



# CODING 101: HTML + CSS

*Vincent Trivett*

*Lead Engineer – Study Abroad Apartments*

---

## CODING 101: HTML + CSS

---

# LEARNING OBJECTIVES

- Gain an overview of the web development landscape and where HTML/CSS fits in the web ecosystem.
- Describe the difference between front-end and back-end code and the basic components of HTML, CSS, and Javascript.
- Use HTML and CSS to mark up a basic webpage.
- Describe the different jobs that use coding or benefit from an understanding of HTML/CSS.
- Describe the various opportunities to continue learning web-development.

**WWW**

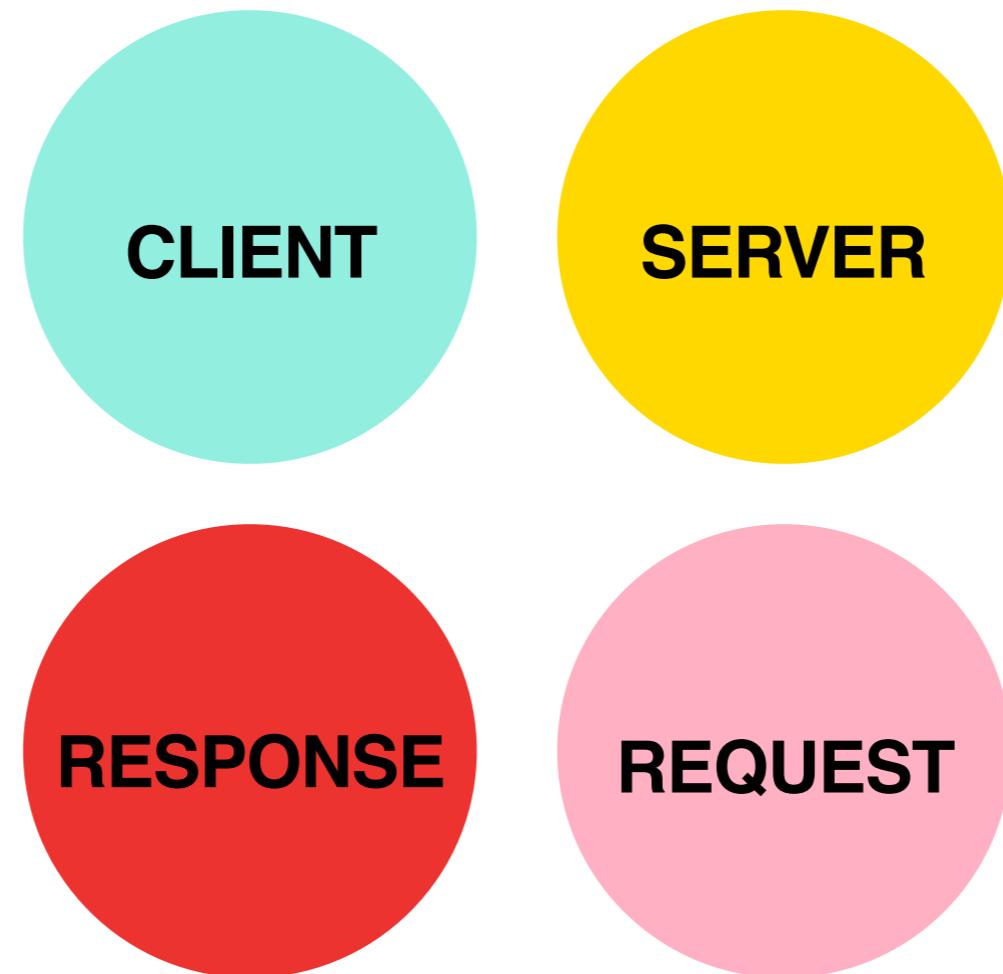
---

**HOW DOES THE  
WORLD WIDE WEB  
WORK?**

---

**WWW**

---

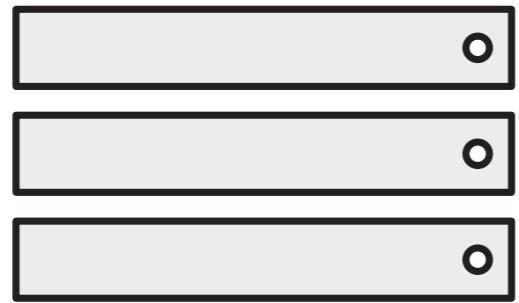


# FIRST OF ALL

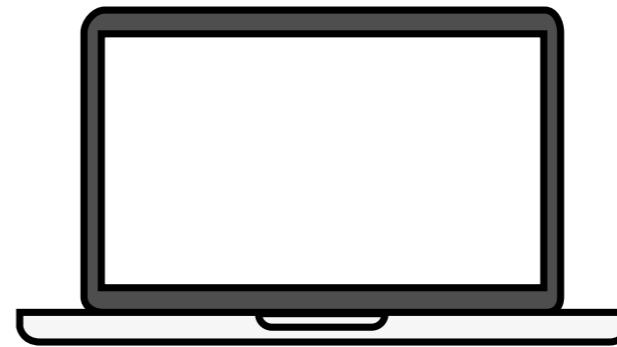
## WHAT IS THE INTERNET

- First of all, it aint the web.
- The internet (lower case in AP style, finally) refers to the global telecommunications infrastructure that enables computers to send messages to one another. It's been around since the 1960s.
- Can be partially destroyed by squirrels.





**Server**



**Client**

IP address 12.345.67.890

Facebook.com

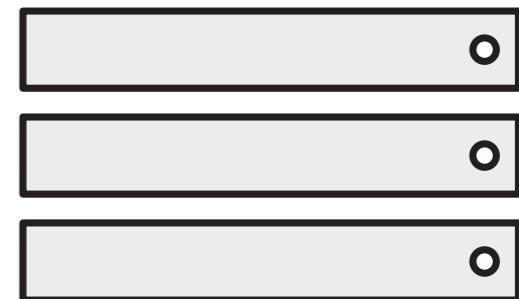
google.com = 74.125.224.72



Client



DNS Server

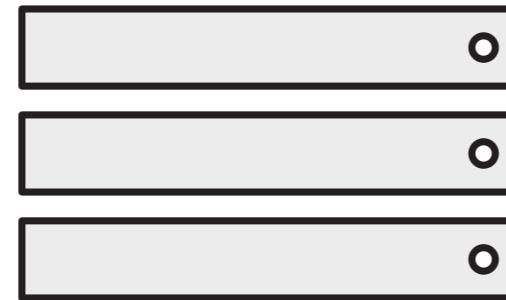


Server

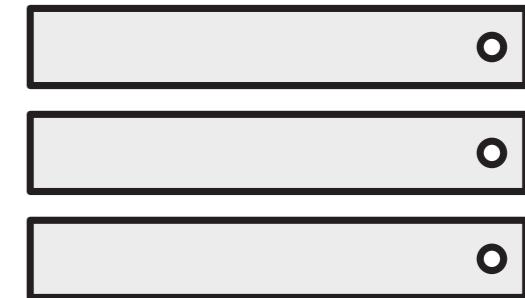
google.com = 74.125.224.72



Client



DNS Server

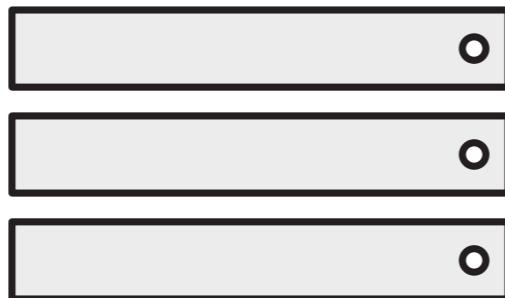


Server

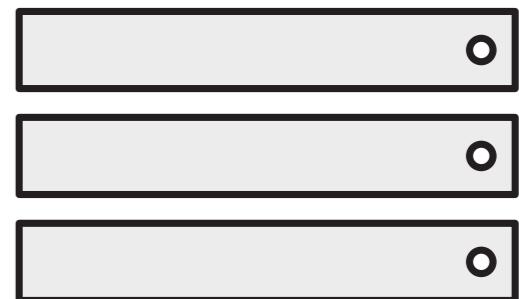
google.com = 74.125.224.72



Client



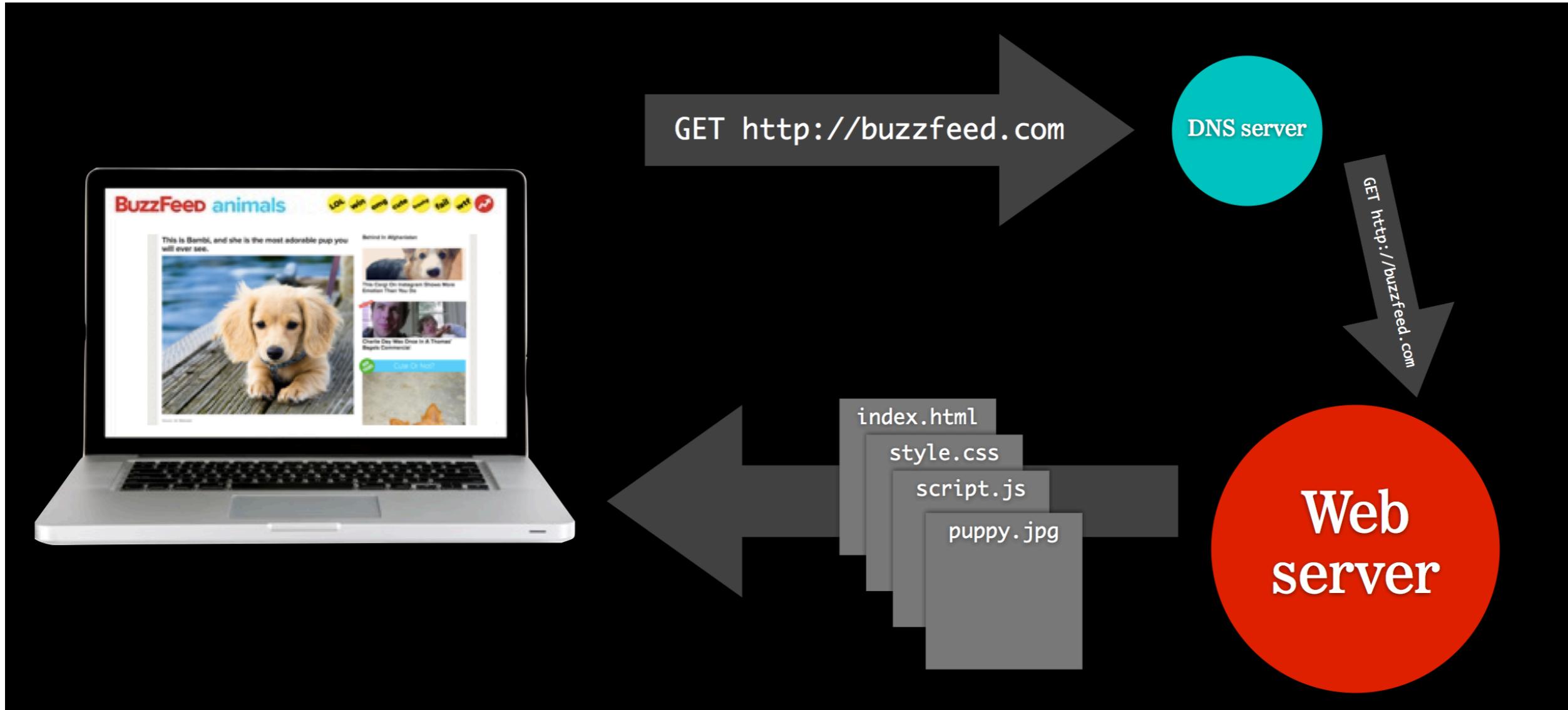
DNS Server

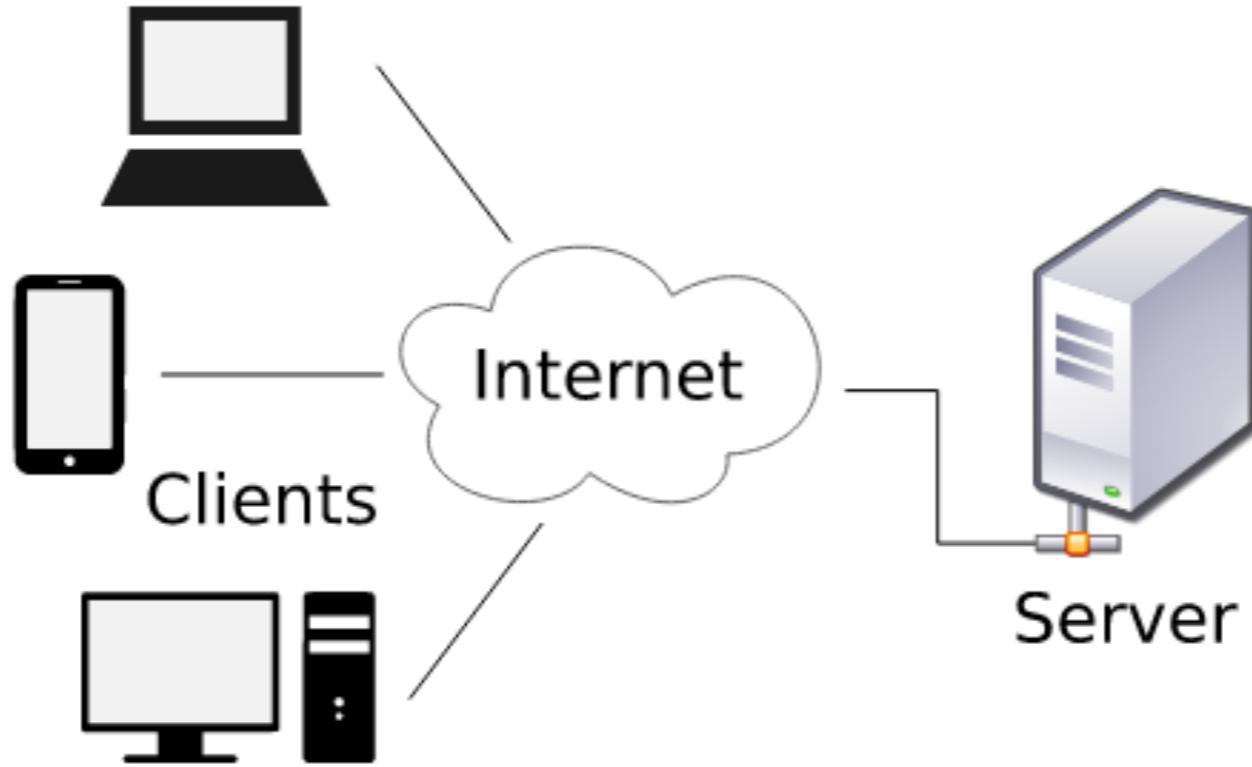


Server

# WWW

---





---

# SO, WHAT'S WEB DEVELOPMENT?

---



# WHAT'S WEB DEVELOPMENT?

---

- The creation and management of both websites and web-based applications
- Made up of the Front End and Back End
- Most Developers will try to convince you that it is magic, but it is mainly editing text files (coding / programming), and solving problems (crying)

## IT'S ALL TEXT

- First and foremost, the main communication mechanism for the internet — you know, that thing that rules our lives — is text. Literally just letters and words and numbers and characters.
- The other main point to take away here is this: the text that is transferred is written in a highly specific manner. It follows a very strict set of rules that can be parsed and understood by the server and the browser. In other words, this text follows a specific set of grammatical rules.
- This is also why you need a code editor like Atom, Sublime Text, Visual Studio Code, etc. I normally use Sublime Text 3 or Vim personally.
- Programmers like to get into some holy war about which editor is the best. I refuse to enter that fray. They all work. Shut up.

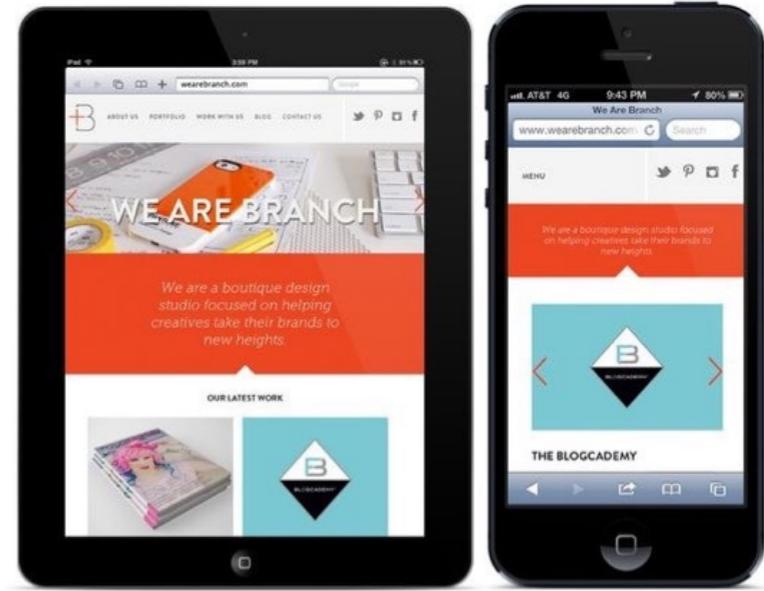
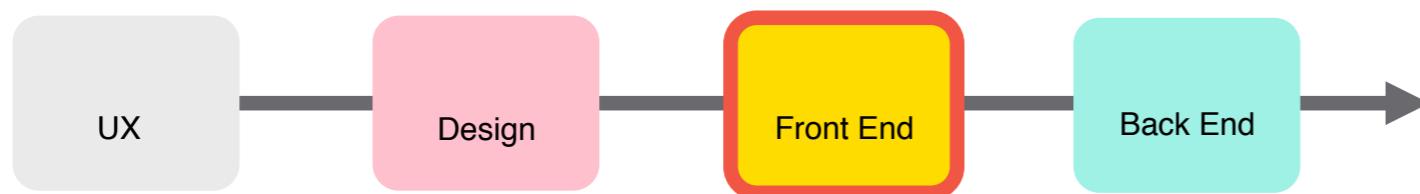
---

**WHERE DOES FRONT END WEB DEVELOPMENT FIT IN?**

---

# WEB PRODUCTION WORKFLOW

# WEB PRODUCTION WORKFLOW



- Take the design and turn it into code and assets.
- Uses HTML/CSS to create the structure for a page and add styles.
- Add interactions with Javascript.
- Other responsibilities: accessibility, performance, cross-browser and cross-device functionality.

---

## WHAT DOES FRONT END EVEN MEAN?

---

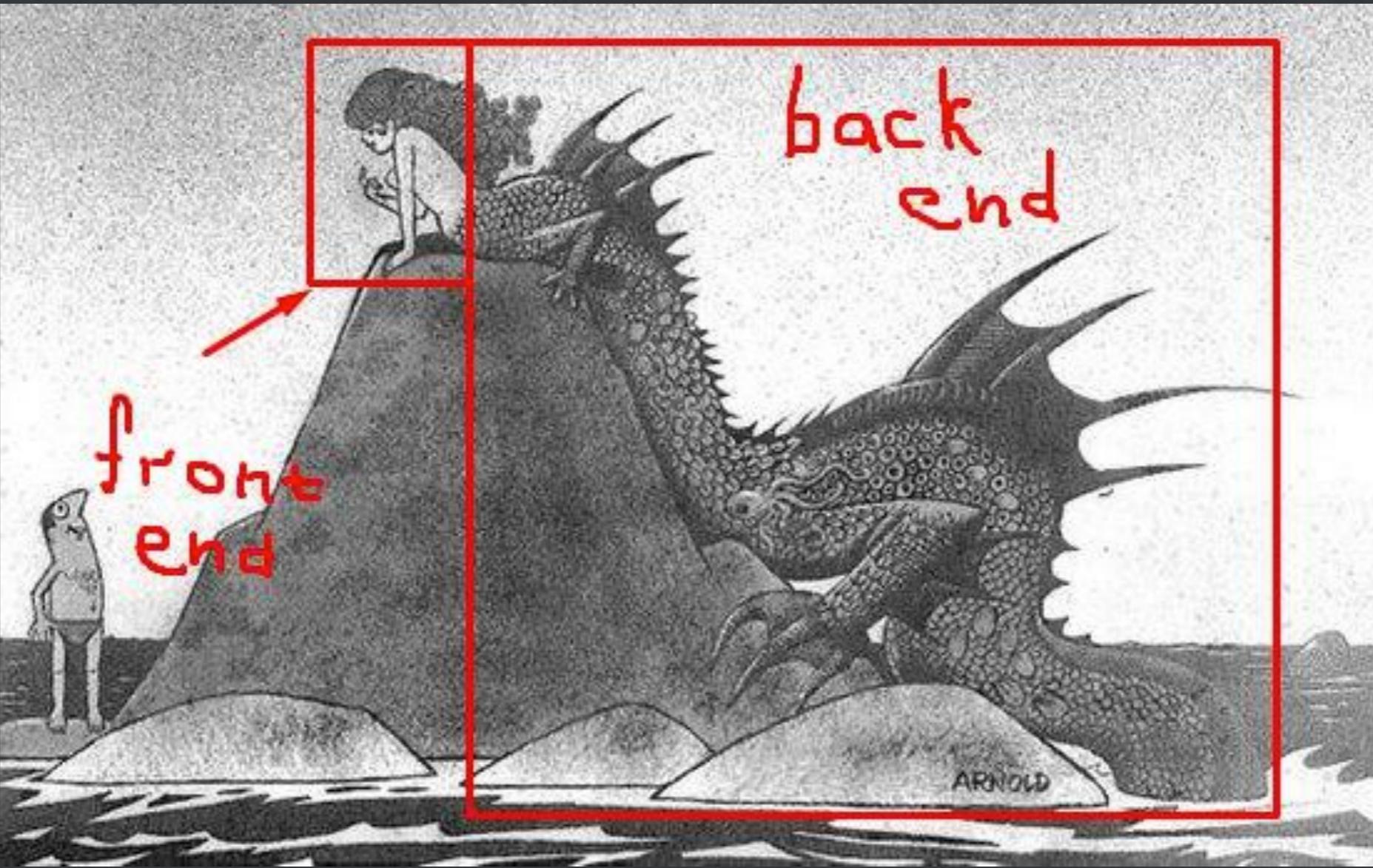
“A mix of programming and layout  
that powers the visuals and  
interactions of the web.”

---

## **IN SUMMARY...**

---

- The Front End is what the user sees
- It powers the visuals and interactions of the web
- It is meant to be pretty, but doesn't always happen that way
- Made up of HTML, CSS and Javascript



---

---

Let's open up a Browser and mess with some front end code

# THE BACK END

---

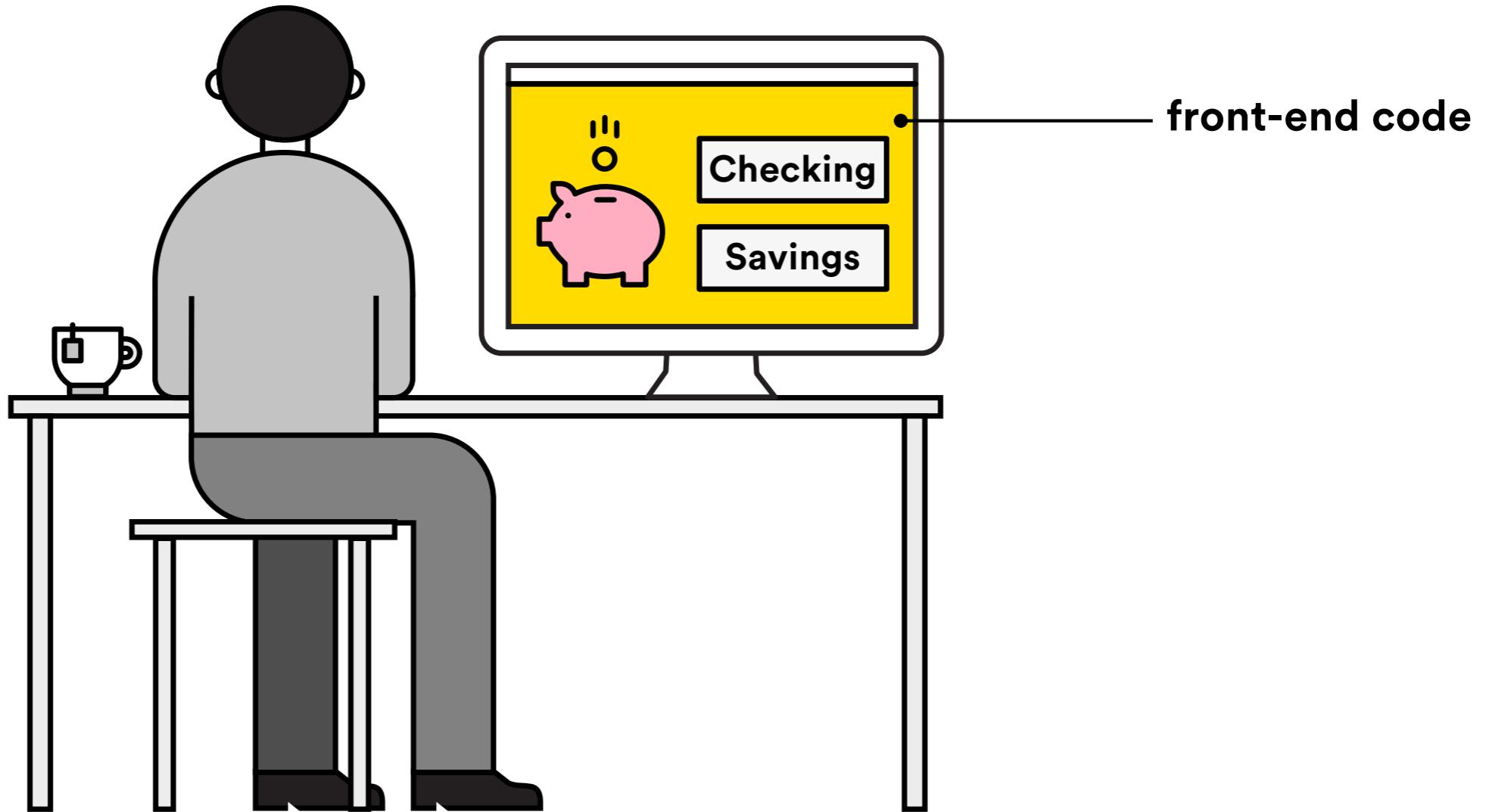
## WEB DEVELOPMENT

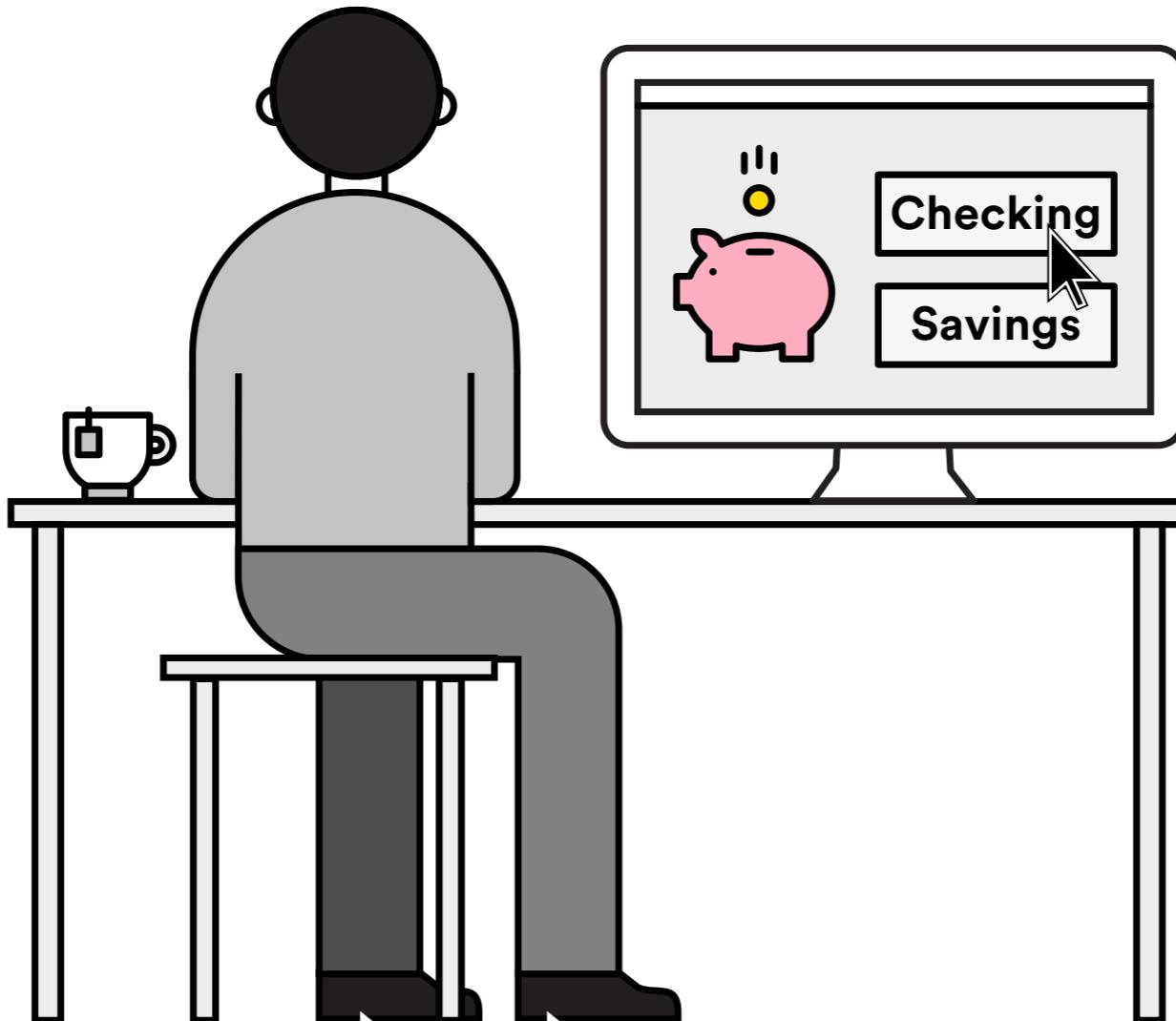
---

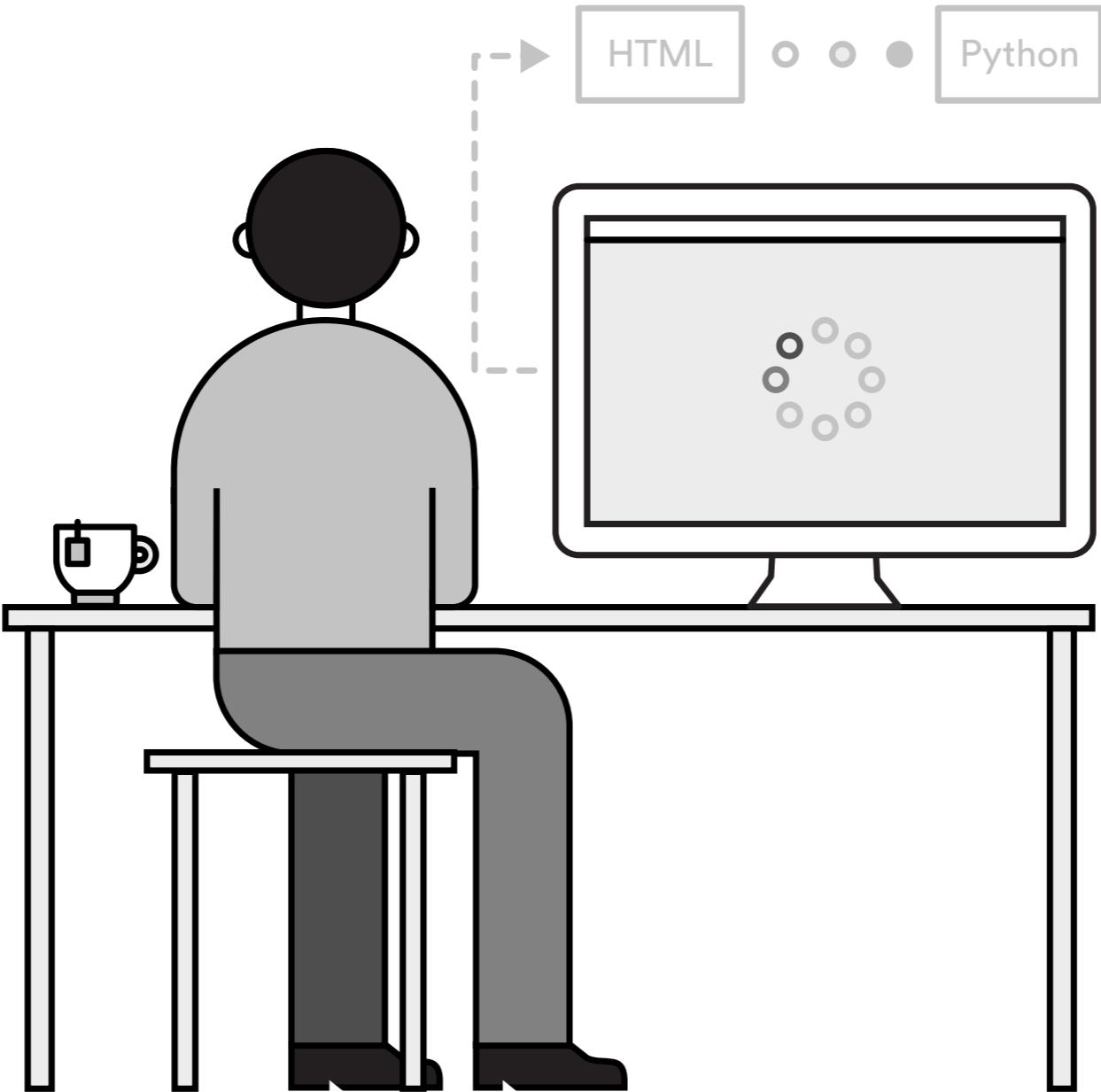
# WHAT IS THE BACK END?

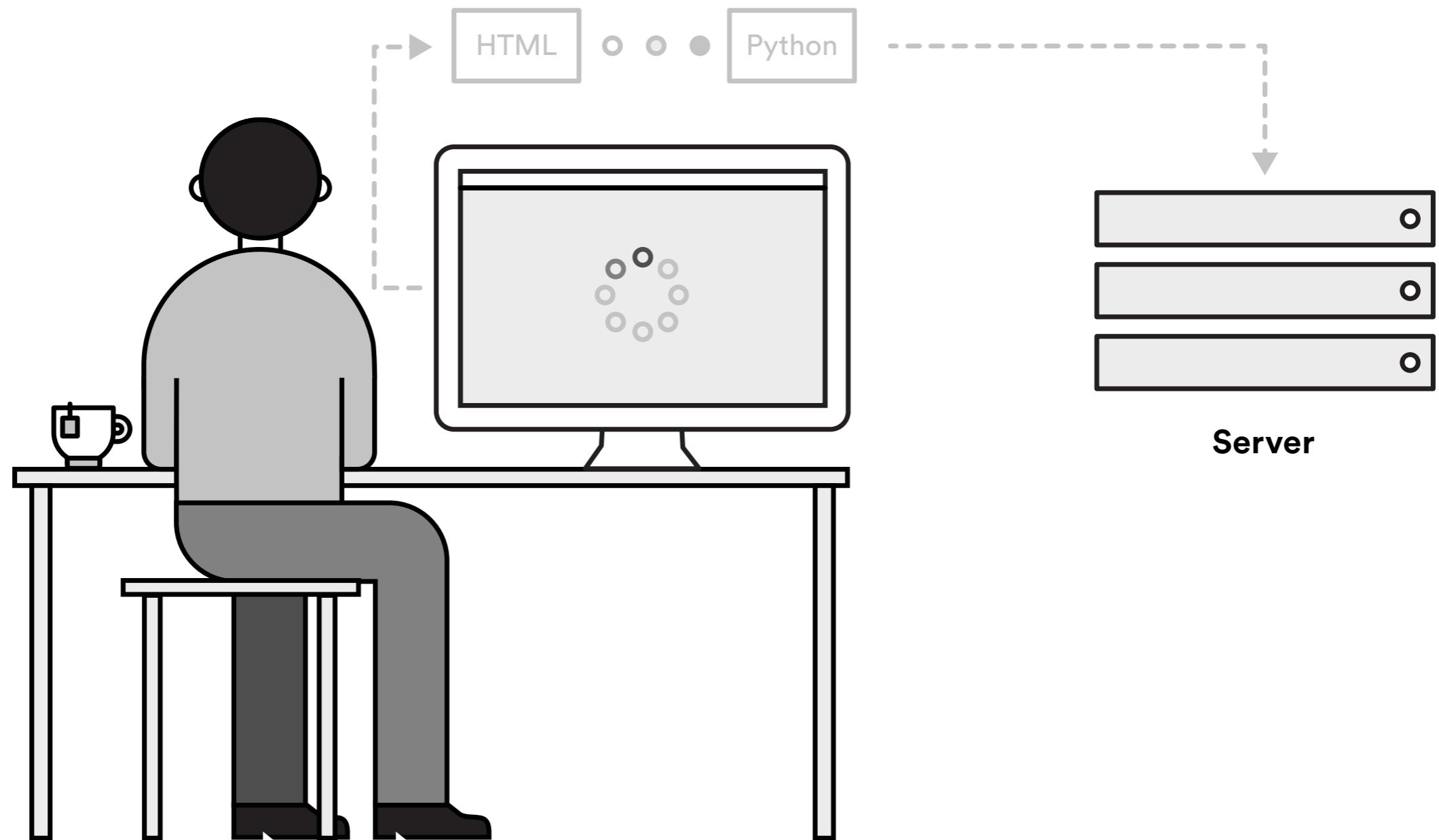
- It is what goes on behind the scenes
- Consists of databases, servers etc.
- Lots of languages:
  - Ruby (Ruby on Rails), Node.js, PHP, Python, C++ etc.

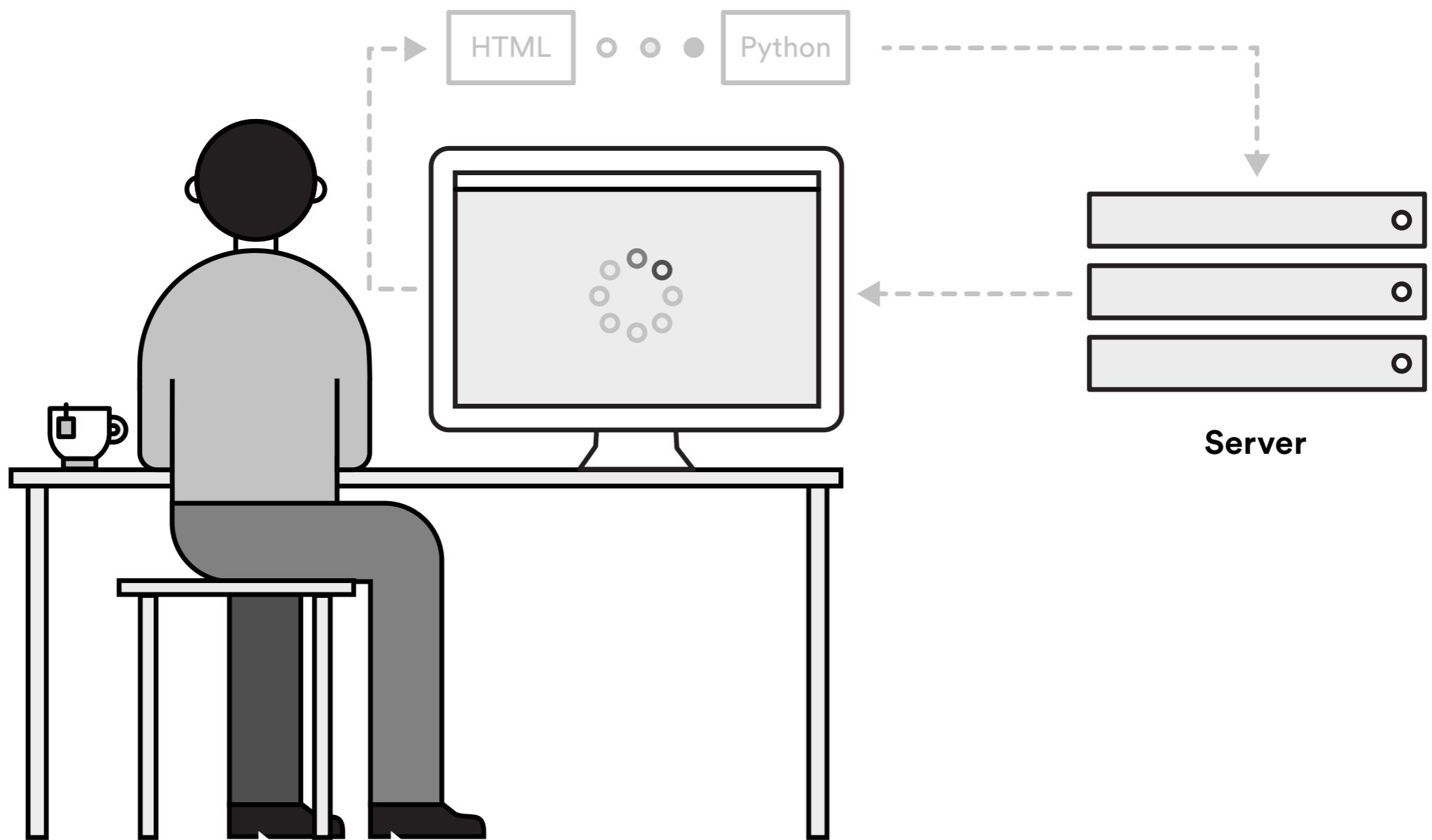


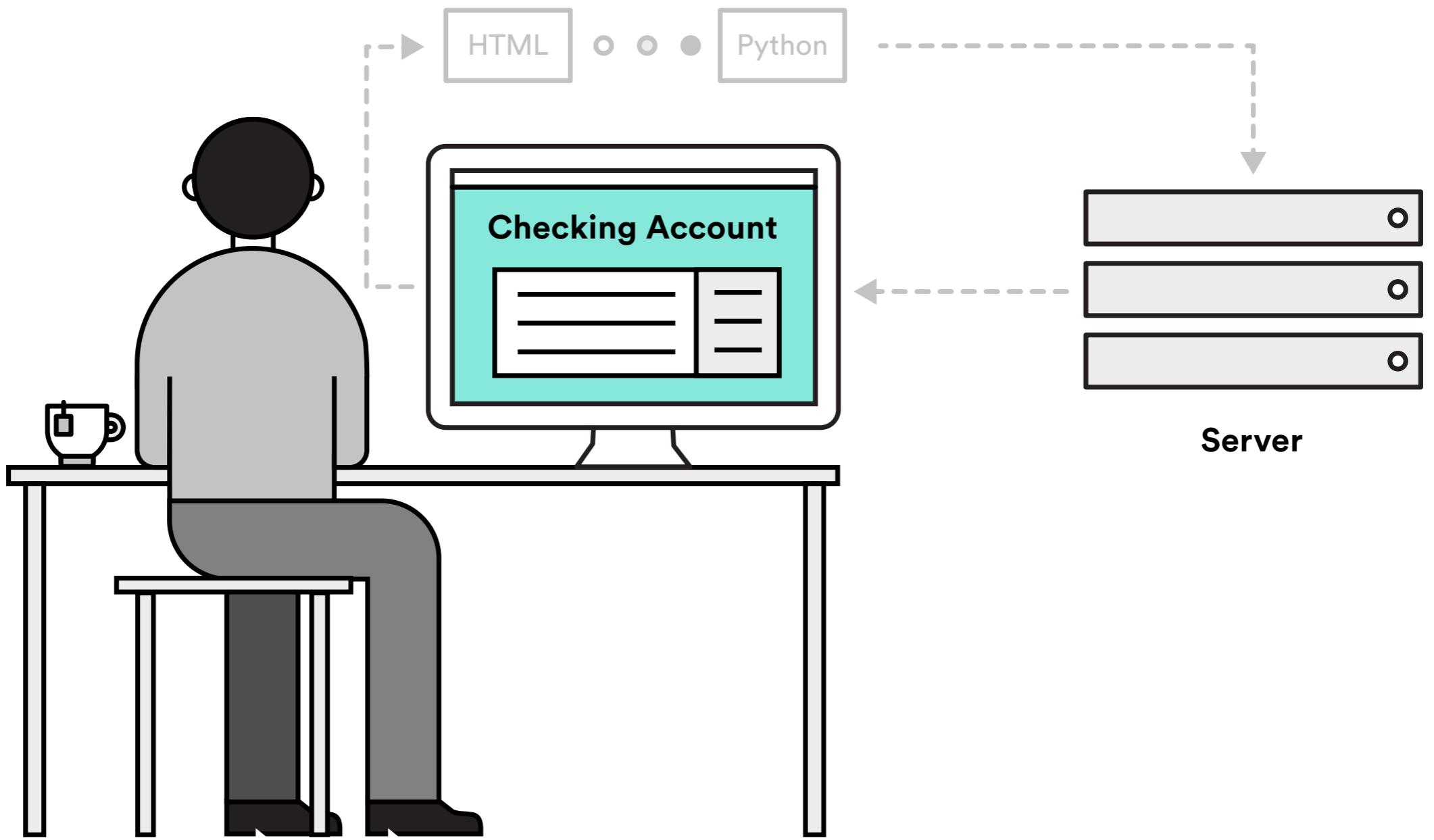












# FRONT END LANGUAGES

---

# FRONT END IS MADE UP OF...

---

HTML

CSS

JavaScript



## FRONT END

---

# THE LANGUAGES

<b>HTML</b>	<i>Defines the Content</i>	<i>“The Bones”</i>
<b>CSS</b>	<i>Assigns the style</i>	<i>“The Skin”</i>
<b>JAVASCRIPT</b>	<i>Adds the functionality</i>	<i>“The Brain”</i>

---

**FRONT END**

---

# DEEP DIVE INTO HTML + CSS

# FRONT END

- HTML is responsible for the markup(content)
  - e.g Site Planning
  - CSS is responsible for the styling of the content
  - e.g Building Aesthetics



# ACTIVITY: DISTINGUISH BETWEEN HTML, CSS, AND JS

## DIRECTIONS

EXERCISE

1. Let's visit [lyft.com](https://lyft.com) together
2. The words "A Ride in Minutes" appears due to \_\_\_\_\_?
3. The reason for which "A Ride in Minutes" is centered and white is due to \_\_\_\_\_?
4. Hover over the word "Explore" in the navigation menu. That animation is most likely due to \_\_\_\_\_?

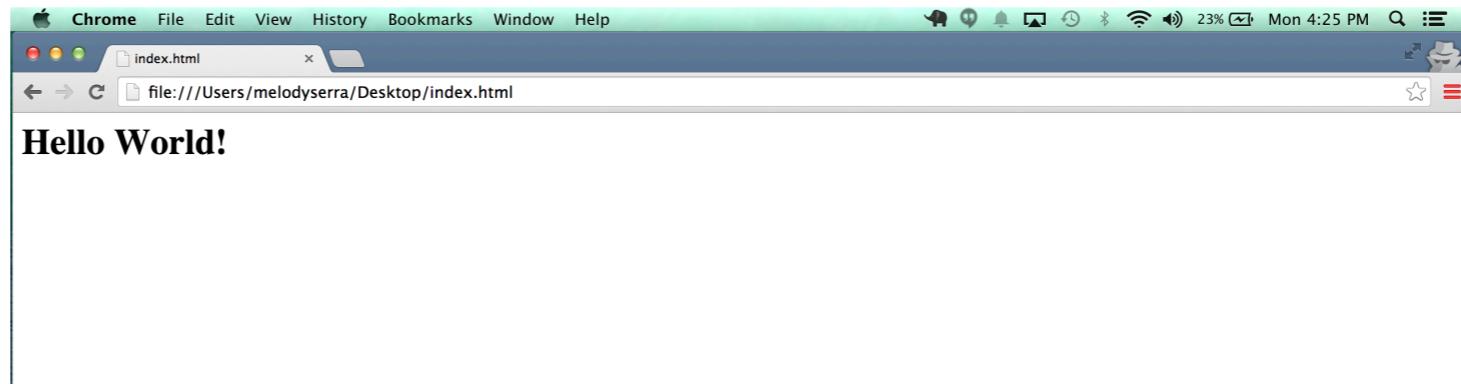
# HTML : HYPER TEXT MARKUP LANGUAGE

---

- HTML is made up of tags
- Tags = <>
- Tags tell the browser how to format content
- e.g Will the content be formatted as an image or as a link?

opening tag, type declaration      what is rendered      closing tag

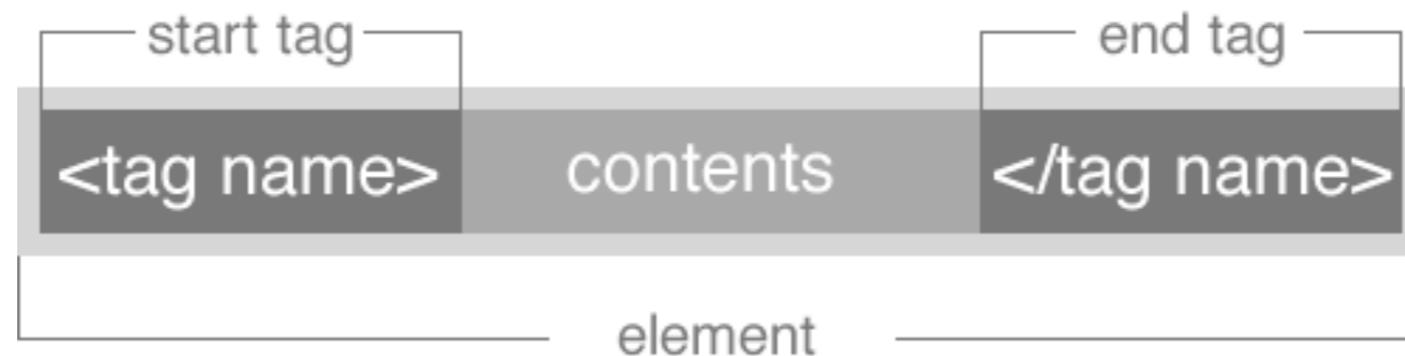
```
<h1>Hello World! </h1>
```



## FRONT END: HTML

---

# HTML SYNTAX



---

**FRONT END**

---

# GUIDED PRACTICE

---

## HTML CODE-ALONG

---

1. OPEN YOUR BROWSER AND  
NAVIGATE TO

**CODEPEN.IO**

## HTML CODE-ALONG

---

“Browser, show ‘Hello!’ as a header.”

```
<h1>Hello!</h1>
```



OPENING TAG



CLOSING TAG

---

# HTML CODE-ALONG

---

<h1>Most important HEADING</h1>

<h2>Second Most Important Heading</h2>

<h3> Third Most Important Heading</h3>

<h4> Fourth Most Important Heading</h4>

<h5> Fifth Most Important Heading</h5>

<h6>Least Important Heading</h6>

# HTML CODE-ALONG

---

<p>

This is a paragraph. Usually, these are used for blocks of text that have two or more sentences.

</p>

# HTML CODE-ALONG

---

“Browser, please add a line break in my text”

```
<p>  
line  
<br> ← LINE BREAK TAG  
break  
</p>
```

# HTML CODE-ALONG

---

Line break tags are open tags.  
This means they do not need an “end tag”.

<p>  
line  
<br>  
break  
</p>

IS THE SAME AS...

<p>  
line  
<br>  
break  
</p>

# HTML CODE-ALONG

---

**TAGS CAN BE PLACED INSIDE OTHER TAGS**

<ol>

<li>First item</li>

<li>Second item</li>

</ol>

# HTML CODE-ALONG

---

## ORDERED LISTS (NUMBERED LISTS)

```
<ol>
```

```
  <li>First item</li>
```

```
  <li>Second item</li>
```

```
  <li>Third item</li>
```

```
</ol>
```

# HTML CODE-ALONG

---

## UNORDERED LIST (BULLET LISTS)

```
<ul>
```

```
  <li> Bullet item </li>
```

```
  <li> Bullet item </li>
```

```
</ul>
```

# THE IMAGE TAG

---

## PLACE KITTEN

```

```

```
<img src="">
```



---

# HTML CODE-ALONG

---

## LINKS

```
<a href="http://google.com">Google</a>
```

```
<a href="">Label</a>
```

---

**HTML**

---

# BASIC LAYOUT OF AN HTML DOCUMENT

# HTML

---

```
<!DOCTYPE html>
<html>_
<head>      sets off title and info that won't be displayed
    <title>My first webpage</title>
    <meta charset="UTF-8">      sets character encoding
</head>
<body>      visible portion
    <h1>Hello World!</h1>
</body>
</html>      ends the HTML document
```

# ACTIVITY: CREATING YOUR FIRST HTML FILE

---



## DIRECTIONS

1. Create a folder on your desktop and title it “hello-coding”
2. Open up the folder you just made in your text editor
3. Save your file as “index.html”
4. Type out the HTML basic layout
5. Open up the HTML file in Google Chrome
6. Add more content tags: h1-h6, p, ul/li, button, a, img to create an “About Me” webpage
7. Keep your editor open

---

## CSS : CASCADING STYLE SHEETS

---

BASIC LAYOUT OF  
AN EXTERNAL CSS  
FILE

# CSS : CASCADING STYLE SHEETS

---

- The symbol used in CSS is {
- CSS tells the browser how to style content
- e.g Will the paragraph content be pink or purple?

the selector, which HTML element you want to add style to

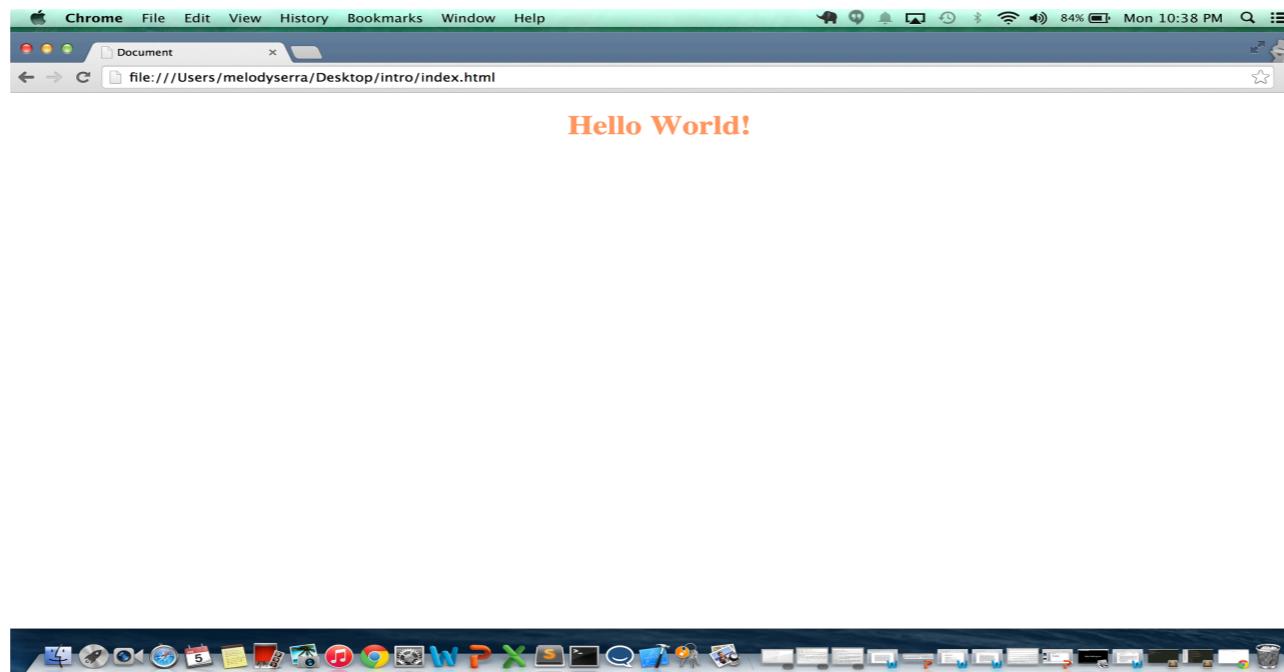
```
        ↗          ↗          ↗  
        h1 {      property    value  
          color: #FF9966;  
          text-align: center;  
        }  
        ↗
```

curly braces, all styles inside these will apply to the HTML elements that belong to the selector

# HOW DO YOU CONNECT THE TWO FILES?

---

`<link rel = “stylesheet” href=“style.css”>`



# ACTIVITY: CREATING YOUR FIRST CSS FILE

---



## DIRECTIONS

1. You should still have the “Coding 101” folder open in your editor
2. Create a new file from the editor, save the file as “style.css”
3. Add a few CSS properties(color, background-color, font-family, text-align) to the content created in the last activity
4. Connect your external CSS file to your HTML file
5. Open up the HTML file in Google Chrome

---

**SO, WHO NEEDS TO  
KNOW ABOUT THIS  
STUFF?**

---

# WRAP UP

---



Business  
Managers



Product  
Managers



Designers



Marketers



Programmers

## CODING 101 : HTML + CSS

---

# HOW TO LEARN THIS AT GA?



**PART-TIME:**  
**JS/FEWD**



**ONLINE:**  
**HCD**



**FULL-TIME:**  
**WDI / WDIR**

---

CODING 101 : HTML + CSS

---

# WRAP-UP

---

## CODING 101 : HTML + CSS

---

### REFERENCE PAGES:

- Mozilla Developer Network
- CSS Tricks
- Web Field Manual
- Free IT Books
- Site Point
- Codecademy

---

## CODING 101 : HTML + CSS

---

## STAYING CURRENT

- Smashing Magazine
- Sidebar.io
- Codrops
- Medium
- A List Apart
- Web Designer Weekly
- Creative Bloq
- CSS Tricks
- Codepen.io

---

# CODING 101 : HTML + CSS

---

## SITE INSPIRATION

- Awwwards
- Site Inspire
- Mediaqueri.es
- One Page Love
- Little Big Details
- The Best Designs
- CSS Design Awards
- Web Design File
- Behance
- Dribbble
- Responsive Patterns

---

## CODING 101 : HTML + CSS

---

### A COUPLE OF LAST THINGS

You are going to get lots of errors...

Google first, ask questions later (but don't be afraid to ask)  
[Stack Overflow](#) is great for this stuff!

Get immersed! Coding is hard if you don't get really involved.

# ACTIVITY: AFTER CLASS YOU CAN...



## DIRECTIONS

1. Go to [dash.ga.co](https://dash.ga.co)
2. There are 5 projects available to you that cover what we went over tonight and more!

---

**CODING 101 : HTML + CSS**

---

# Q & A

---

# THANKS!

---

## Vincent Trivett

- Optional Information:
- Email: [trivett@gmail.com](mailto:trivett@gmail.com)
- Website: [vincent trivett.com](http://vincent trivett.com)
- Twitter [@vincent\\_trivett](https://twitter.com/vincent_trivett)