protocols: WiFi/TCP/IP/HTTP/HTTPS



PAGES FEEL *LOCAL*

in fact, a copy of the HTML+CSS+JS files is saved in a *secret* local folder which is managed by the browser

HTTPS is designed to make browsers follow up links or download needed files *transparently*

- clicking on `<a>`s sends us to a new page, local or web
- online images, style files etc. are fetched and redered

we realise that this is all networked *only when it stops working*

HTTPS IS *STATELESS*

each page request is dealt the same

there is no history of a visit to a site, only our browser may remember

Yet,

- we feel *progress* through stages of the visit, e.g., in e-commerce
- pages are customised for country, language etc.
- they remember us returning

COOKIES

A small text file which is saved in a *secret* local folder which is managed by the browser

keep record of previous visits and help in *customising* pages

inside, there's a tiny database organised in atribute/value pairs:

```
"name"="ale"; "last_visit"="15-11-24"; "hour"=14; ...
```

JS functions create/read/amend cookie files

In principle, it's public information, and local

Let’s visualise cookies.

Please add SQLite Manager (by Lunu) to your Browser!

INSTRUCTIONS

@firefox: https://addons.mozilla.org/en-US/firefox/addon/sqlite-manager-webext/

try

```
about:support
```

on your browser, or follow instruction on http://mzl.la/1BAQULj

Example: Firefox 132 on Win11:

`C:\Users\aless\AppData\Roaming\Mozilla\Firefox\Profiles\k`
`release\cookies.sqlite`

Open file *cookies.sqlite* with the browser extension search for our cookie, e.g. with

```
1 select *
2 from "moz_cookies"
3 where name = "likejavascript"
```

FOR OTHER BROWSERS

The same process can be done by opening the cookies file directly from the file systems, as described here (for Win 10).

Example: Crome on Win10:

```
C:\Users\aless\AppData\Local\Google\Chrome\User Data\Default\Network
```

IN-CLASS WORK

Design user profiling for your MA COM refactoring page:

- ask one or more questions using buttons
- record choices/preferences in cookies.
- on second visit we shall salute them with their name and invited them to enroll!

CASE STUDY

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FORMS: WE COLLECT DATA

Users can assign values to variables thanks to forms.

Forms require attention as there are many form attributes and details.

Please complete the subsequent units *a la carte*: look at the forms you deem useful for your work on a COM landing page.

COLLECT EMAILS?

Today, browsers collect lots of user behaviours, e.g., scroll speed in Facebook-like pages.

Independent web sites may create a user base or a *community* around a web presence

Idea: use forms to collect emails (not indentities) to manage a simple circular email system, weekly or monthly.

GDPR regulation restricts *consent*, *safe storage* etc.

See the Mailchimp software.

COOKIES LAB

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THE BASELINE

inside folder `src` see files `rename-me.html`, `mystyle.css` and `script.js`

open them all in VS Code, read the HTML and the CSS

Notice how `checkCookie()` is executed every time the browser (re)loads `<body>`

next, load the page on Firefox etc and open the console (CTRL+SHIFT+k)

check the cookie then refresh to check second-time behaviour

read the script.js file line by line, don't move on until you understood

Look up on W3Schools parts that are new, e.g., `while`

place a `console.log()` or an `window.alert()` at each step to visualise the content of the variables

example:

```
1  user = prompt("Thanks for visiting! Please enter your name:", "");
2
3  if (user != "" && user != null) {
```

becomes

```
1  user = prompt("Thanks for visiting! Please enter your name:", "");
2  console.log('User has entered '+ user)
3  if (user != "" && user != null) {
```