

Hello Welcome!

Lecture Week One





ON SILENT MODE PLEASE



This is Web Technologies

4NCC01- Autumn 2022





Pravash Karki
Lecturer. Designer.

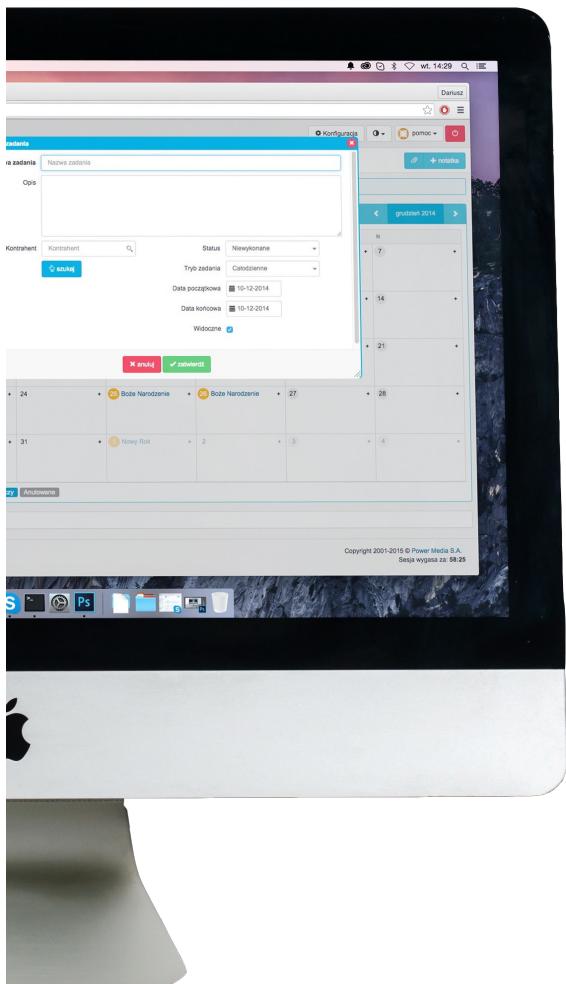
18+ years in tech



What the heck did you **Build?**



A screenshot of a Google search results page for the query "pravash karki". The top navigation bar shows the search term and various browser icons. Below the bar, there's a row of image cards for "kathmandu", "wordpress kathmandu", "meetup", "design", "ux courses", "last door", "pravashkarki", "karki upwork", and "ui design". The main search results are arranged in a grid. The first row contains five items: a portrait of Pravash Karki, an event poster for "DESIGN IN WEB" featuring him, a portrait of him with glasses, another event poster for "WordPress+WoCommerce", and a portfolio of UI designs. Each item has a Facebook link below it. The second row contains three items: a promotional image for "TECH INSIGHT" at Islington College, a Dribbble profile for Pravash Karki, and a GitHub profile for pravashkarki. The third row contains two items: a video thumbnail of him speaking at a conference, a Facebook post from his page, and a DevotePress post about a workshop in Pokhara. The bottom row contains one item: a Dribbble profile for Pravash Karki.



4NCC01

Introduction

Web Technologies Team

FACILITATORS

1. Pravash Karki (*Module Leader*)
2. Jenny Rajak
3. Nerisha Shrestha
4. Yojana Ghimire
5. Jesmi Rajak



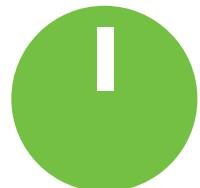
Module's Agenda



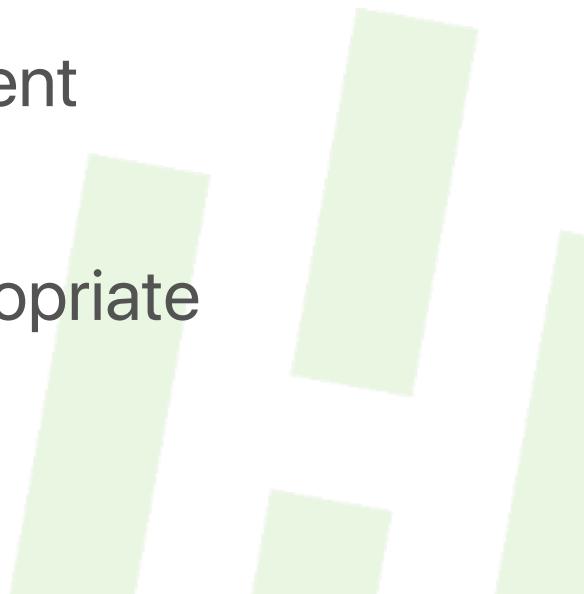
Understand: Internet and cloud-based software architecture, tools, and techniques.

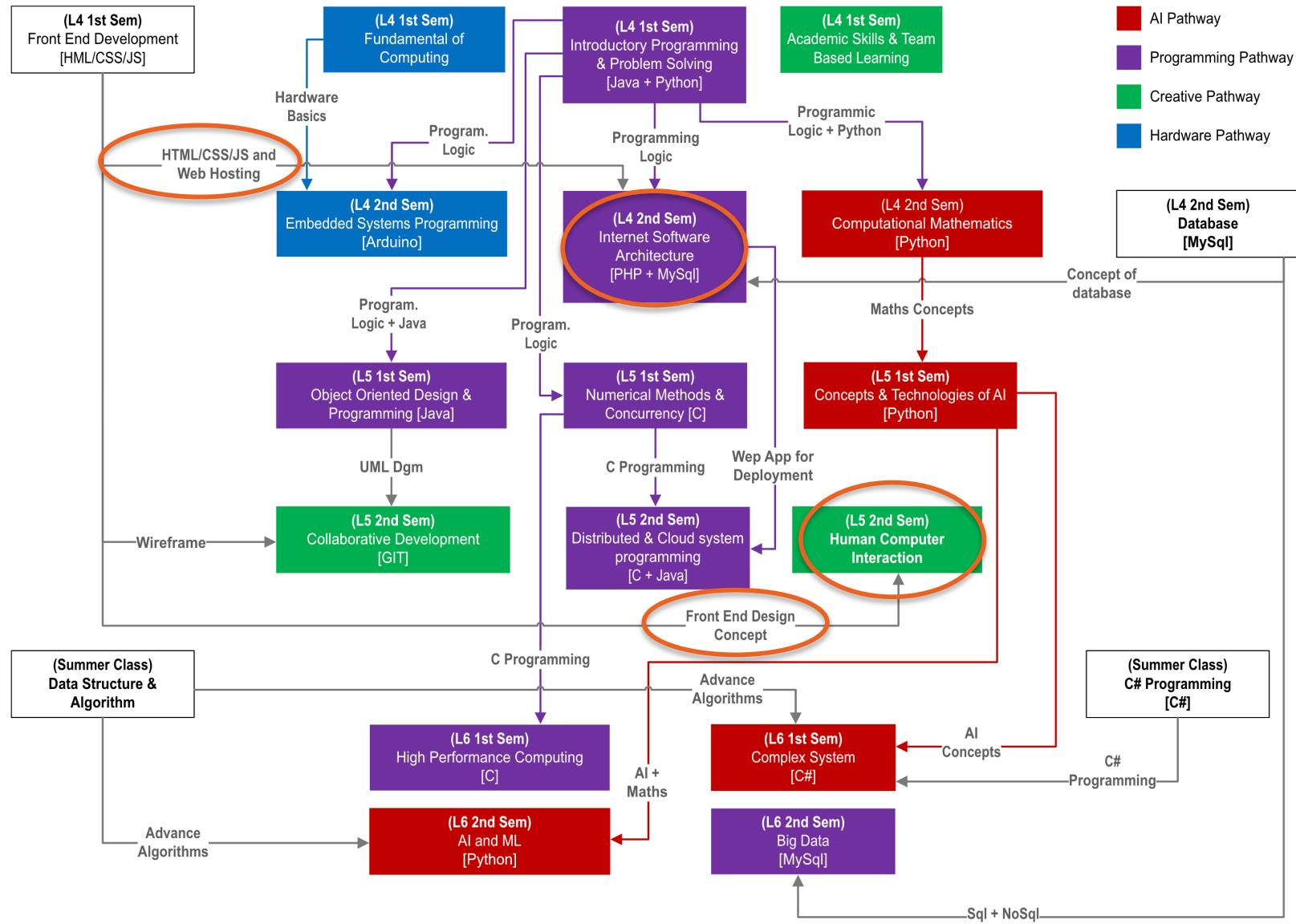


Design: Architecture based on requirements and constraints.



Implement: Portfolio website using appropriate architecture and technology.





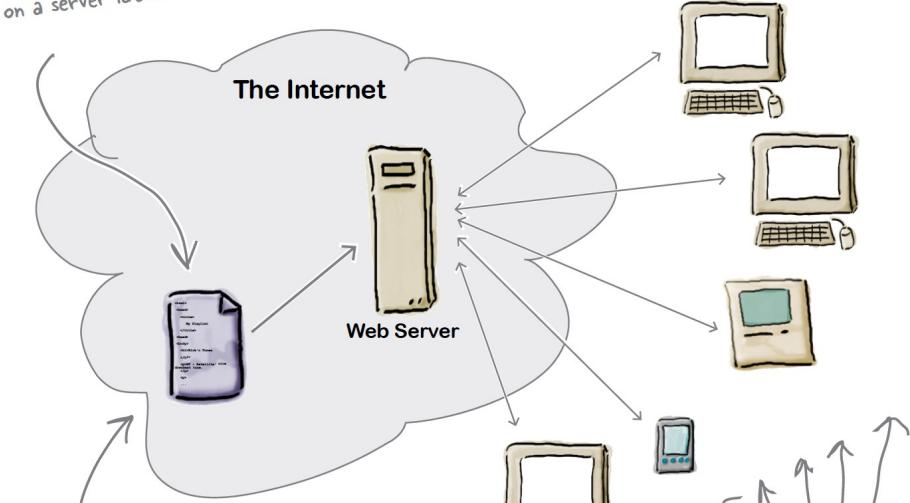
Getting to know **HTML**

The Language of the Web



The Internet

To make web pages, you create files written in the HyperText Markup Language (HTML for short) and place them on a web server (we'll talk about how to get your files on a server later).

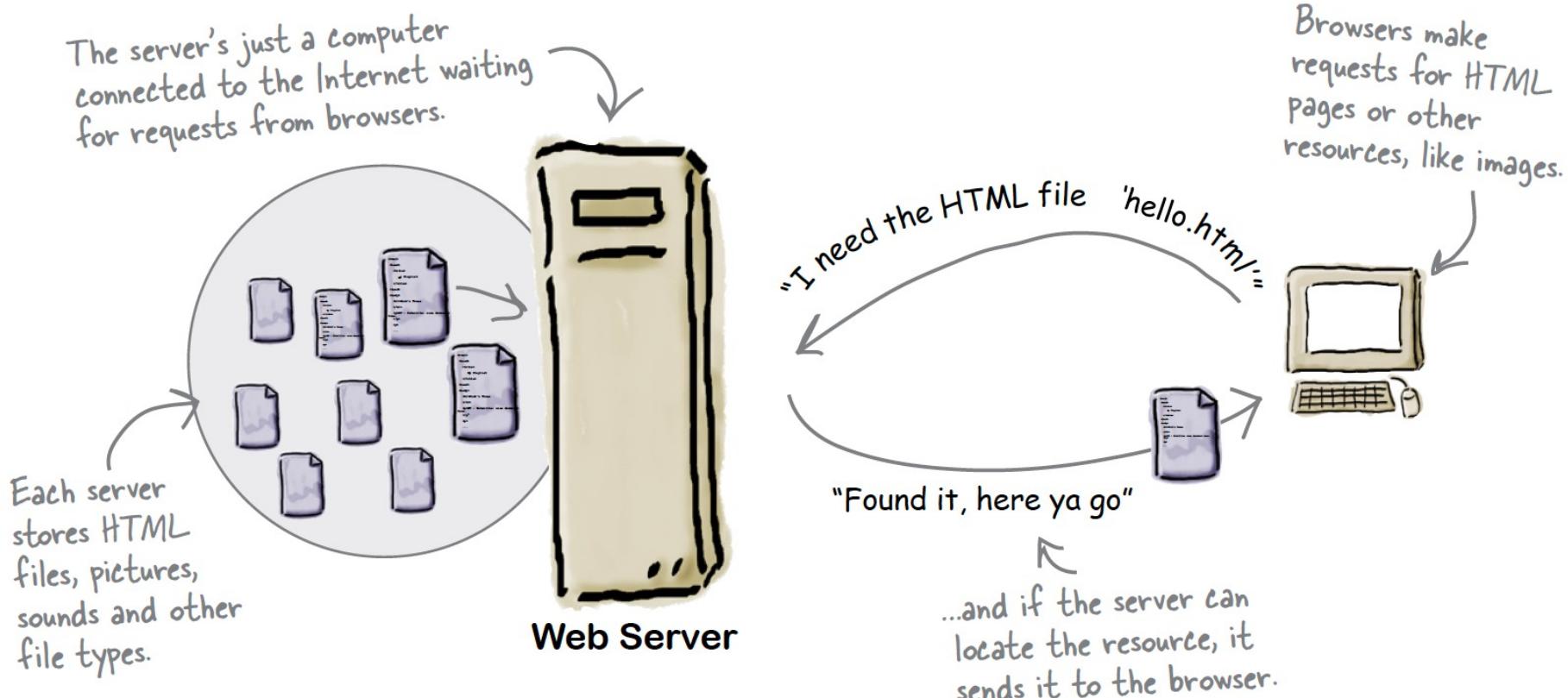


The HTML in your web page tells the browser what it needs to know to display your page. And, if you've done your job well, your pages will even display well on cell phones and mobile devices, and work with speech browsers and screen magnifiers for the visually impaired.

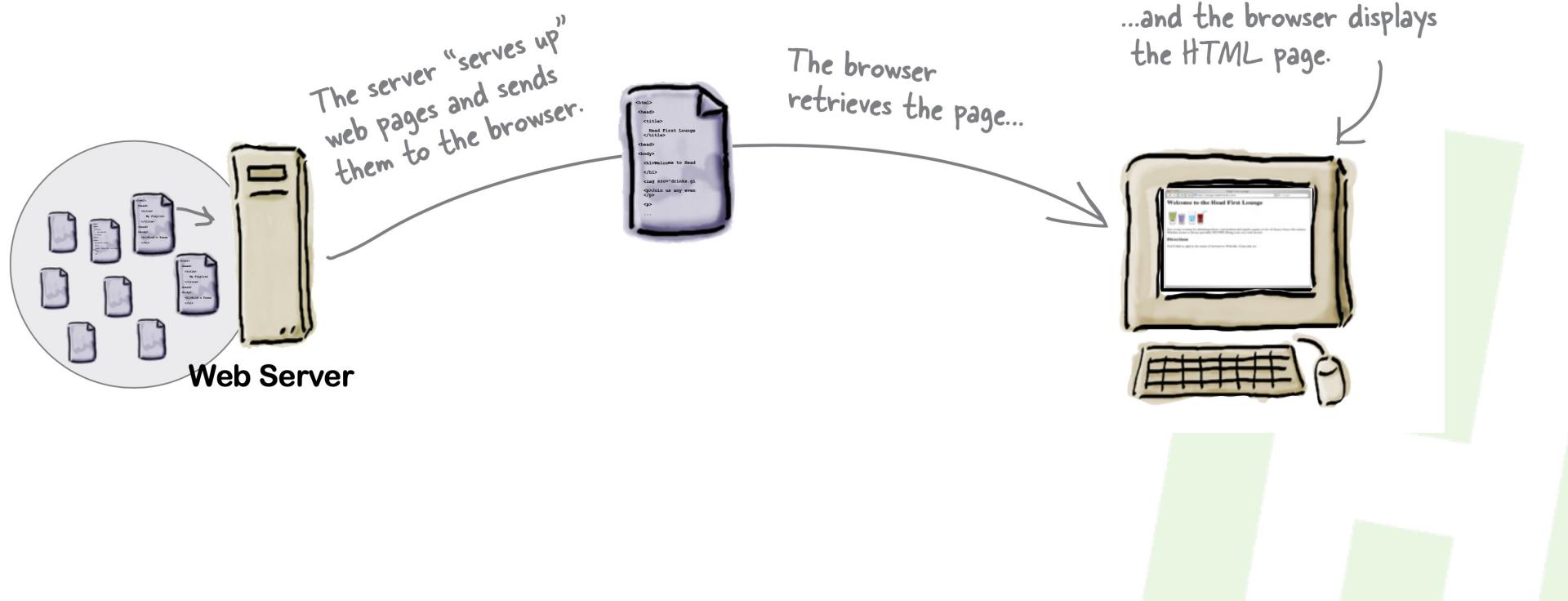
Once you've put your files on a web server, any browser can retrieve your web pages over the Internet.

And there are a lot of PCs and devices connected to the Internet all running web browsers. More importantly, there are friends, family, fans, and potential customers using those devices!

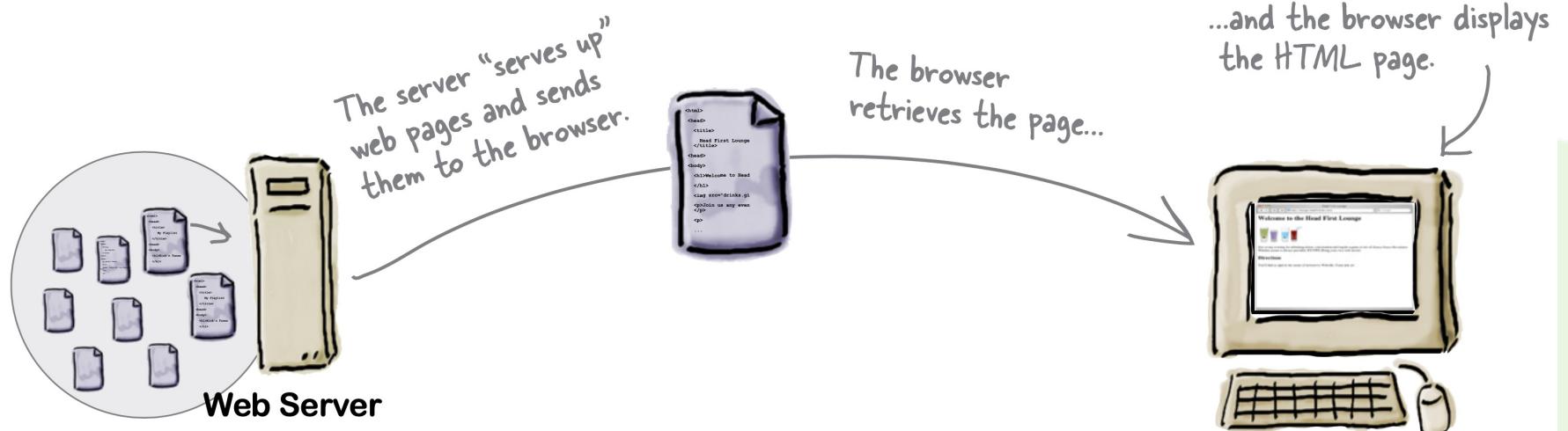
What does the web **Server** do?



What does the web **browser** do?



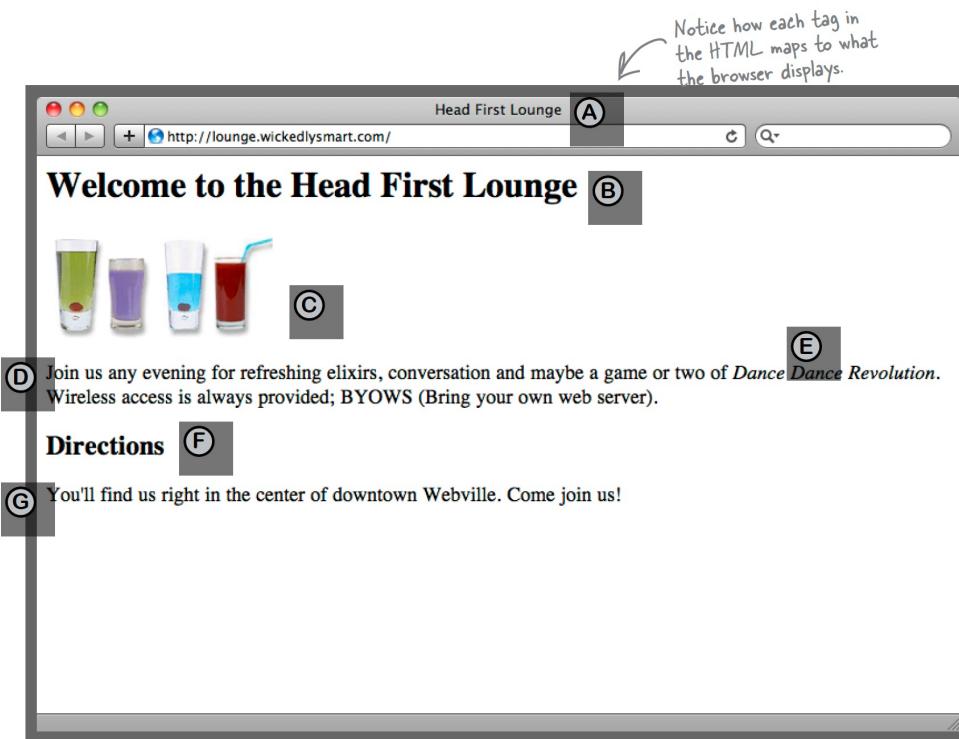
What does the web **browser** do?



```
<html>
  <head>
    <title>Head First Lounge</title> Ⓛ
  </head>
  <body>
    <h1>Welcome to the Head First Lounge</h1> Ⓜ
     Ⓝ
    <p>
      Ⓞ Join us any evening for refreshing elixirs,
      conversation and maybe a game or
      two of <em>Dance Dance Revolution</em>. Ⓟ
      Wireless access is always provided;
      BYOWS (Bring your own web server).
    </p>
    <h2>Directions</h2> Ⓠ
    <p>
      Ⓡ You'll find us right in the center of
      downtown Webville. Come join us!
    </p>
  </body>
</html>
```

What you write (the html)

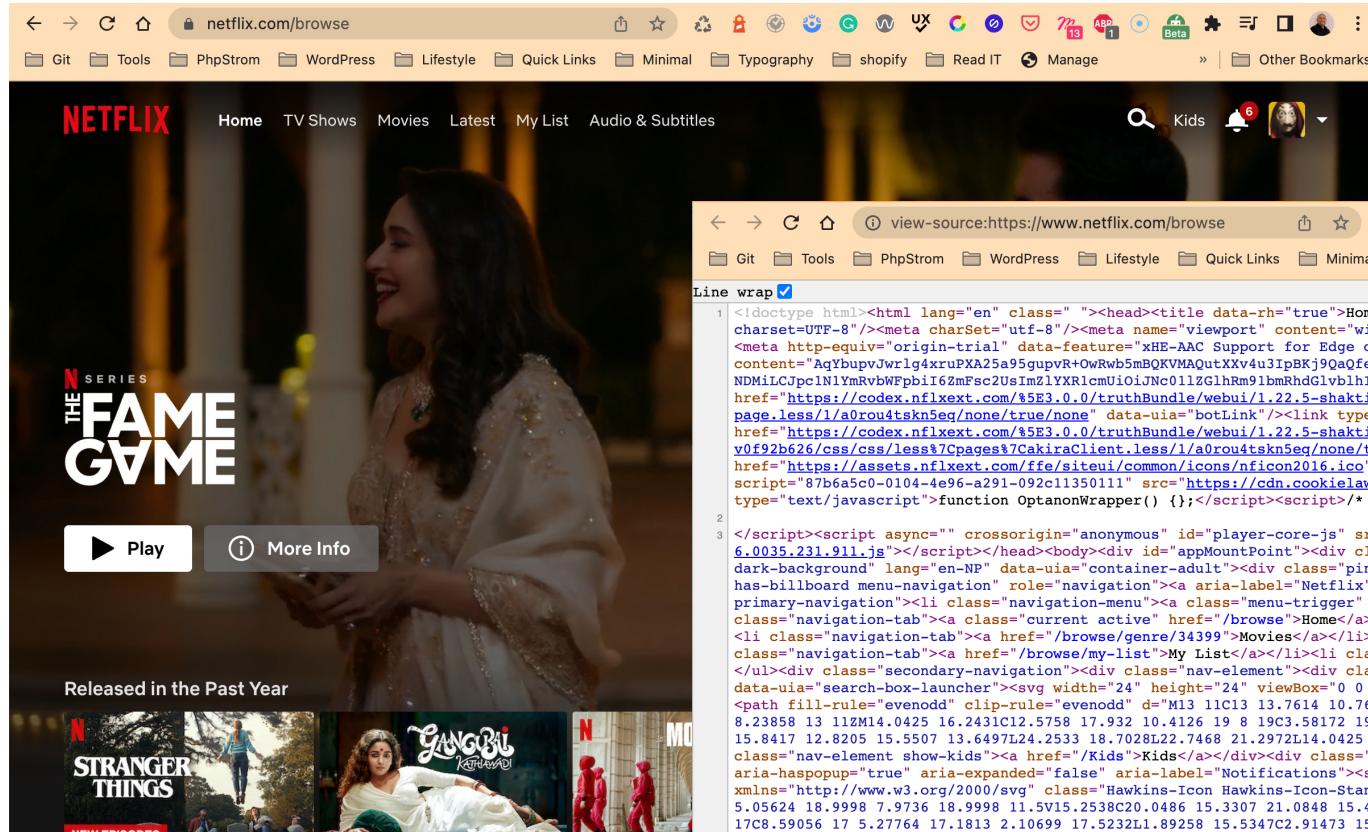
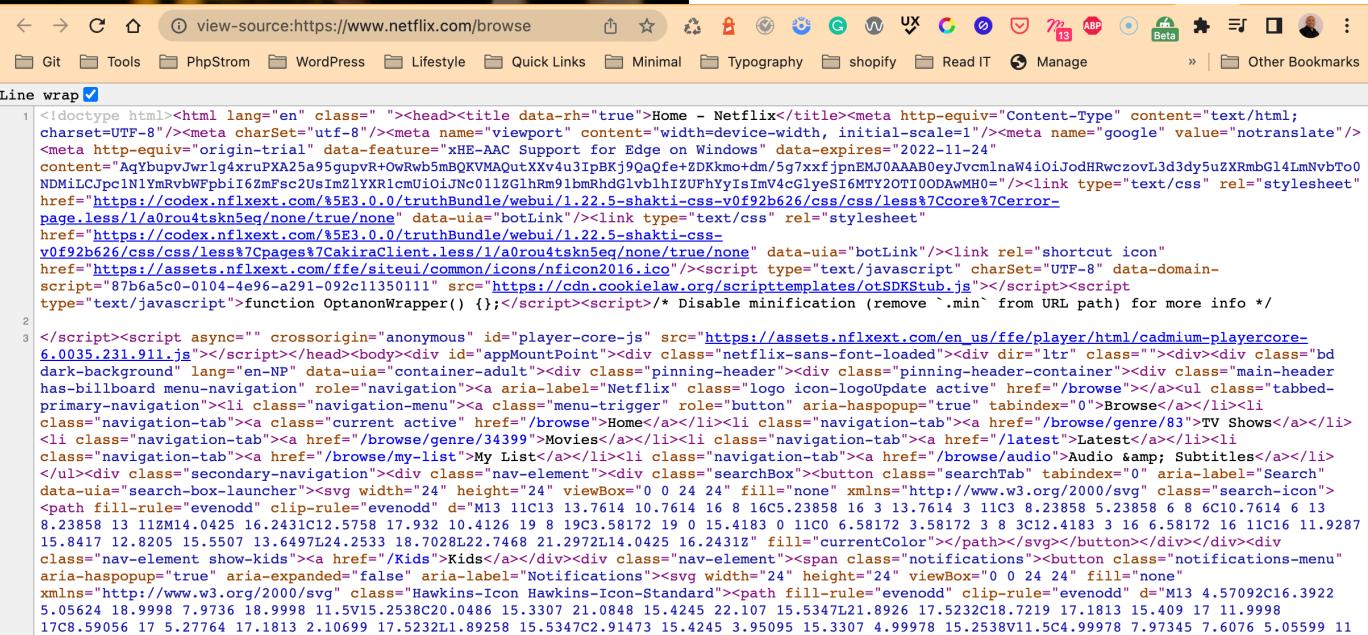




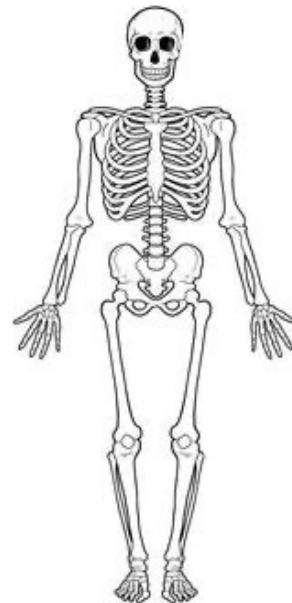
What the browser create



How complex the html code can be?

The image shows a comparison between the visual representation of a website and its underlying HTML structure. On the left, a screenshot of a web browser displays the Netflix homepage, featuring a large image of a woman in a white dress, the title 'THE FAME GAME', and navigation links like 'Home', 'TV Shows', 'Movies', 'Latest', 'My List', and 'Audio & Subtitles'. On the right, a screenshot of a browser's developer tools (view-source) shows the raw HTML code for the same page. The HTML code is extremely complex, containing numerous nested tags, CSS links, and JavaScript snippets, demonstrating the intricate nature of modern web development.



HTML
[Structure or Skeleton]

What are Web Pages made of?

HTML (Hyper Text Markup Language)

HTML are Structure or Skeleton



What are Web Pages made of?

CSS (Cascading Style Sheets)

CSS is Styling

CSS
[Styling]





What are Web Pages made of?

Javascript

JS is Functionality & Interaction

JavaScript
[Functionality & Interaction]



Writing your **first html page...**

Document type declaration.

```
<!DOCTYPE html>
```



The head

```
<head> <title>Page Name </title> </head>
```

And body

```
<body>  
<h1>Hello Class!</h1>  
<p> elements inside the "body" element is  
visible to the users via the web browsers.  
</body>
```



Let's put it all **together**

```
<!DOCTYPE html>
<html>
    <head>
        <!-- These will not be shown in the browser-->
        <meta charset="utf-8">
        <title>Hello World!!</title>
    </head>
    <body>
        <!-- Only this part will be shown in the browser-->
        <h1>Hello Class</h1>
    </body>
</html>
```

<tag> attribute="value">



<tags> are...

Structure that surround content

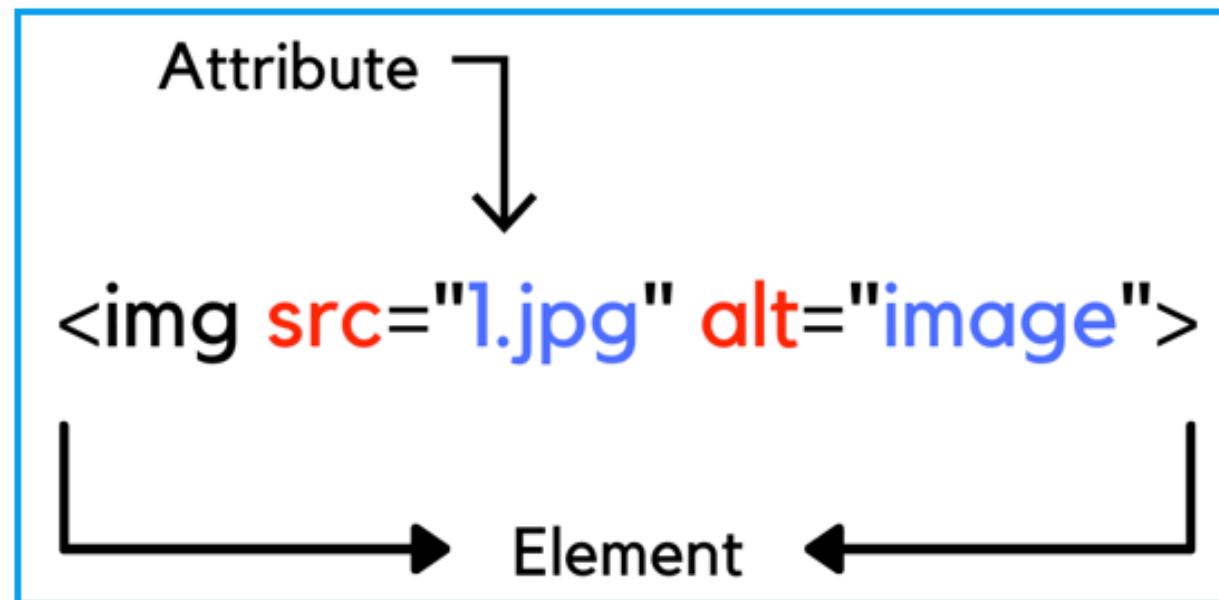
<start></start>

exception

**
 don't need closing**



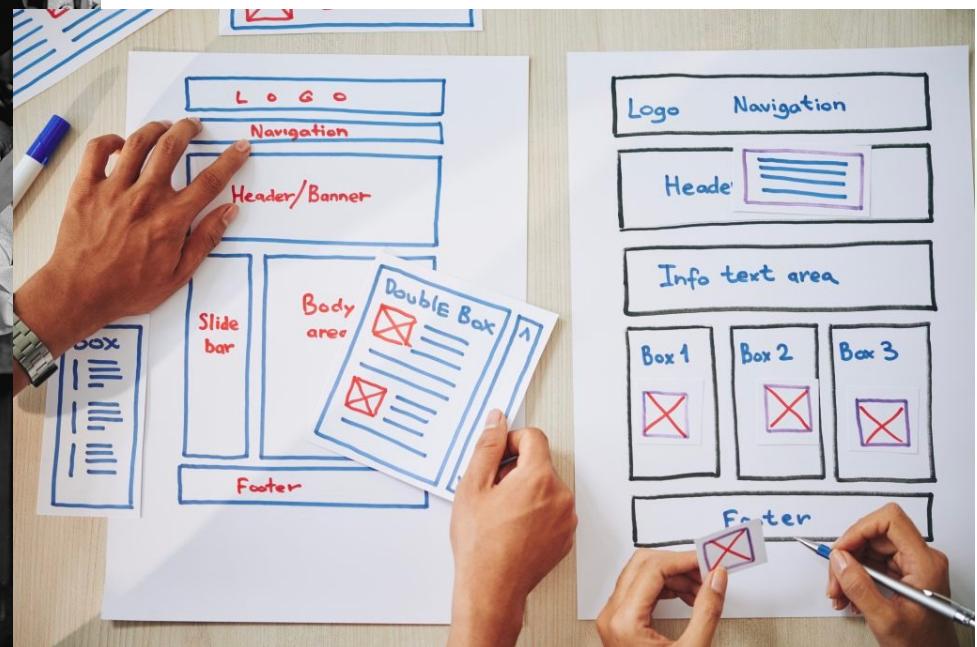
Attributes



let's take a
**
**



Web Page Construction



Making a rough sketch

Sometimes he doesn't include a picture. In this entry, he just has a heading (the date) and a description of the day's events.

The third entry should look just like the first one: a heading, an image, and a paragraph.

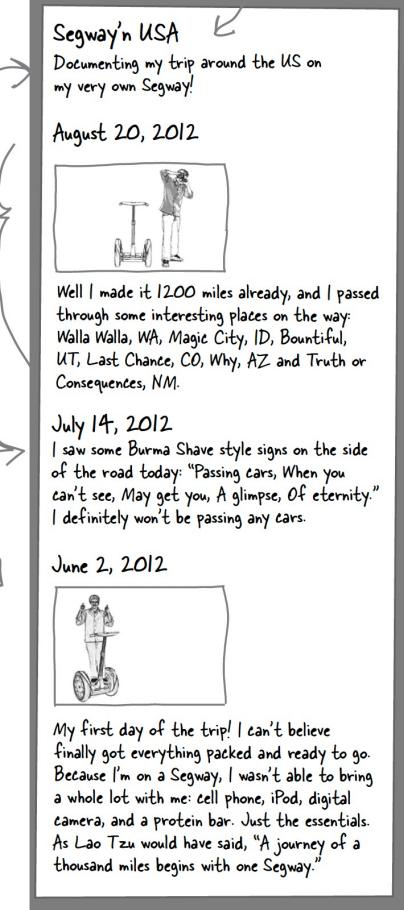
Unlike Tony's paper journal, our page length isn't limited, so we can fit many entries on one web page. His friends and family can just use the scroll bar to scroll through his entries...

However, notice that we reversed the order of the journal entries from newest to oldest. That way, the most recent entries appear at the top where users can see them without scrolling.

He also gave his journal a description. We'll capture that here as a small paragraph at the top.

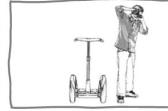
Each day, Tony creates an entry that includes the date, usually a picture, and a description of the day's adventures. So, that's a heading, an image, and another paragraph of text.

Tony gave his journal a title, "Segway'n USA," so let's get that right at the top as a heading.



Segway'n USA
Documenting my trip around the US on my very own Segway!

August 20, 2012



Well I made it 1200 miles already, and I passed through some interesting places on the way: Walla Walla, WA, Magic City, ID, Bountiful, UT, Last Chance, CO, Why, AZ and Truth or Consequences, NM.

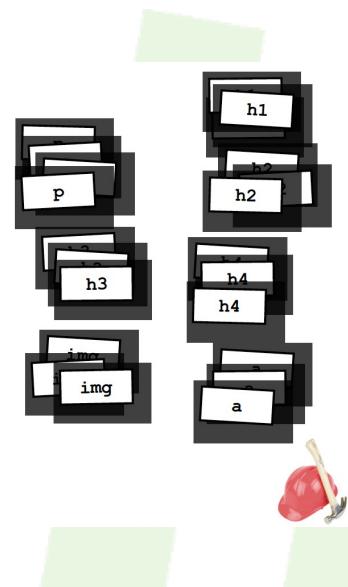
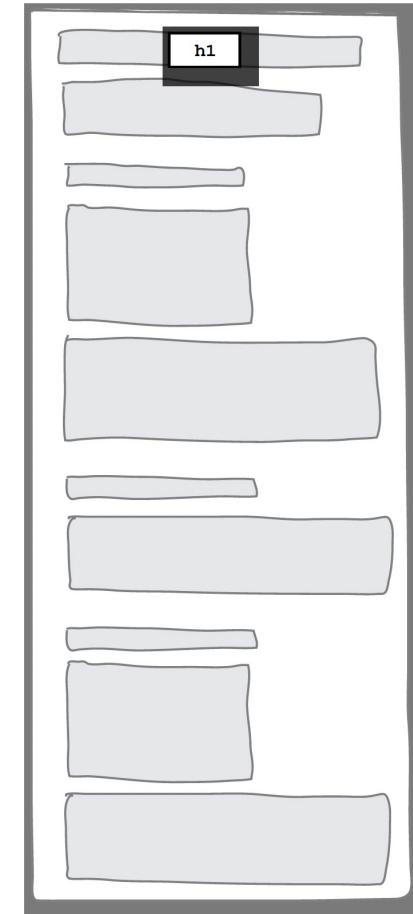
July 14, 2012

I saw some Burma Shave style signs on the side of the road today: "Passing cars, When you can't see, May get you. A glimpse, Of eternity." I definitely won't be passing any cars.

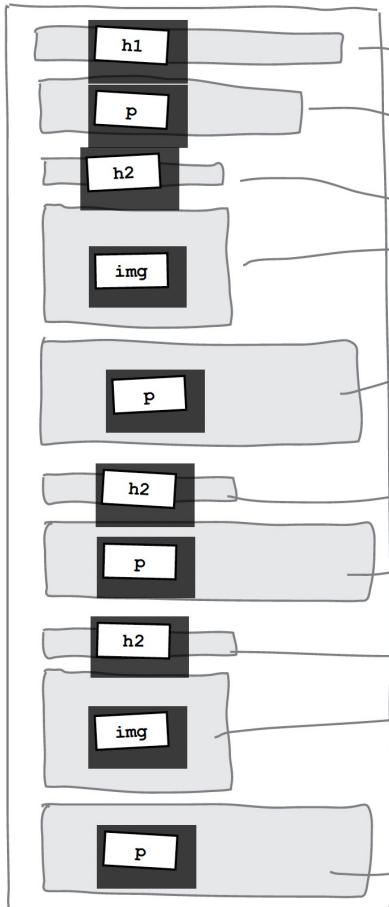
June 2, 2012



My first day of the trip! I can't believe finally got everything packed and ready to go. Because I'm on a Segway, I wasn't able to bring a whole lot with me: cell phone, iPod, digital camera, and a protein bar. Just the essentials. As Lao Tzu would have said, "A journey of a thousand miles begins with one Segway."



Turning the outline into a web page



Don't forget, you always need the `<html>`,
`<head>`, `<title>`, and `<body>` elements.

```
<html>
  <head>
    <title>My Trip Around the USA on a Segway</title>
  </head>
  <body>
```

We're using the title of the journal as
the title of the web page.

```
    <h1>Segway'n USA</h1>
    <p>
```

Documenting my trip around the US on my very own Segway!

```
</p>
    <h2>August 20, 2012</h2>
    
    <p>
```

Well I made it 1200 miles already, and I passed
through some interesting places on the way: Walla Walla,
WA, Magic City, ID, Bountiful, UT, Last Chance, CO,
Why, AZ and Truth or Consequences, NM.

```
</p>
```

```
    <h2>July 14, 2012</h2>
    <p>
```

I saw some Burma Shave style signs on the side of the
road today: "Passing cars, When you can't see, May get
you, A glimpse, Of eternity." I definitely won't be passing
any cars.

```
</p>
    <h2>June 2, 2012</h2>
    
    <p>
```

My first day of the trip! I can't believe I finally got
everything packed and ready to go. Because I'm on a Segway,
I wasn't able to bring a whole lot with me: cell phone, iPod,
digital camera, and a protein bar. Just the essentials. As
Lao Tzu would have said, "A journey of a thousand miles begins
with one Segway."

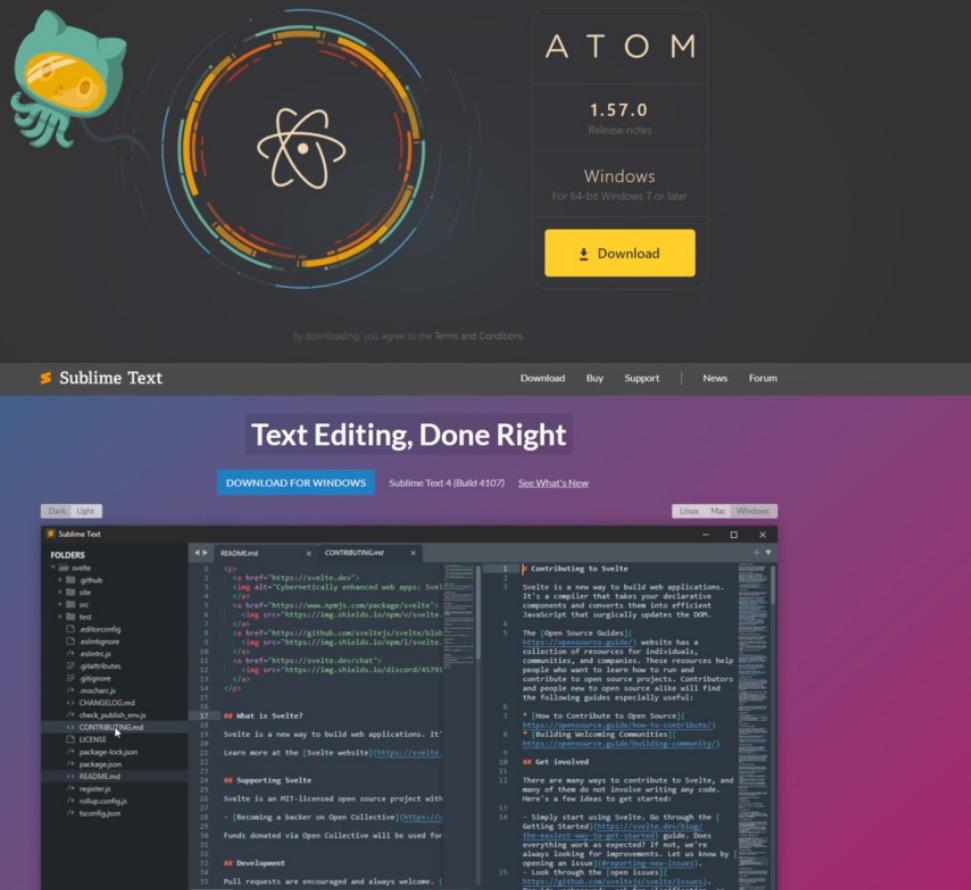
```
</p>
  </body>
</html>
```

Last, but not least, don't forget to
close your `<body>` and `<html>` elements.

Go ahead and type this in. Save your file to the "chapter3/journal" folder as "journal.html". You'll find the images
`"segway1.jpg"` and `"segway2.jpg"` already in the "images" folder. When you're done, give this page a test drive.

Ok, I understand how the web and html
works... but where to I write the actual html?

An integrated development environment



Sublime Text

Text Editing, Done Right

DOWNLOAD FOR WINDOWS Sublime Text 4 (Build 4107) See What's New

Dark Light

FOLDERS

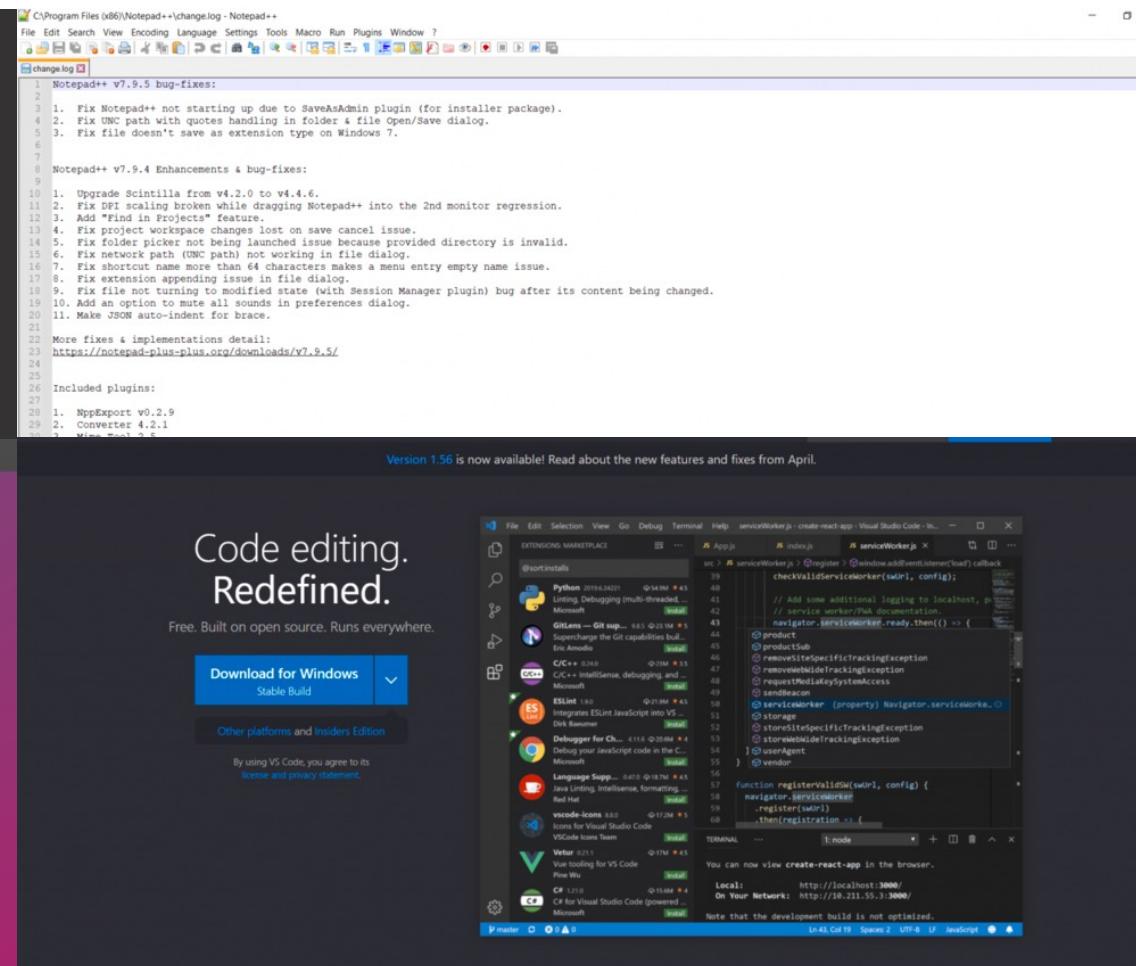
- svelte
- github
- site
- src
- test
- editorconfig
- eslintignore
- eslintrc.js
- gitattributes
- .gitignore
- .moshrc.js
- CHANGELOG.md
- CONTRIBUTING.md
- LICENSE
- package-lock.json
- package.json
- README.md
- register.js
- rollup.config.js
- tsconfig.json

README.md

```

1 <a href="https://svelte.dev">1 href="https://svelte.dev"
2 <a href="https://cybernetically-enhanced-web-apps/Svelte">2 href="https://cybernetically-enhanced-web-apps/Svelte"
3 </a>
4 </p>
5 <a href="https://www.npmjs.com/package/svelte">5 href="https://www.npmjs.com/package/svelte"
6 6 img alt="Svelte logo" src="https://img Shields io/npm/svelte"
7 </a>
8 </p>
9 <a href="https://github.com/sveltejs/svelte">9 href="https://github.com/sveltejs/svelte"
10 10 img alt="GitHub logo" src="https://img Shields io/github/svelte"
11 </a>
12 </p>
13 <a href="https://discord.js.org/">13 href="https://discord.js.org/"
14 14 img alt="Discord logo" src="https://img Shields io/discord/4579"
15 </a>
16 </p>
17 <b># What is Svelte?
18 </p>
19 <b>CONTRIBUTING.md
20 </p>
21 <p>Svelte is a new way to build web applications. It's a compiler that takes your declarative components and converts them into efficient JavaScript that surgically updates the DOM.
22 <p>The Open Source Guides [https://svelte.dev/guides] website has a collection of resources for individuals, communities, and companies. These resources help people learn how to contribute to open source projects and contribute to open source alike will find the following guides especially useful:>
23 <ul>
24 <li>[How to Contribute to Open Source] [https://svelte.dev/guides/contributing-to-open-source]
25 <li>[Building welcoming Communities] [https://opensource.psdn/building-community/]
26 </ul>
27 <b># Get Involved
28 </p>
29 <p>There are many ways to contribute to Svelte, and many of them do not involve writing any code. Here's a few ideas to get started:>
30 <ul>
31 <li>- Simply start using Svelte. Go through the [Getting Started] [https://svelte.dev/get-started] guide. Does everything work as expected? If not, we're always looking for improvements. Let us know by opening an issue [https://github.com/sveltejs/svelte/issues].
32 <li>- Look through the [open issues] [https://github.com/sveltejs/svelte/issues?utf8=%E2%9C%93&q=is%3Aopen].
33 <li>- Provide feedback on our [specification] [https://github.com/sveltejs/svelte-spec].
34 <li>- Provide feedback on our [implementation] [https://github.com/sveltejs/svelte-impl].
35 </ul>
36 <p>Full requests are encouraged and always welcome. [

```



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EXTENSIONS MARKETPLACE

Python 2019.12.2021 0.34.0 Microsoft

GITLens — Git super... 0.8.1 Q3.1M 45 Eric Ameier

C/C++ 0.30.0 Microsoft

ESLint 1.8.0 Integrates ESLint JavaScript into VS Code 2.1M 45 Dan Barter

Debugger for Ch... 4.11.0 Q3.0M 44 Microsoft

Language S... 0.40.0 Q3.1M 45 Red Hat

vscode-icons 8.8.0 Icons for Visual Studio Code 0.12M 45 Ming Wu

Vetur 0.21.1 Vue tooling for VS Code 0.17M 45 Few Wu

CF 1.21.0 CF 0.15M 44 Microsoft

File Watcher 0.1.0 File Watcher for Visual Studio Code (powered by Node.js) 0.1M 44 Note that the development build is not optimized.

File Watcher 0.1.0 File Watcher for Visual Studio Code (powered by Node.js) 0.1M 44 Note that the development build is not optimized.

TERMINAL

node

Local: http://localhost:3000/
On Your Network: http://10.211.55.3:3000/

Module Grading UK

Range of Marks	Grade	Remarks
70 - 100	A	Excellent: outstanding performance with only minor errors
60 - 69	B	Very Good: above the average standard but with some errors
50 - 59	C	Good: generally sound work with a number of notable errors
43 - 49	D	Satisfactory: fair but with significant shortcomings
40 - 42	E	Sufficient: performance meets the minimum criteria
0 - 39	F	Fail: performance does not meet the minimum criteria and considerable further work is required

Want to **Learn**
more?

- **HTML5 Doctor**
- **HTML5: W3C Schools**
- **HTML5: Tutorial Points**





Thank you!

