Storm

What is Storm?

hello world(s)!

Not Secure | storm.cis.fordham.edu/~rleopold/

professor rebecca (marks) leopold

CISC 3300 - Internet + Web Programming:

- Sample Class Site
- Class Github Repo + Wikis:
  - Spring 2019 - Lincoln Center
  - Spring 2019 - Rose Hill

CISC 3300 - Information + Web Programming:

- Fall 2018

Git

What is Git?

A version control system meant to make it easier to have multiple versions of code, sometimes across multiple developers or teams

At its most simple, git helps with the ‘**indexv1.html**, **indexv2.html**, **indexv3FINAL.html**' problem

At its most complex, git allows developers to work together worldwide on code without stepping on each other's toes

Github

Github is a service to host yr projects on the web.

Code is pushed (uploaded) from a local directory (folder) called a repository or rep.

example - our class site:
http://www.github.com/rebleo/webDevSpring2020

Git vs GitHub.com

git is a version control system that takes snapshots of your code at certain points in development

These snapshots are stored in a '**repo**', or '**repository**' on your local machine

GitHub.com is a website that hosts git repositories on a remote server + is available for all the web to see, copy + implement.

Git Terminology

repository - where data is managed. the directory containing your files.

local - the copy that exists on your machine, no one else can access this

remote - the copy in your github account, anyone with access to your github repo can access the remote instance (we won't be doing this!)

push - once you make changes to the local copy you *upload the changes to the remote copy

pull - if someone else makes changes to the remote copy (we won't be doing this this semester)

clone a repository - download the entire codebase of the repo you can pull in changes + and push your own changes if you are given access

Github pages

github.io

easily allows you to host web pages using github servers + workflow

url (uniform resource locator)

http://

yrUsername.github.io

yrUsername.github.io

Unix!

< HTML >

< HTML >

Hypertext Markup Langauge

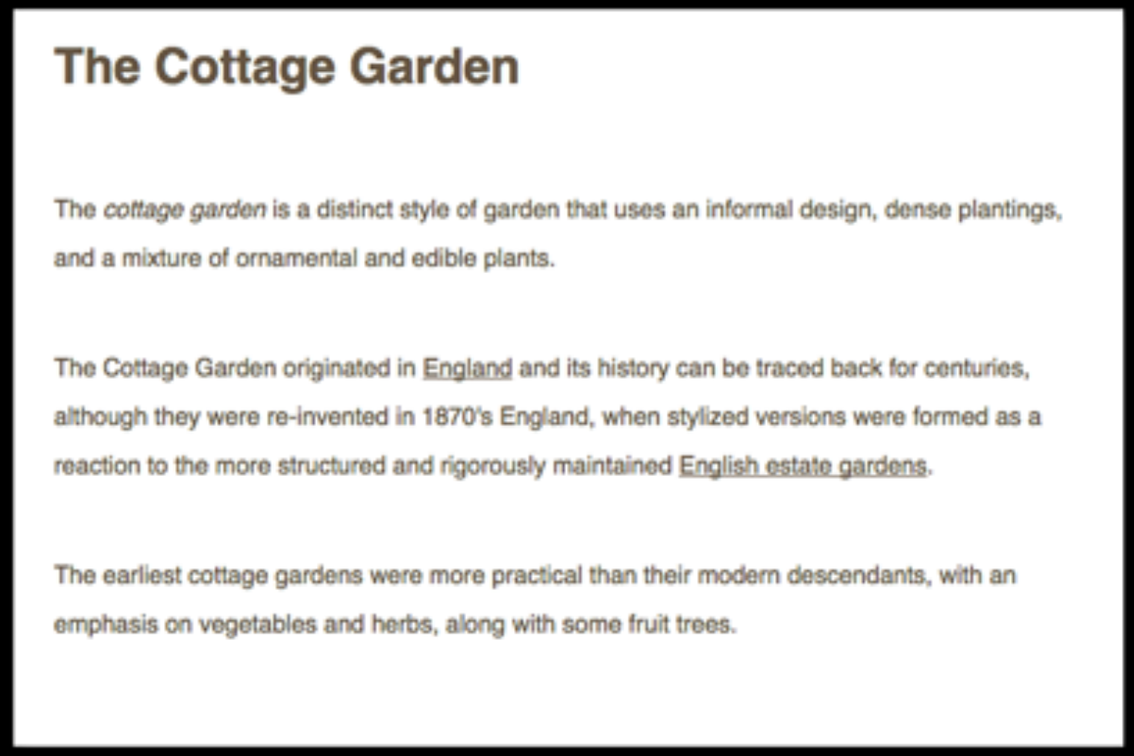
Describes the content + structure of a web page;
NOT a programming language

Unlike other programming languages - HTML, CSS + JavaScript were authored for their outputs to **be read or seen** by human persons on glowing rectangular screens.

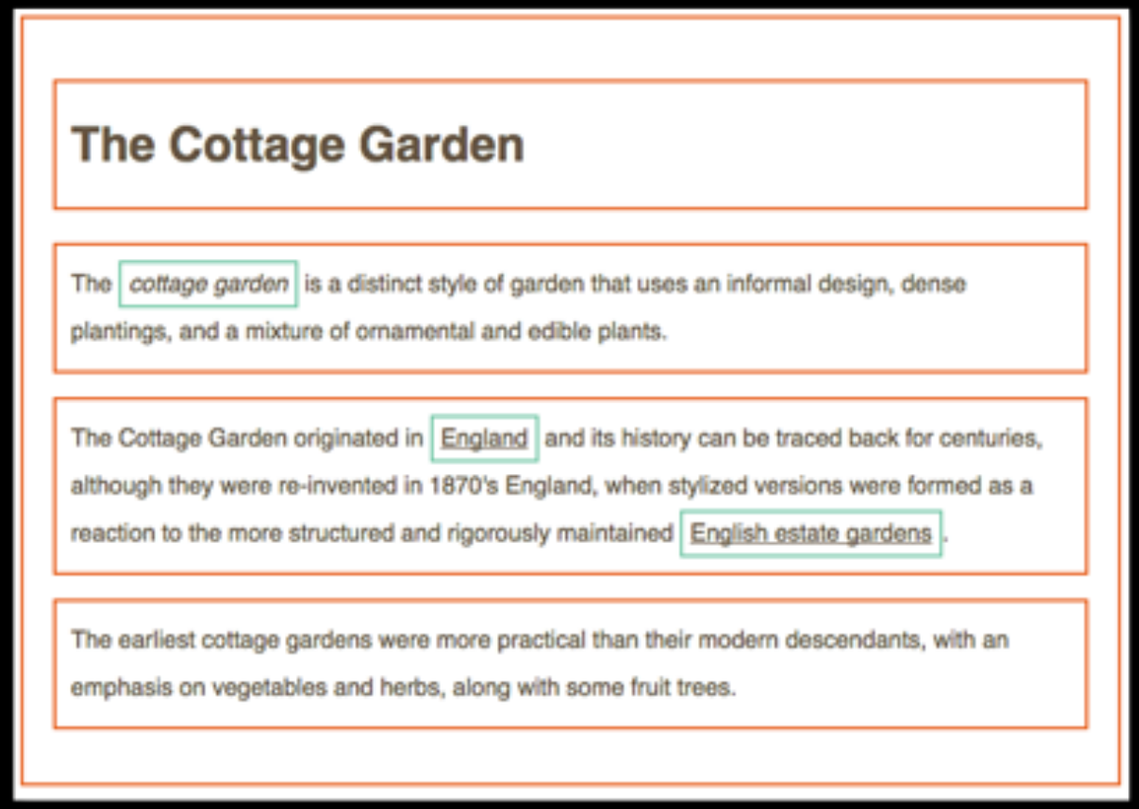
< HTML >

block vs. **inline** display

The key to understanding how **HTML** + **CSS** works is to imagine that there is an invisible box around every **HTML** element.



Block level elements are outlined w/ red + inline elements in green.



<body> creates 1st box, then **<h1>**, **<h2>**, **<p>**, **<i>** + **<a>** each create their own boxes within it.

< HTML >

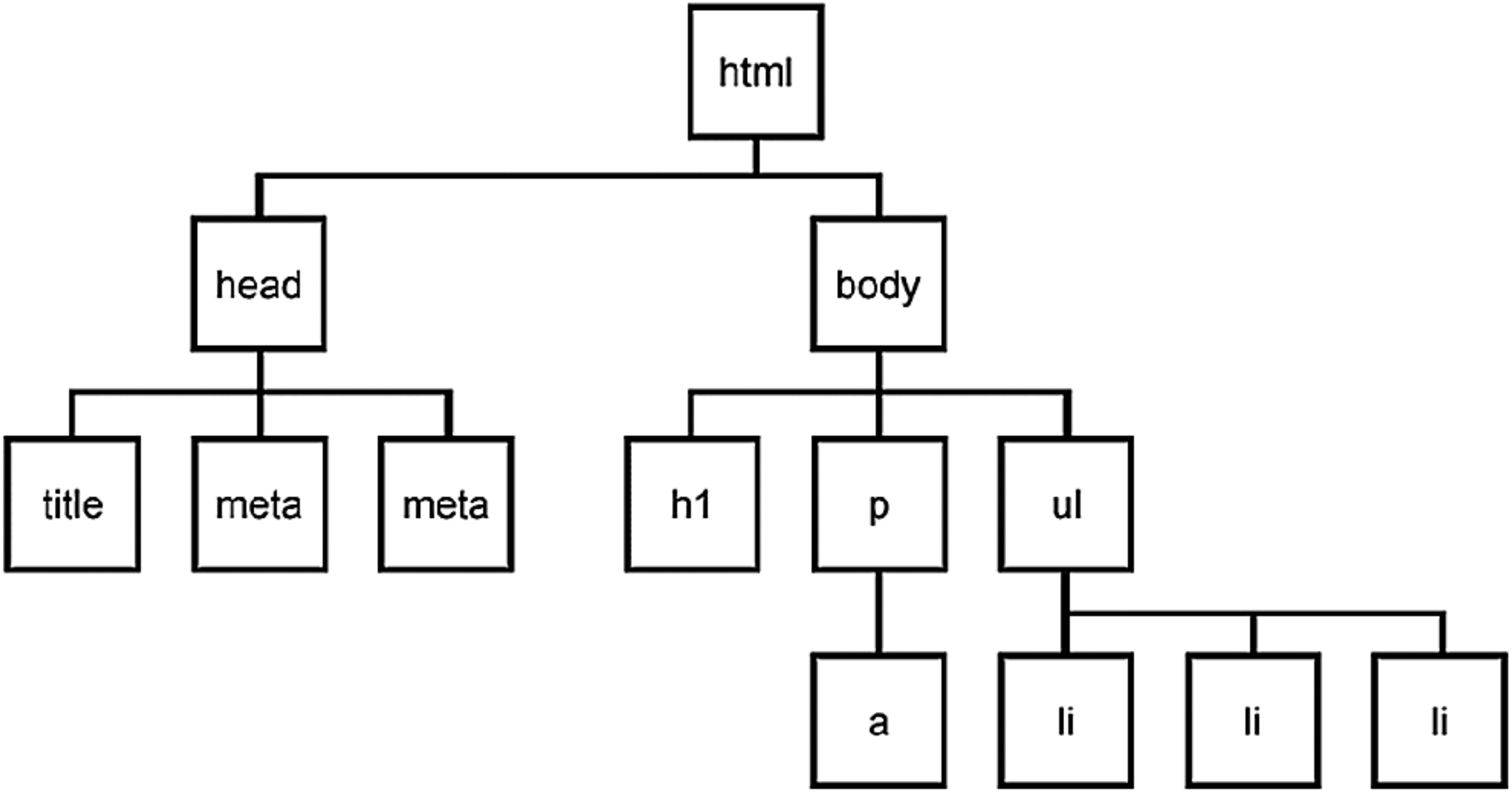
3 categories of HTML elements

1 - block: large blocks of content has height + width
<p>, **<h1>**, **<blockquote>**, **<ol>**, **<ul>**, **<table>**

2 - inline: small about of content, no height or width
<a>, **, **, **
, , <time>**
a. **inline block**: inline content w/ height + width

3 - metadata: information abou the page, usually not visible
<title>, **<meta>**, **<script>**

Parent / Child Element Structure



Parent + Child

```
<!doctype html>
<head>
    <title> Week 1 </title>
</head>
<body>
    <div>
    Here's a Great Site.
    </div>
</body>
</html>
```

head is the parent of title

div is the child of body

body is the child of html

Structure tags

The <head> element contains the metadata for a web page. Metadata is information about the page that isn't displayed directly on the web page. Unlike the information inside of the <body> tag, the metadata in the head is information about the page itself.

s can contain any text or other HTML elements, such as links, images, or videos. Remember to always add two spaces of indentation when you nest elements inside of s for better readability.

Semantic HTML

HTML should be coded to represent the data that will be populated and not based on its default presentation styling. Presentation (how it should look), is the sole responsibility of CSS.

Some of the benefits from writing semantic markup are as follows:

- Search engines will consider its contents as important keywords to influence the page's search rankings (see SEO)
- Screen readers can use it as a signpost to help visually impaired users navigate a page
- Finding blocks of meaningful code is significantly easier than searching though endless divs with or without semantic or namespaced classes
-Suggests to the developer the type of data that will be populated
-Semantic naming mirrors proper custom element/component naming

https://developer.mozilla.org/en-US/docs/Glossary/Semantics

Semantic elements

<p>	
<h1> - <h6>	
<main>	dominant content of the <body> element
<article>	A document, page or site. This is usually a root container element after body
<section>	Generic section of a document
<header>	Intro section of a document
<footer>	Footer at end of a document or section
<nav>	Navigational section

Use these **before** div when appropriate.

Semantic elements

<aside>

represents a portion of a document whose content is only indirectly related to the document's main content. Asides are frequently presented as sidebars or call-out boxes.

<details>

creates a disclosure widget in which information is visible only when the widget is toggled into an "open" state.

<figcaption>

represents a caption or legend describing the rest of the contents of its parent `<figure>` element.

<mark>

represents text which is marked or highlighted for reference or notation purposes, due to the marked passage's relevance or importance in the enclosing context.

<summary>

element specifies a summary, caption, or legend for a `<details>` element's disclosure box. Clicking the `<summary>` element toggles the state of the parent `<details>` element open and closed.

<time>

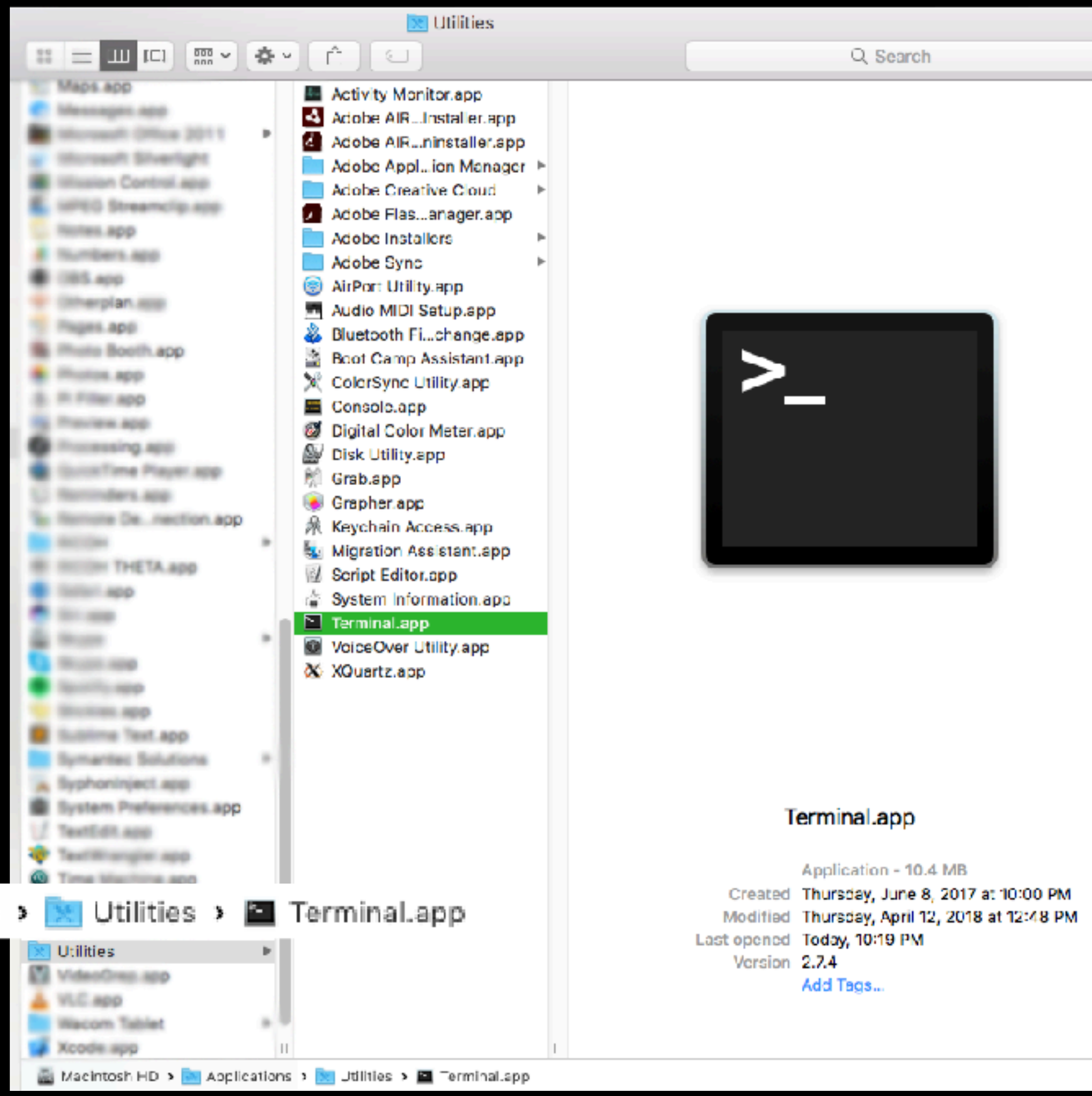
represents a specific period in time.

The tag will generally render as *italic* emphasis.

The will generally **render as** bold **emphasis.**


BBC FOUR
What was real was what you could
put your hands on.

for mac users -
to open your terminal



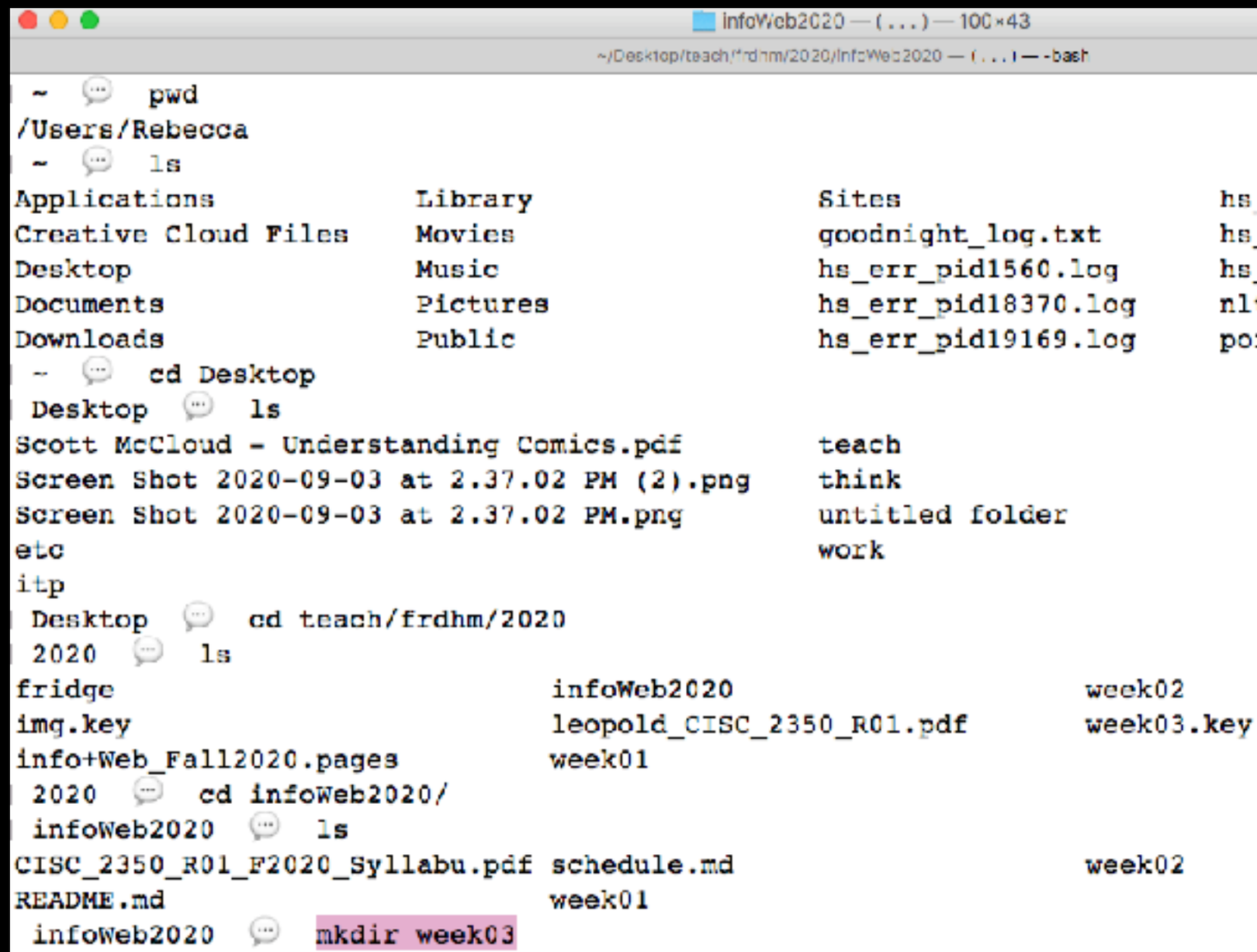
the file path is:

Macintosh HD › Applications › Utilities › Terminal.app

on the command line we are asking our computer questions and telling it what to do in **Unix** :

- **pwd** - "present working directory" === *where am I!?*
- **cd** - "change directory" === *go inside this folder please.*
- **ls** - "list items in this directory" === *what's in this folder?*
- **rm** - "remove file" === *GET RID OF THIS FOREVER* (doesn't work w/ directories)
- **mkdir** - "make directory" === *make a new folder*
- **touch** - "create file" === *create a name.fileExtension (index.html)*

When in doubt - don't forget to ask the interwebs! Example.



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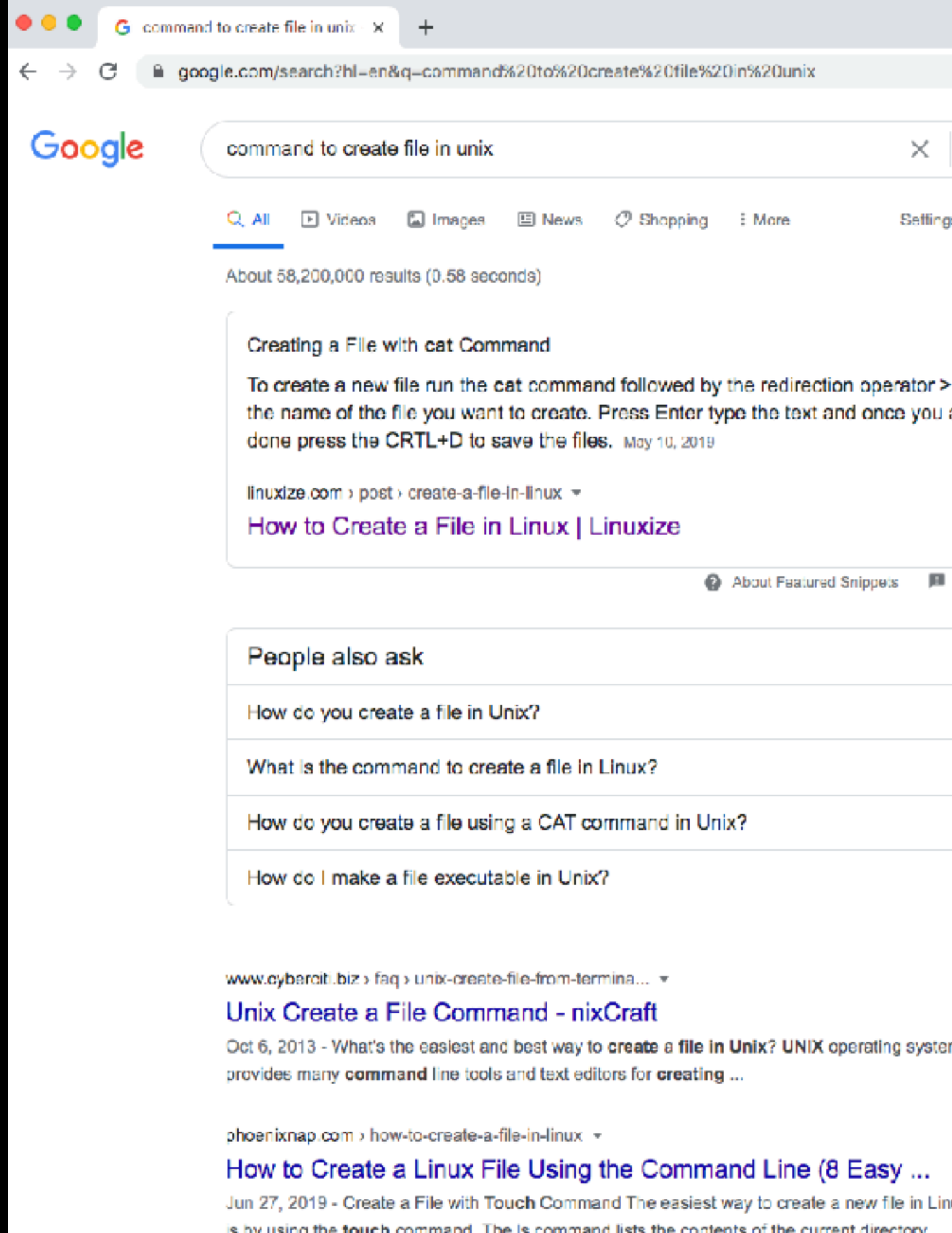
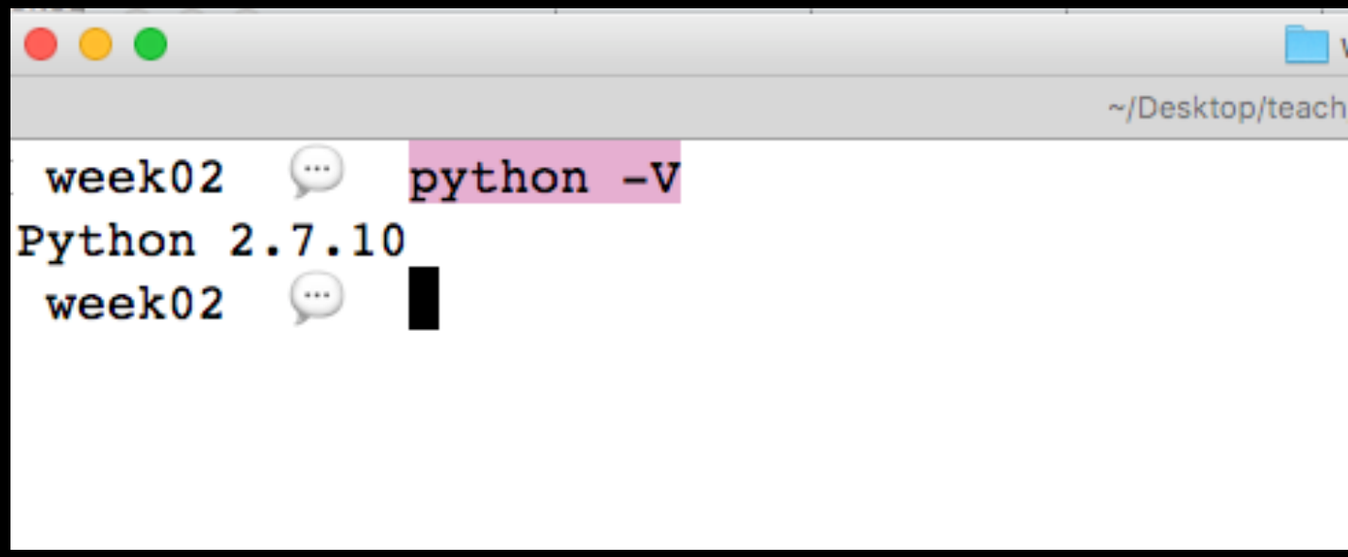


We also use the command line to run a local server when prototyping websites.

On a Mac this is easy.

Step 1. Check which version of Python is on yr machine

python -V



Starting a local http server from the command line...

If you have installed Python 3.0+:

`python -m http.server`

otherwise: `python -m SimpleHTTPServer`

in browser address bar: `localhost:8000`

Mac - to close the server: `COMMAND C`
Wndws - to close the server: `CNTRL C`

As you make changes to your design / code - you can “live” refresh the page, changes (+ bugs) will be noted by the server.

```
[ week02  python -m SimpleHTTPServer
Serving HTTP on 0.0.0.0 port 8000 ...
127.0.0.1 - - [05/Sep/2018 22:20:50] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [05/Sep/2018 22:35:16] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [05/Sep/2018 22:35:33] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [05/Sep/2018 22:35:33] code 404, message File not found
127.0.0.1 - - [05/Sep/2018 22:35:33] "GET /assests/mt0.jpg HTTP/1.1" 404 -
127.0.0.1 - - [05/Sep/2018 22:35:45] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [05/Sep/2018 22:35:45] code 404, message File not found
127.0.0.1 - - [05/Sep/2018 22:35:45] "GET /assests/mt0.jpg HTTP/1.1" 404 -
127.0.0.1 - - [05/Sep/2018 22:35:50] "GET / HTTP/1.1" 200 -
^C----------------------------------------
```

** Press “Control” + “C” to end the server session.

(Otherwise it’s the equivelent to unplugging a hard drive w/ out “ejecting it” - BAD PRACTICE. As DIGITAL CITIZENS - we 💚 our hardware + software…)

Running a local **Python** HTTP Server
in Mac OS - this is very simple :

When inside yr project folder simply
type the following command:

"**python -m SimpleHTTPServer**"
– defaults to port 8000

if we wrote:
"python -m SimpleHTTPServer 12345"
- we would go to port 12345

week02 — (. . .) — 74×37

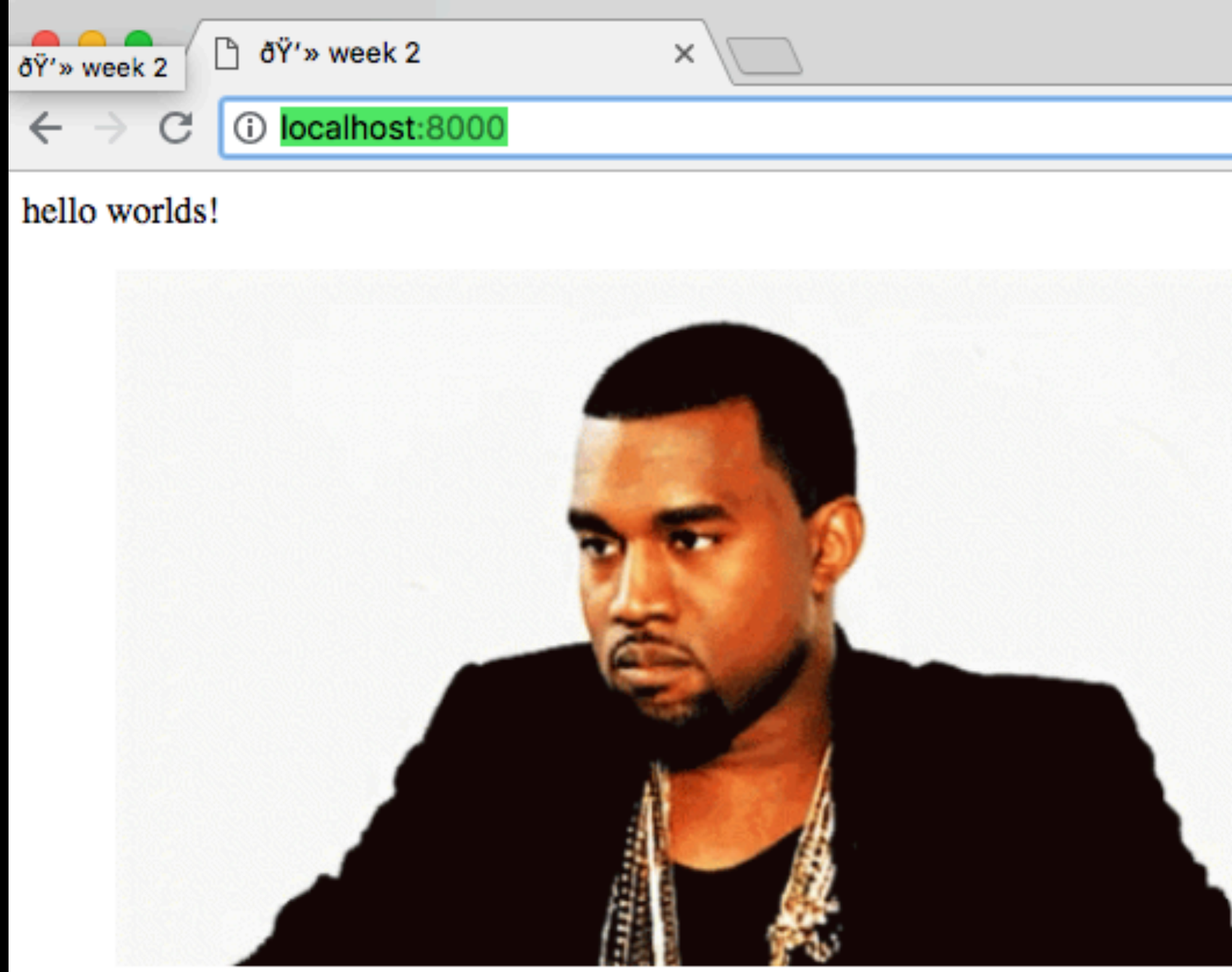
~/Desktop/teach/frdhm/[redacted]_F_2018/infoWeb2018/week02 — (. . .) — -bash

```
[ infoWeb2018 ⌘ ls
README.md        week01          week02
[ infoWeb2018 ⌘ cd week02
[ week02 ⌘ ls
_assests         index.html
 week02 ⌘ python -m SimpleHTTPServer
```

week02 — (. . .) — 74×37

...teach/frdhm/[redacted]_F_2018/infoWeb2018/week02 — (. . .) — python -m SimpleHTTPSe

```
[ infoWeb2018 ⌘ ls
README.md        week01          week02
[ infoWeb2018 ⌘ cd week02
[ week02 ⌘ ls
_assests         index.html
[ week02 ⌘ python -m SimpleHTTPServer
Serving HTTP on 0.0.0.0 port 8000 ...
```



url is:

localhost:8000