

Intro to Web Development

Section C

Technology, Culture + Society

Integrated Digital Media (<3 IDM)

Fall 2020 Monday + Wednesday 10:00 - 11:50 am

rebecca (marks) leopold

rebleo@nyu.edu

On campus we are beaming in from
downtown or Ft. Green, Brooklyn
former land of the Lenape + Canarsie

In the chat - tell us where yr beaming in from
and add a land acknowledgement!

<https://native-land.ca/>

ZOOM

Our class will meet synchronously during our class time. Attendance is not mandatory if you really can't attend. Recordings will be provided.

By now we've learned the difference between nodding smiling faces and talking to grey rectangles! You should have your camera on as much as possible. If you're concerned about privacy don't forget you can setup a [Zoom background](#) to obscure your surroundings, family members, pets, messy rooms, ugly wall paper, etc!

If you plan on attending class from home - or your dorm I strongly suggest you buy an **external monitor**. So you can have the Zoom meeting on one screen and your own tools (text editor, terminal, browser, etc.) on another. This will also encourage us to keep formal workspaces. Your brain is a part of your body you guys! From time to time I will turn off my camera to save bandwidth. If possible I strongly encourage you to buy a **wifi dongle** and connecting your machine directly into your router via an **ethernet cable**.

If your software crashes during class please ~~send a message on our slack channel~~. When you see that someone has messaged that they were kicked out - please let me know so I can let them back in!

class repo: https://github.com/IDMNYU/webDev_C_Fall2020

class wiki: https://github.com/IDMNYU/webDev_C_Fall2020/wiki

class syllabus: https://github.com/IDMNYU/webDev_C_Fall2020/blob/master/week01/DM-UY_2193_C_F2020_Leopold.pdf

if you do not already have a github account:

!! <https://education.github.com/pack> !!

what is the internet?

TCP/IP - Internet Protocol suite

TCP - Transmission Control Protocol

IP - Internet Protocol

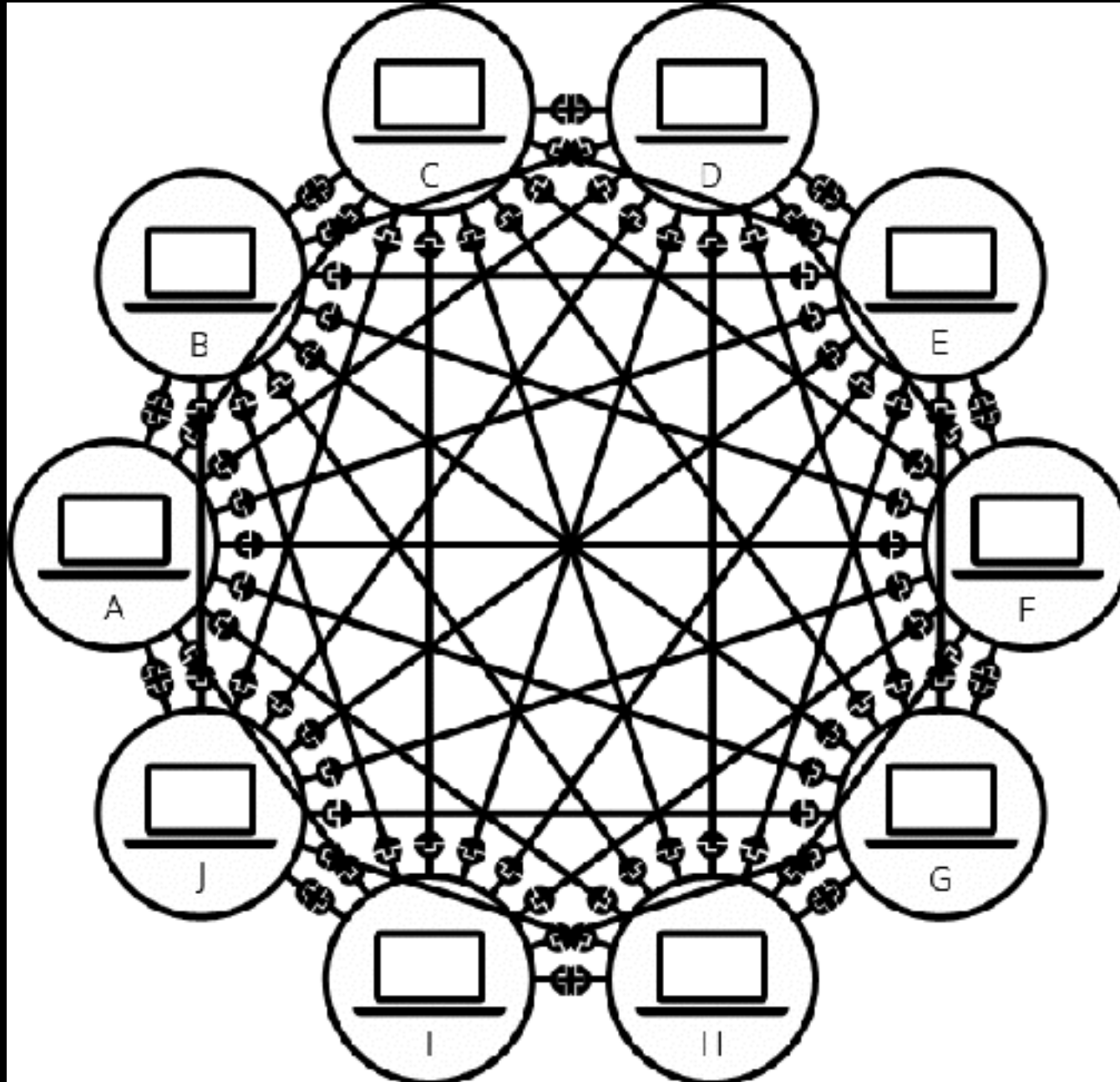


1969 - Arpanet

first message sent from UCLA to Stanford

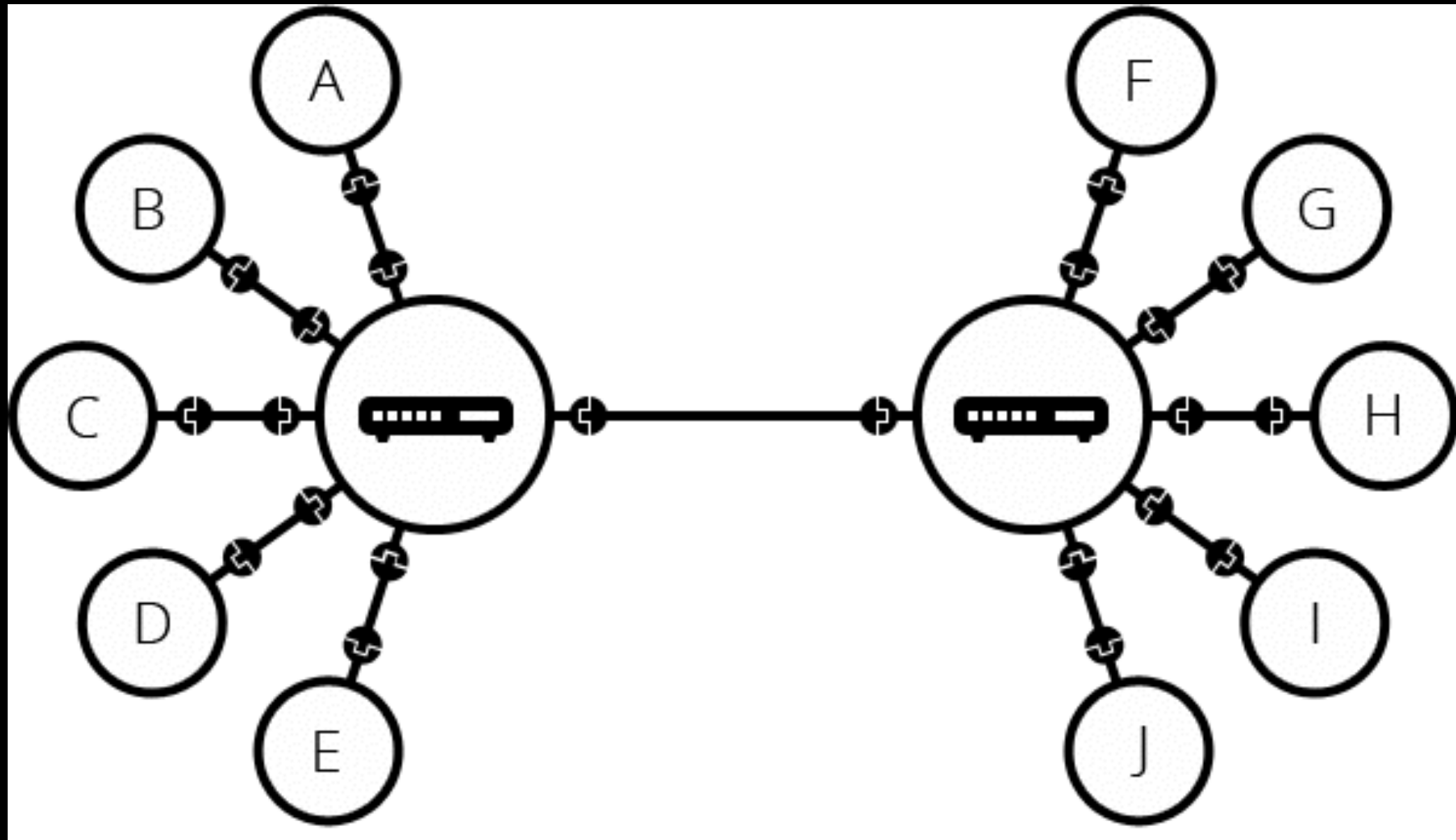
stanford machine had 128 Kb of memory and 24 Mb of disk space

What is the Internet? A global network of computers connected to each other.



https://developer.mozilla.org/en-US/docs/Learn/Common_questions/How_the_Internet_works

A networks of networks



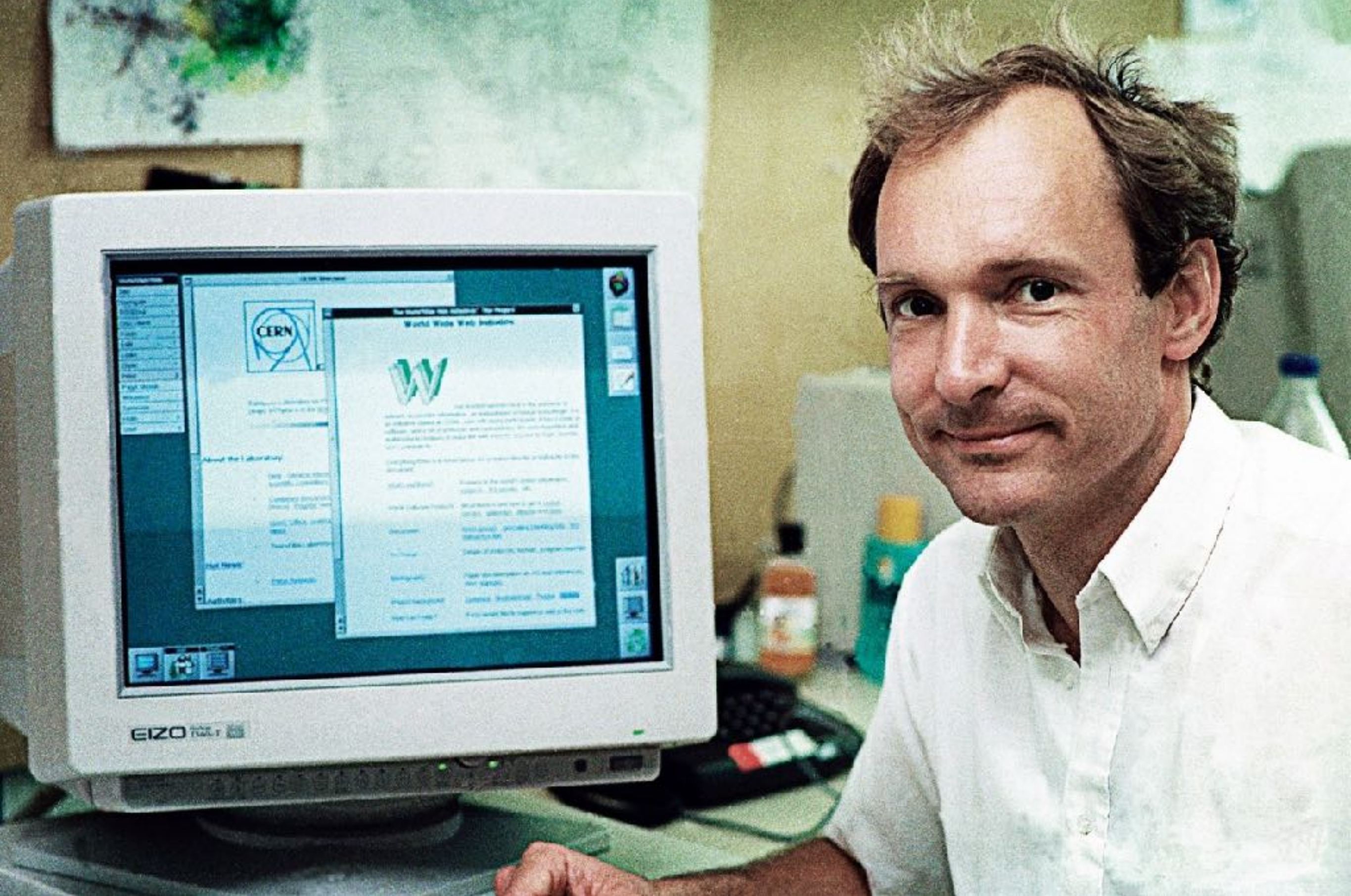
By connecting computers to routers, then routers to routers, we are able to scale infinitely.

https://developer.mozilla.org/en-US/docs/Learn/Common_questions/How_does_the_Internet_work

what is the web?

1. You enter a URL into a web browser
2. The browser looks up the IP address for the domain name via DNS
3. The browser sends a HTTP request to the server
4. The server sends back a HTTP response
5. The browser begins rendering the HTML
6. The browser sends requests for additional objects embedded in HTML (images, css, JavaScript) and repeats steps 3-5.
7. Once the page is loaded, the browser sends further async requests as needed.

<https://wsvincent.com/what-happens-when->



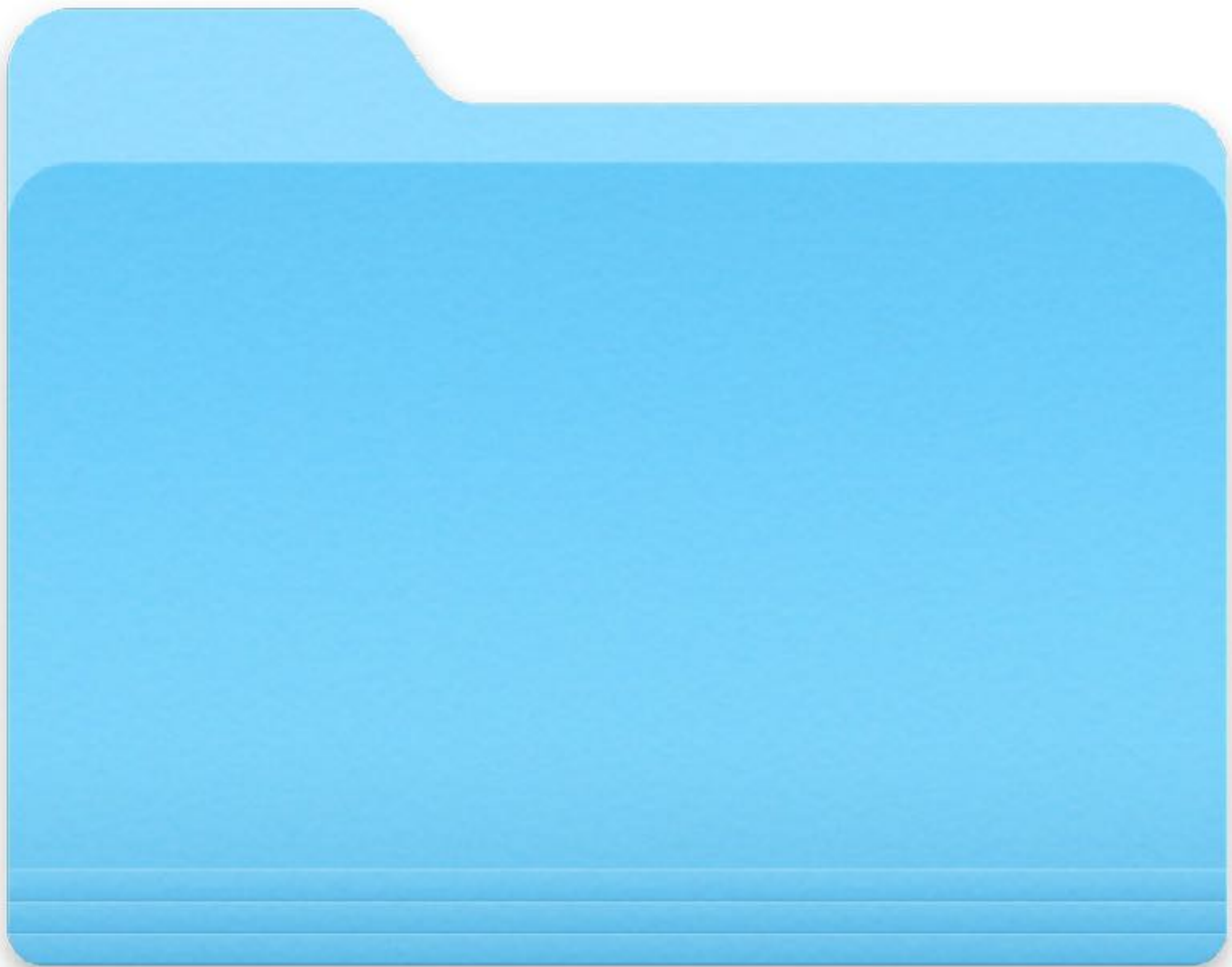
1989 - Due to the way the NeXT software was designed, **Tim Berners-Lee** is able to invent the WWW on a NeXT machine



1989 - First Web Server

Due to the way the computer's storage was designed, Tim Berners-Lee invents the WWW (HTTP) on a NeXT machine

what is a webpage?



HTML



CSS



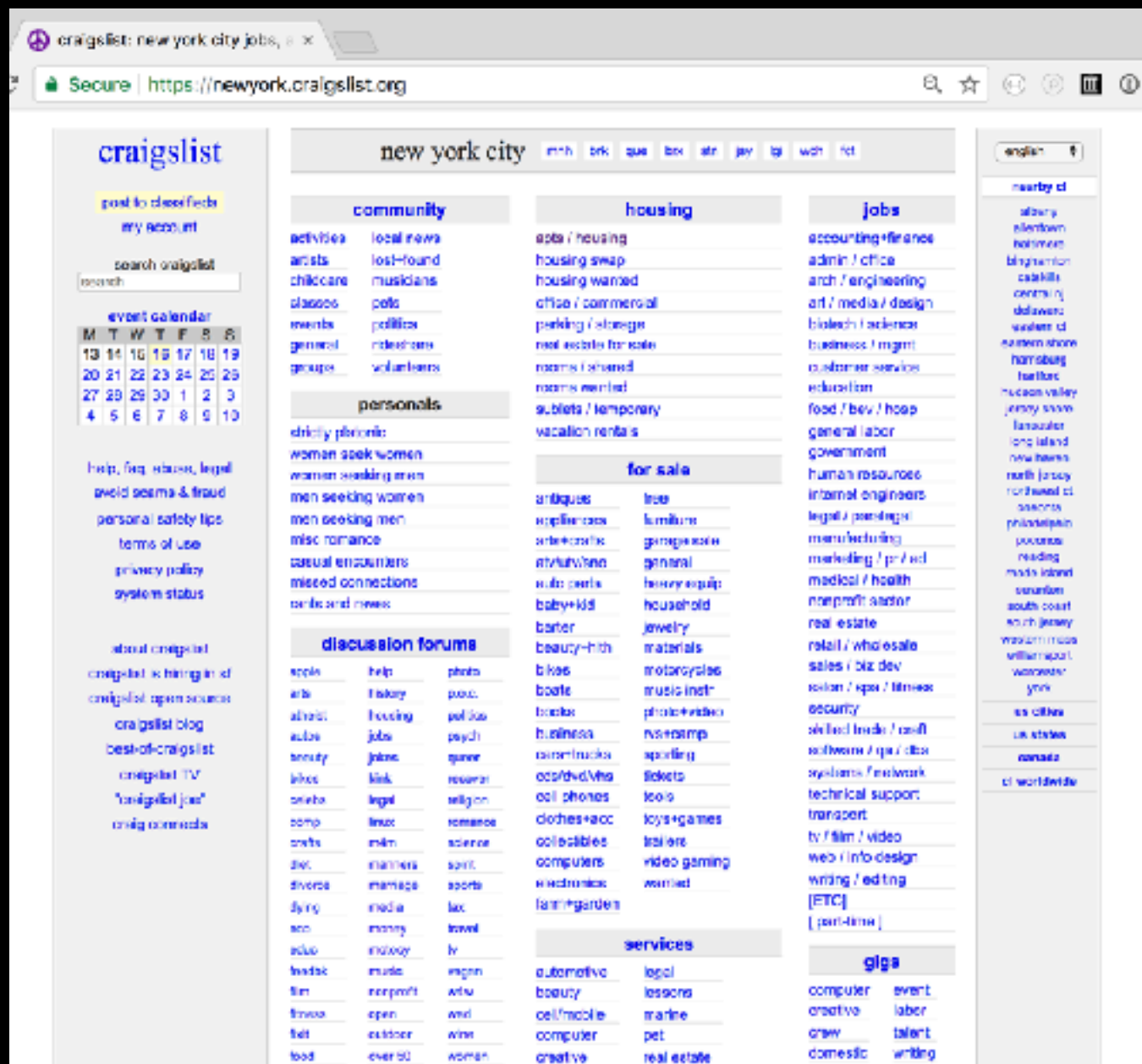
JS





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

It's the difference btw this:



Craigslist Landing Page

HTML + CSS

(Web. 1.0)

+ this...



NY Times Landing Page

HTML, CSS + JS

(Web. 2.0)

HTML
CSS
JAVASCRIPT

JavaScript is a programming language specifically written to work w/ HTML and CSS. It facilitates an opportunity for more dynamic web pages with interactive media content. This led us to Web 2.0 in 2004-2005 ish.

Facebook, init(): February 2004

<http://www.fb.com>

The screenshot shows the early Facebook interface. At the top is a navigation bar with the Facebook logo, a search bar, and links for 'Rebecca', 'Home', and a group of friends. The main header features a large blue world map background with a profile picture of Mark Zuckerberg on the left. Below the profile picture is his name 'Mark Zuckerberg' with a verified badge, and buttons for 'Follow' and 'Message'. A navigation menu includes 'Timeline', 'About', 'Friends', 'Photos', and 'More'. Below this is a section to 'Follow Mark to get his public posts in your News Feed' with a 'Follow' button and a count of '60,209,000 Followers'. The 'Intro' section lists his roles: 'Founder and CEO at Facebook', 'Works at Chan Zuckerberg Initiative', 'Studied Computer science at Harvard University', 'Lives in Palo Alto, California', 'Married to Priscilla Chan', 'From Dobbs Ferry, New York', and 'Followed by 98,286,008 people'. The 'Photos' section shows a grid of images, including a rainbow flag. The 'Featured Albums' section lists language options: 'English (US)', 'Español', 'Português (Brasil)', 'Français (France)', and 'Deutsch'. The main content area shows a post titled 'Wrapping up a Year of Travel' with a video thumbnail and text about his personal challenge to visit every US state by the end of 2017. The post has 14 reactions and 60 shares. A comment from Vincenzo Lamegna is visible, mentioning a drawing of Mark.



Search the web using Google!

Special Searches
[Stanford Search](#)
[Linux Search](#)

[Help!](#)
[About Google!](#)
[Company Info](#)
[Google! Logs](#)

Get Google!
updates monthly:

 [Archive](#)

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**Google, init(): September 1998
went public August 2004**

Youtube, init(): February 2005

**You: Person of the Year
Time Magazine, December 2006**



A Web Page **WAS**:

HTML - Hyper Text Mark Up

is a grammar for structuring web pages. It defines paragraphs, headings, data tables + media elements. HTML describes the content of the page - not how it looks.

CSS - Cascading Style Sheet

rules for styling a web page. Setting colors, positioning, typeface, layout and even timing. It can be used to consider the design of your page across different platforms and screen sizes.

(**Web. 1.0**)


```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
    <title>  Intro to CSS</title>
```

```
  </head>
```

```
  <body>
```

```
    <h1>
```

```
    This Webpage though....
```

```
    </h1>
```

```
    <p>
```

```
    here is a page of text. here is a page of text. here...
```

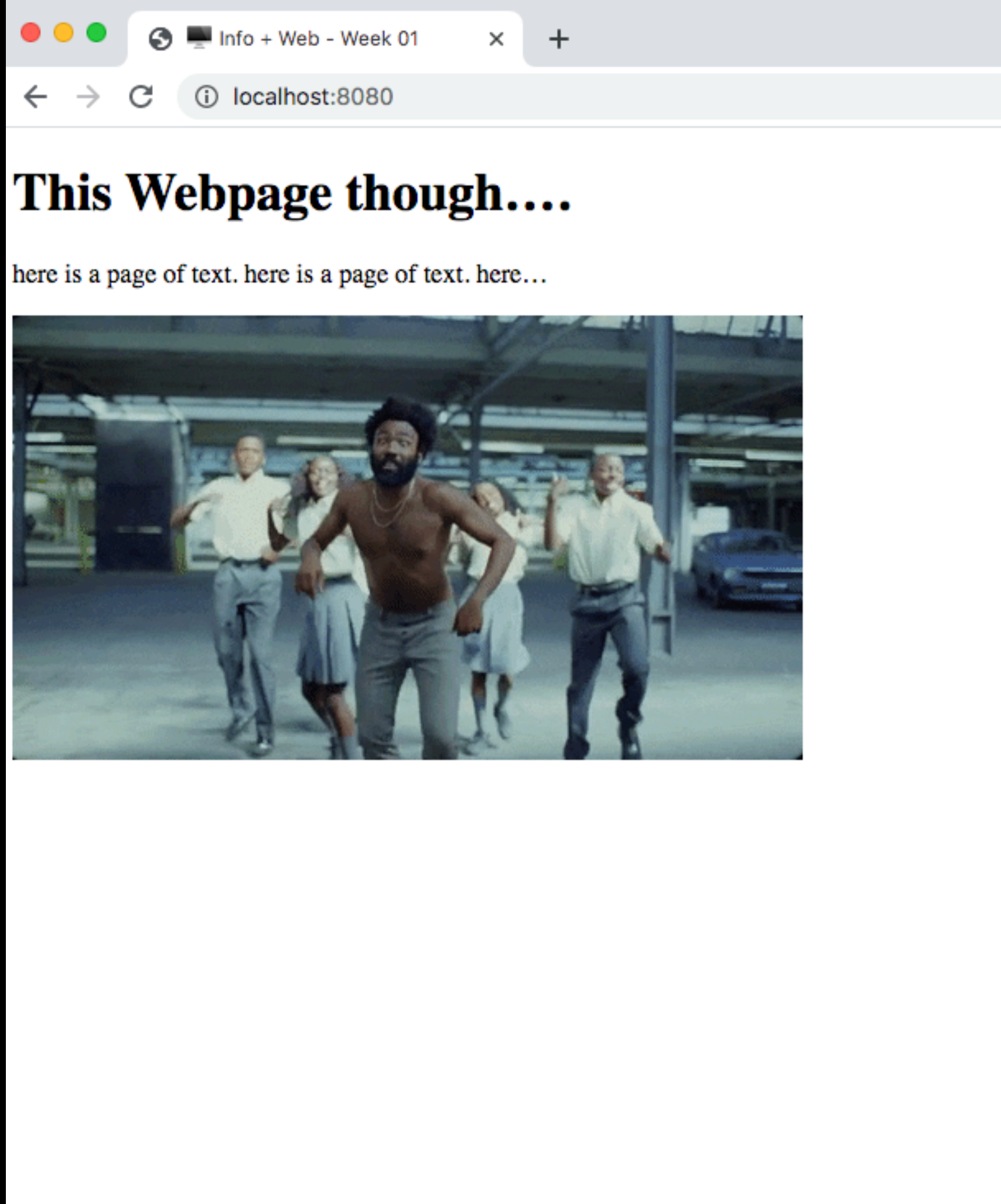
```
    </p>
```

```
    <img src = "https://media.giphy.com/media/  
    IYf4uAJEWVo1FffnVD/giphy.gif">
```

```
  </body>
```

```
</html>
```

html looks like this:



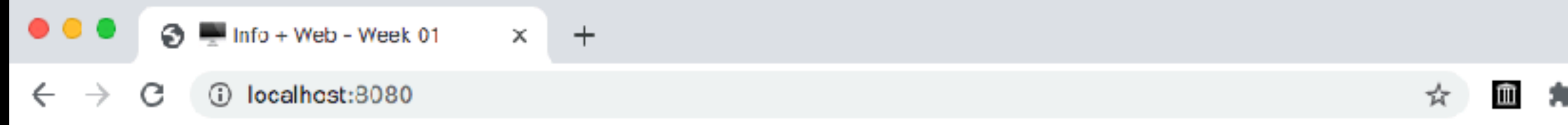
CSS - Cascading Style Sheet

```
h1 {  
    color: #FF4500  
}
```

```
body {  
    background: #000080;  
    font-family: sans-serif;  
    color: rgb(255,255,255);  
}
```

```
body p {  
    font-family: 'Courier New';  
}
```

html + css:



This Webpage though7.

here is a page of text. here is a page of text. here...



Web pages are made of three different file types. All of which we are capable of creating on our machines!

It's easier than you think...

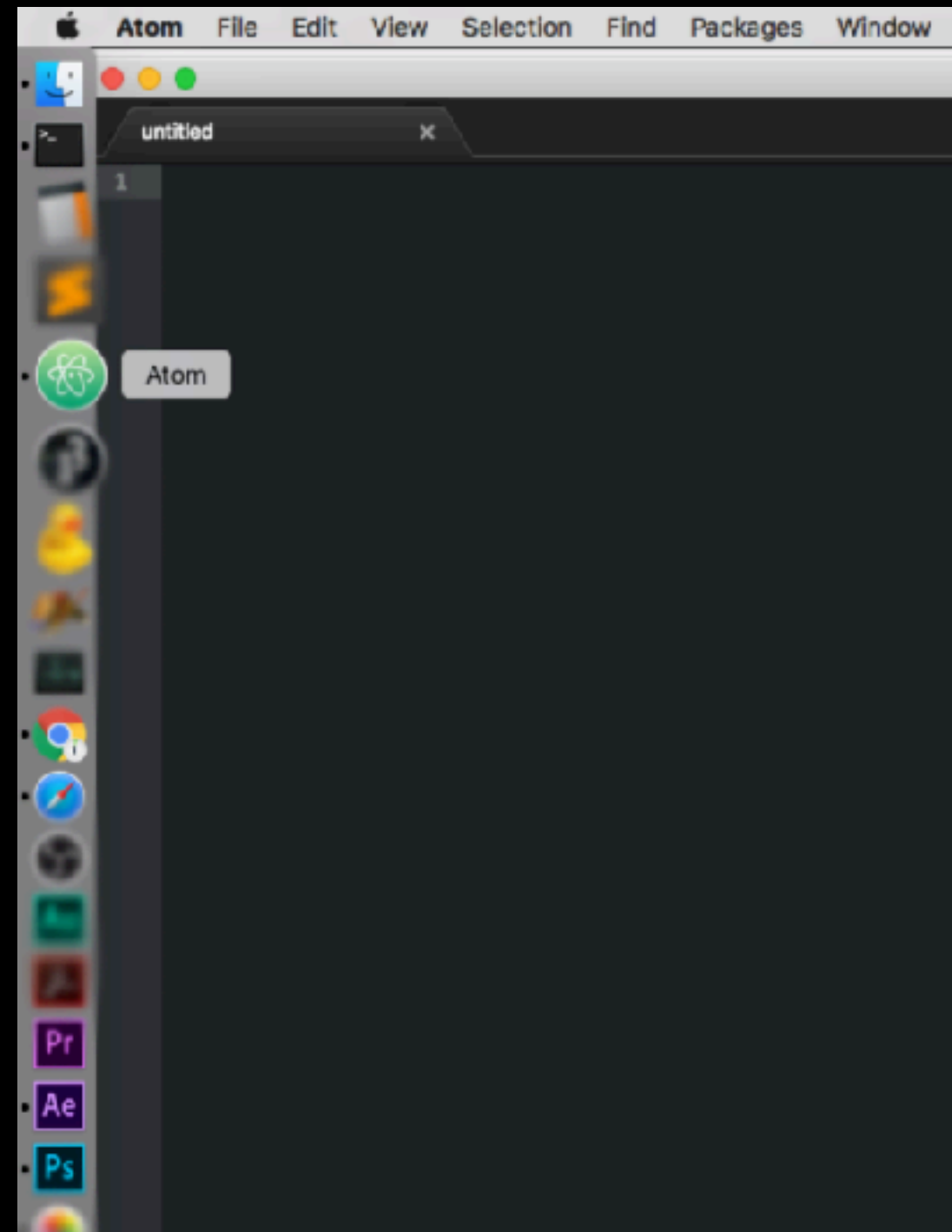
.html	(hyper text mark up)
.css	(cascading style sheet)
.js	(javascript)

We can create + write these files with a text editor.

Like [Visual Studio Code](#).

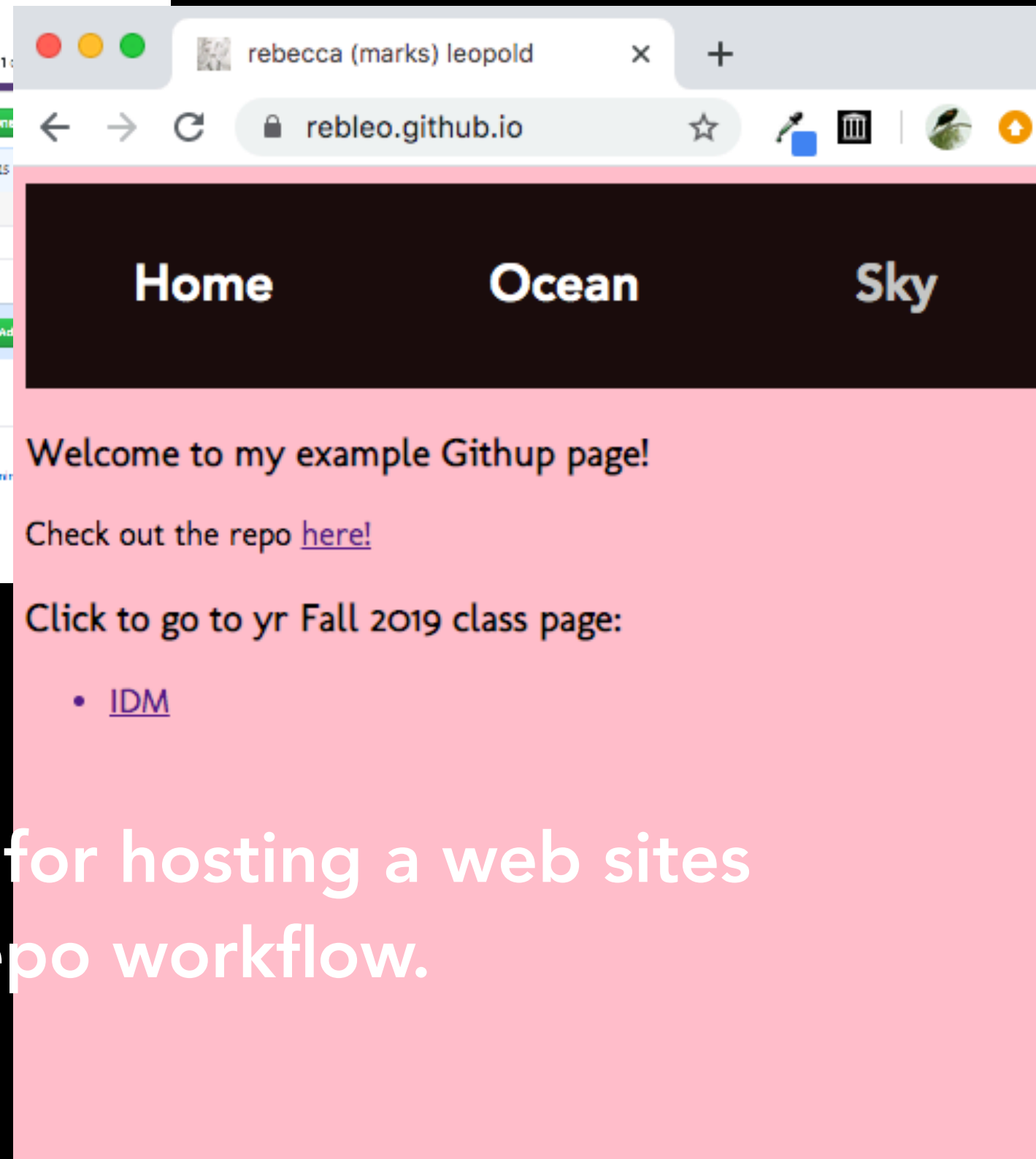
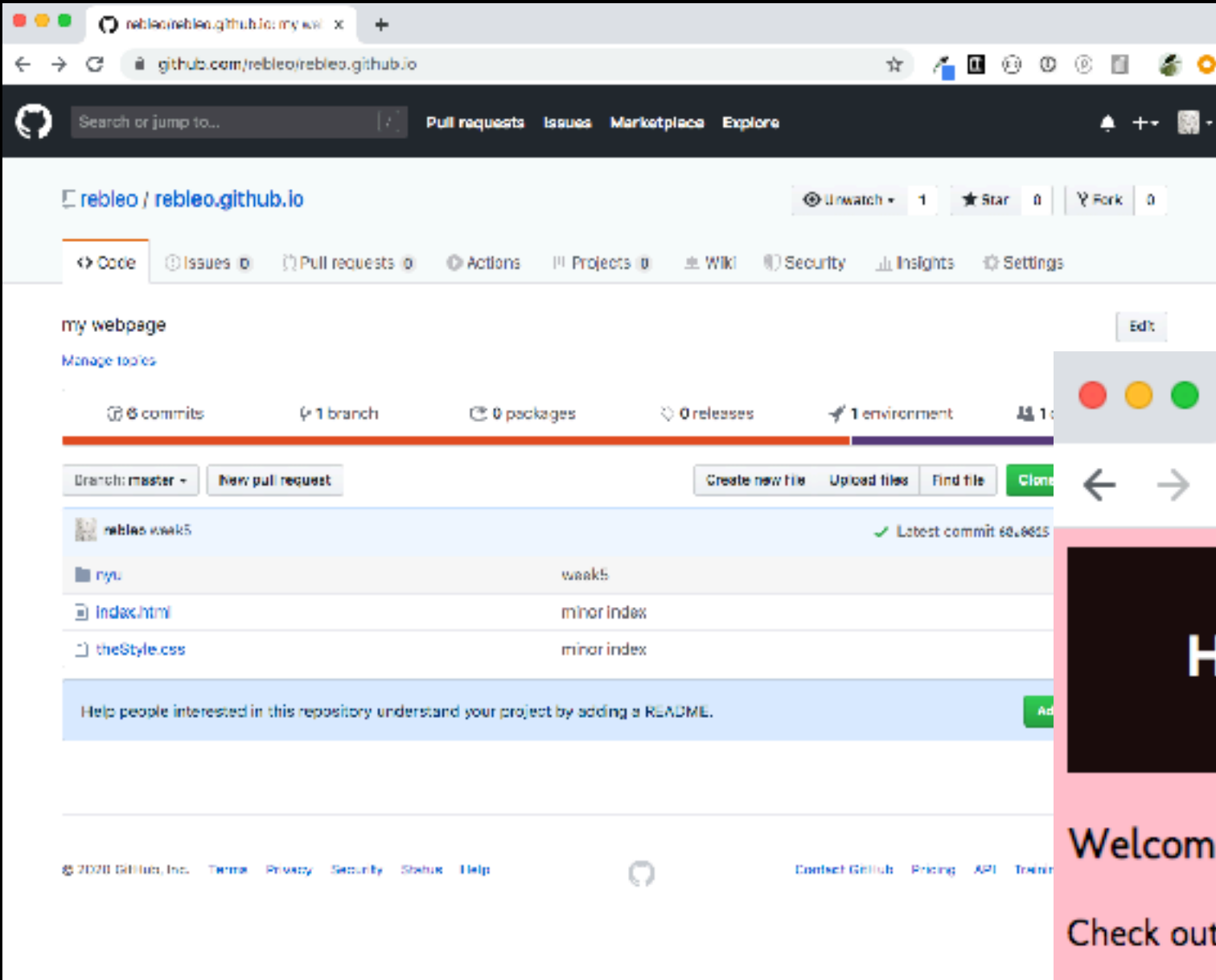
Mimic a server w/ our command line

And look at our work in the browser.



prototype: local http server
(using our local machine as a server!!!)

publish: pushed to Github Pages



github has an easy shortcut for hosting a web sites
on their servers using the repo workflow.