CODING 101: HTML + CSS

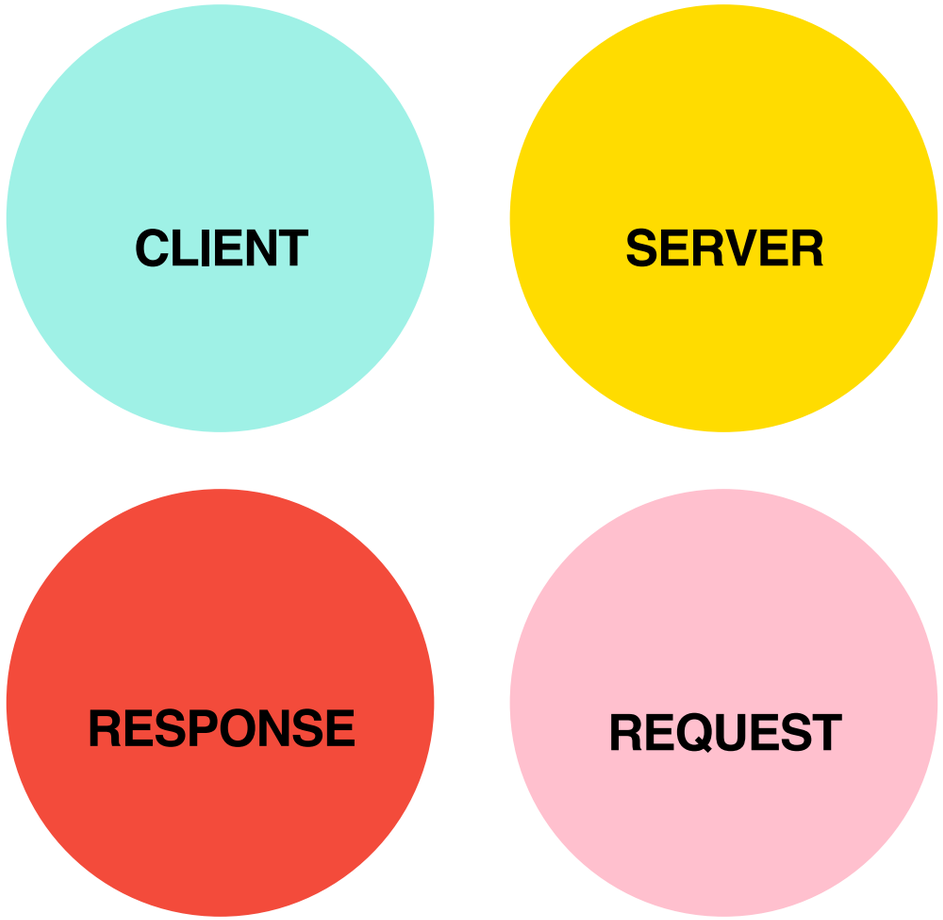
Melody Serra

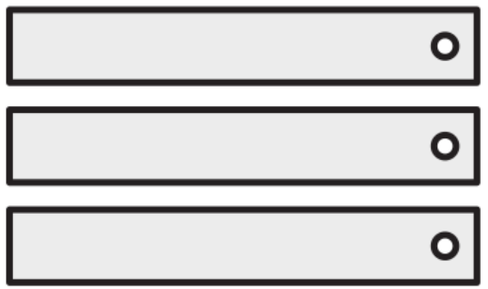
LEARNING OBJECTIVES

- 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.

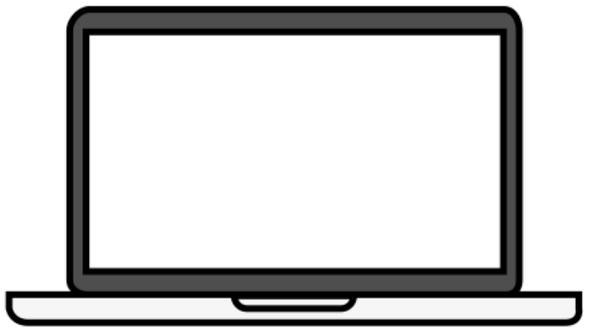
HOW DOES THE WORLD WIDE WEB WORK?

WWW



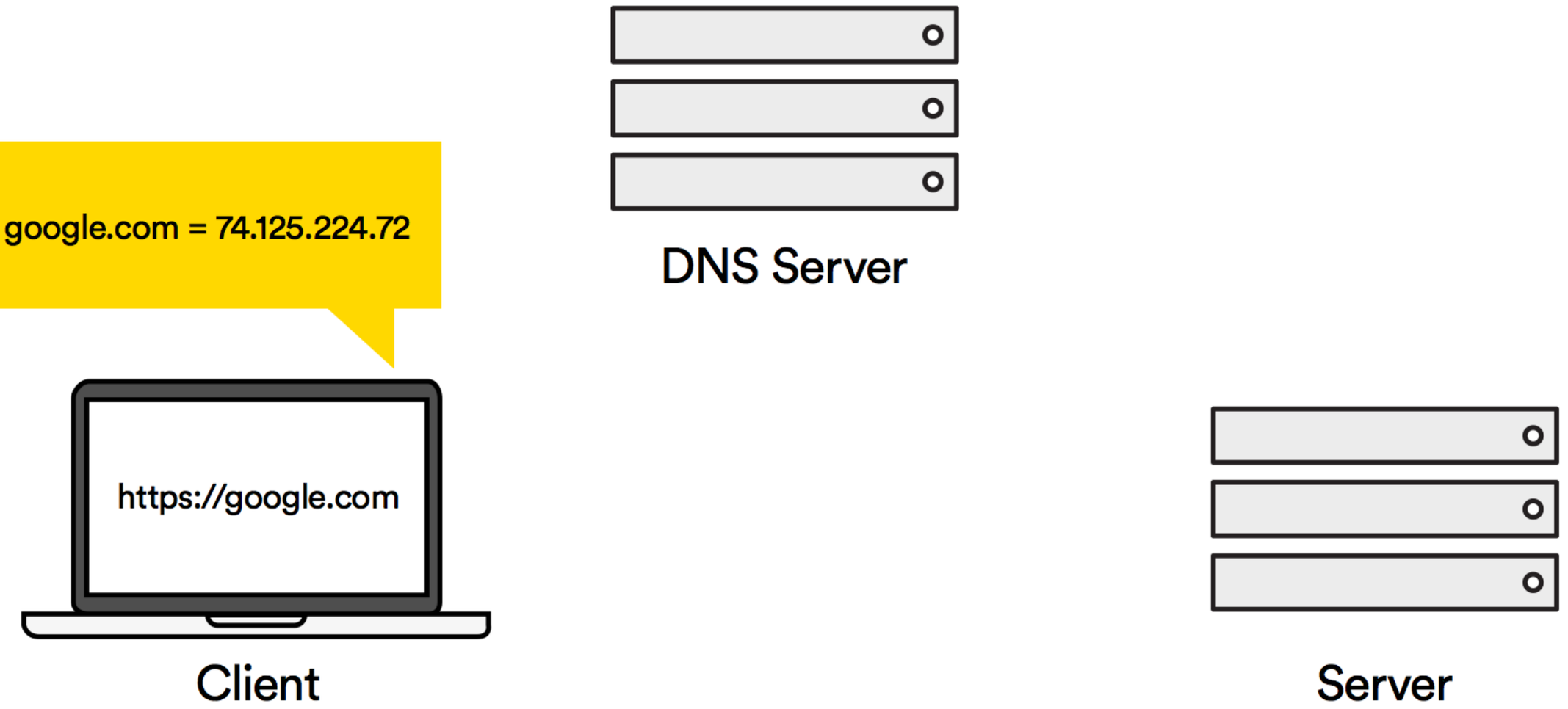


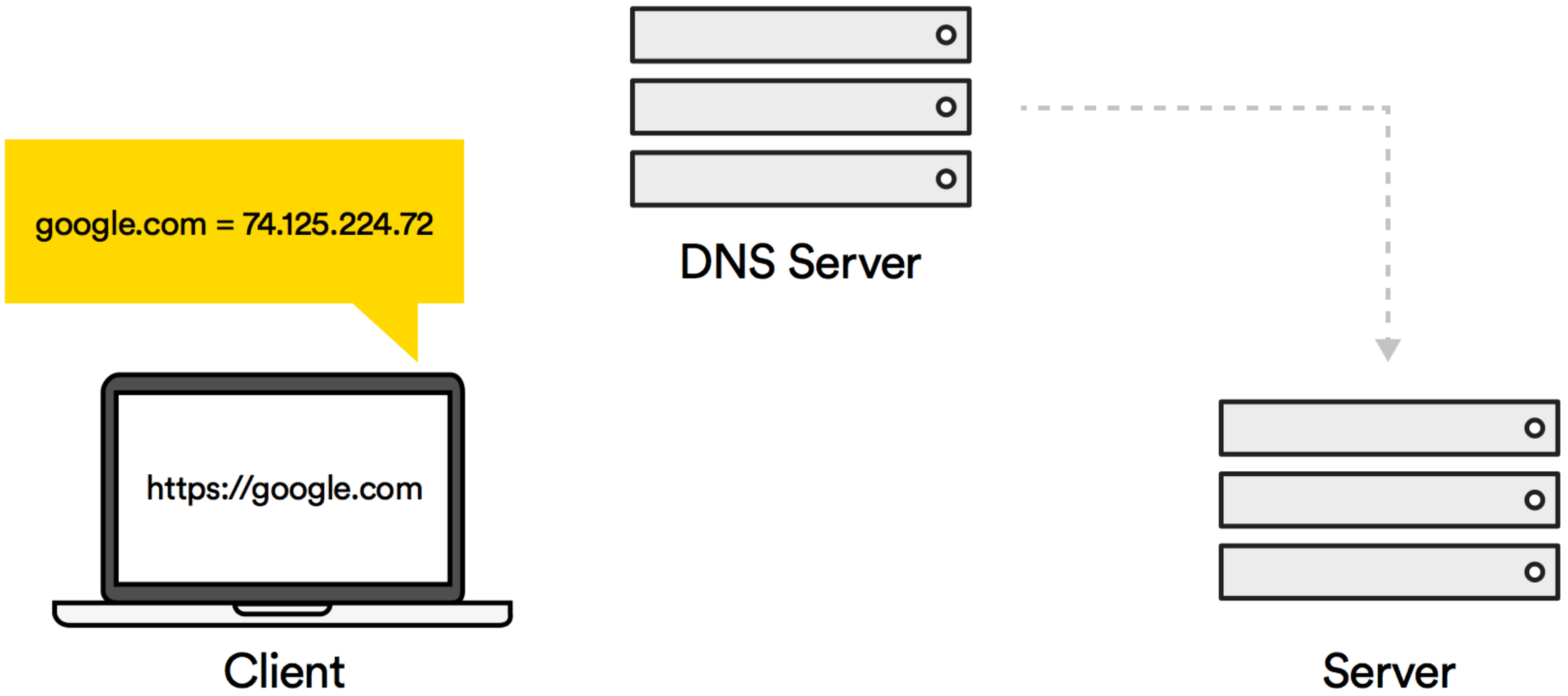
Server

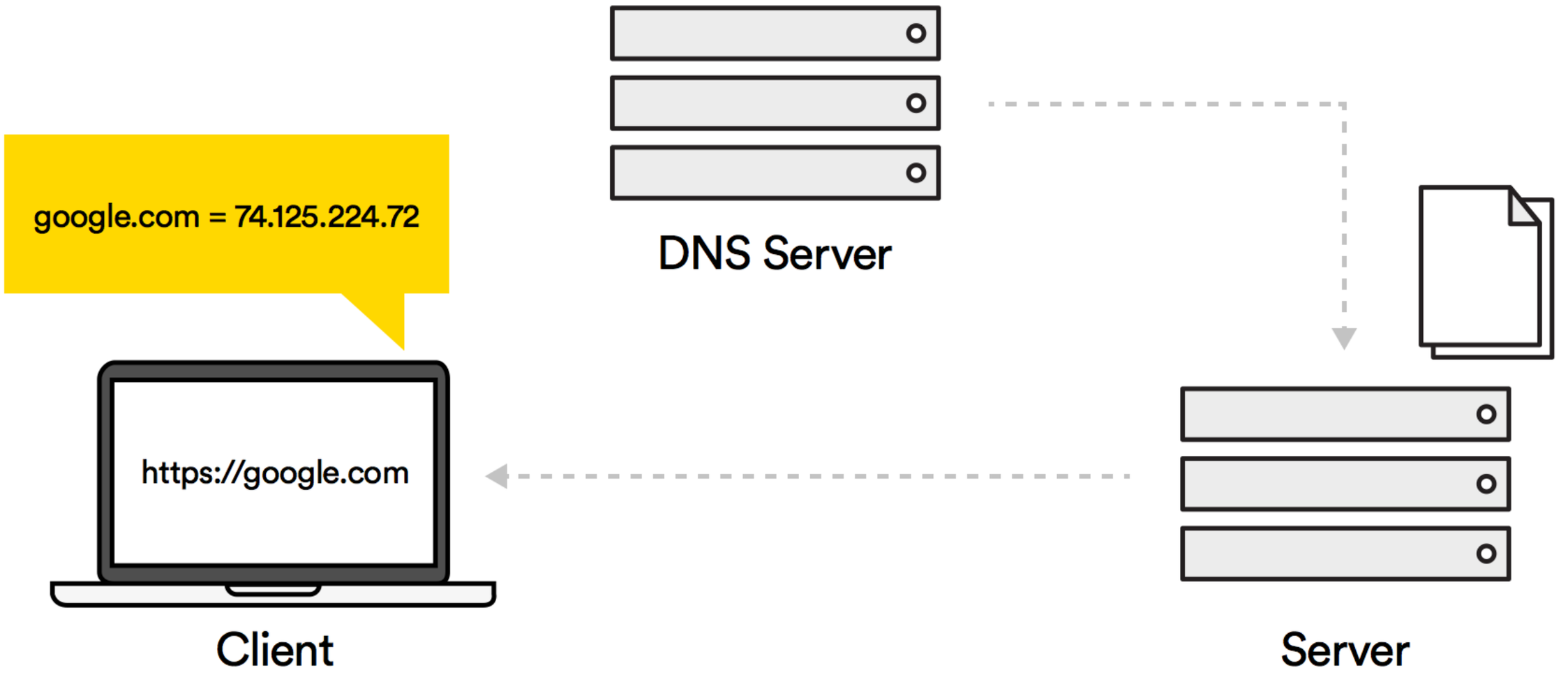


Client

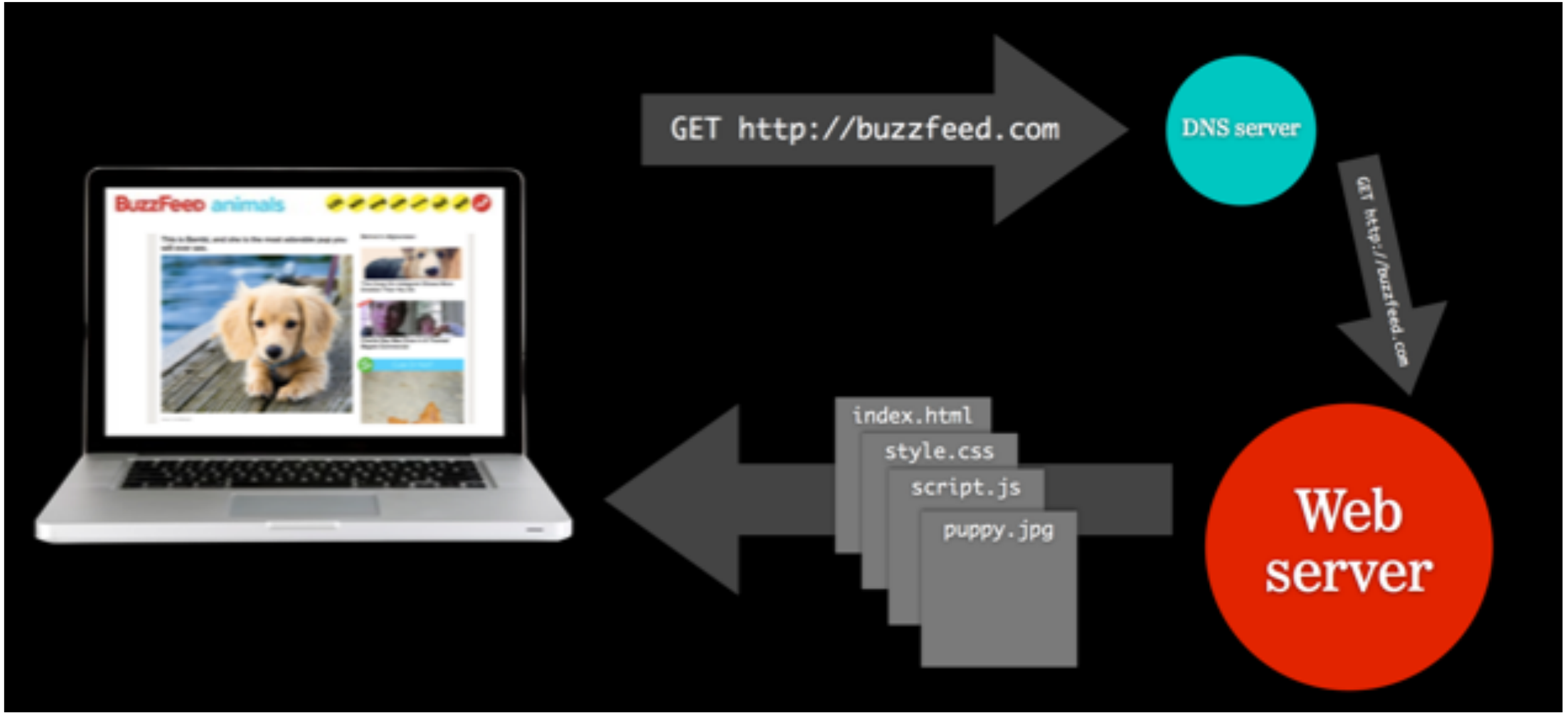
IP Address: 66.220.144.0
Domain Name: facebook.com


google.com = 74.125.224.72
https://google.com
Client
DNS Server
Server


google.com = 74.125.224.72
https://google.com
Client
DNS Server
Server


google.com = 74.125.224.72
DNS Server
https://google.com
Client
Server

www


GET http://buzzfeed.com
DNS server
GET http://buzzfeed.com
BuzzFeed animals
index.html
style.css
script.js
puppy.jpg
Web server

SO, WHAT'S WEB DEVELOPMENT?

WHAT'S WEB DEVELOPMENT?

- The creation and management of both websites and web-based applications

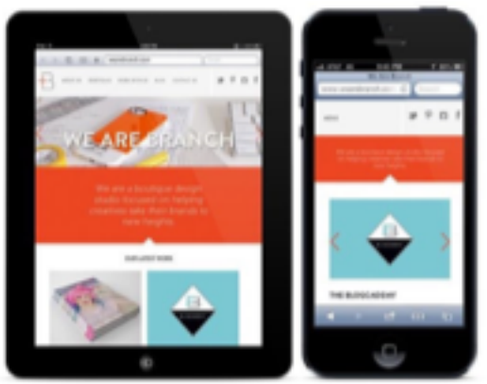
- Most Developers will try to convince you that it is magic, but it is mainly editing text files (coding / programming), and solving problems (crying)

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."

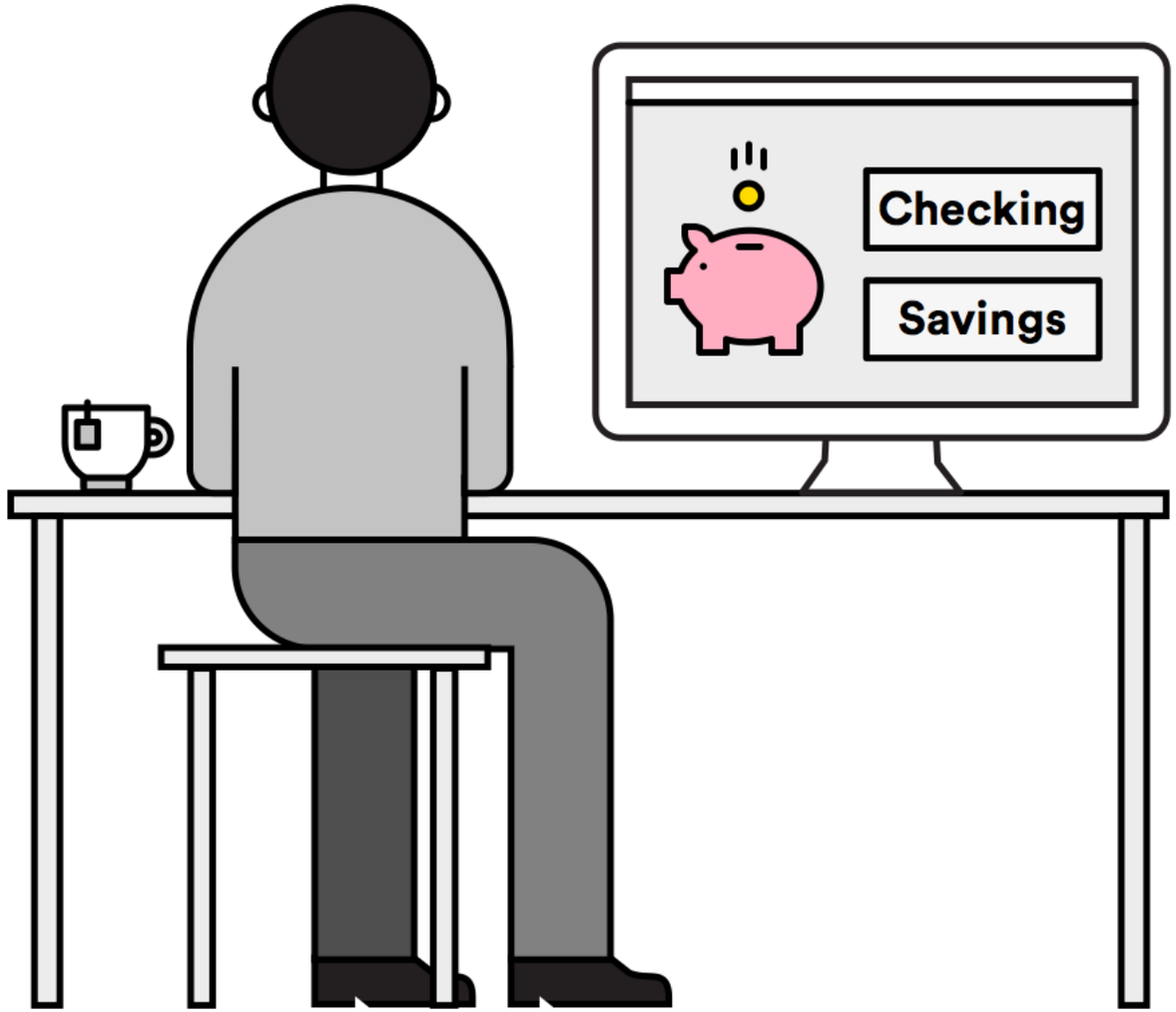
IN SUMMARY…

- 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

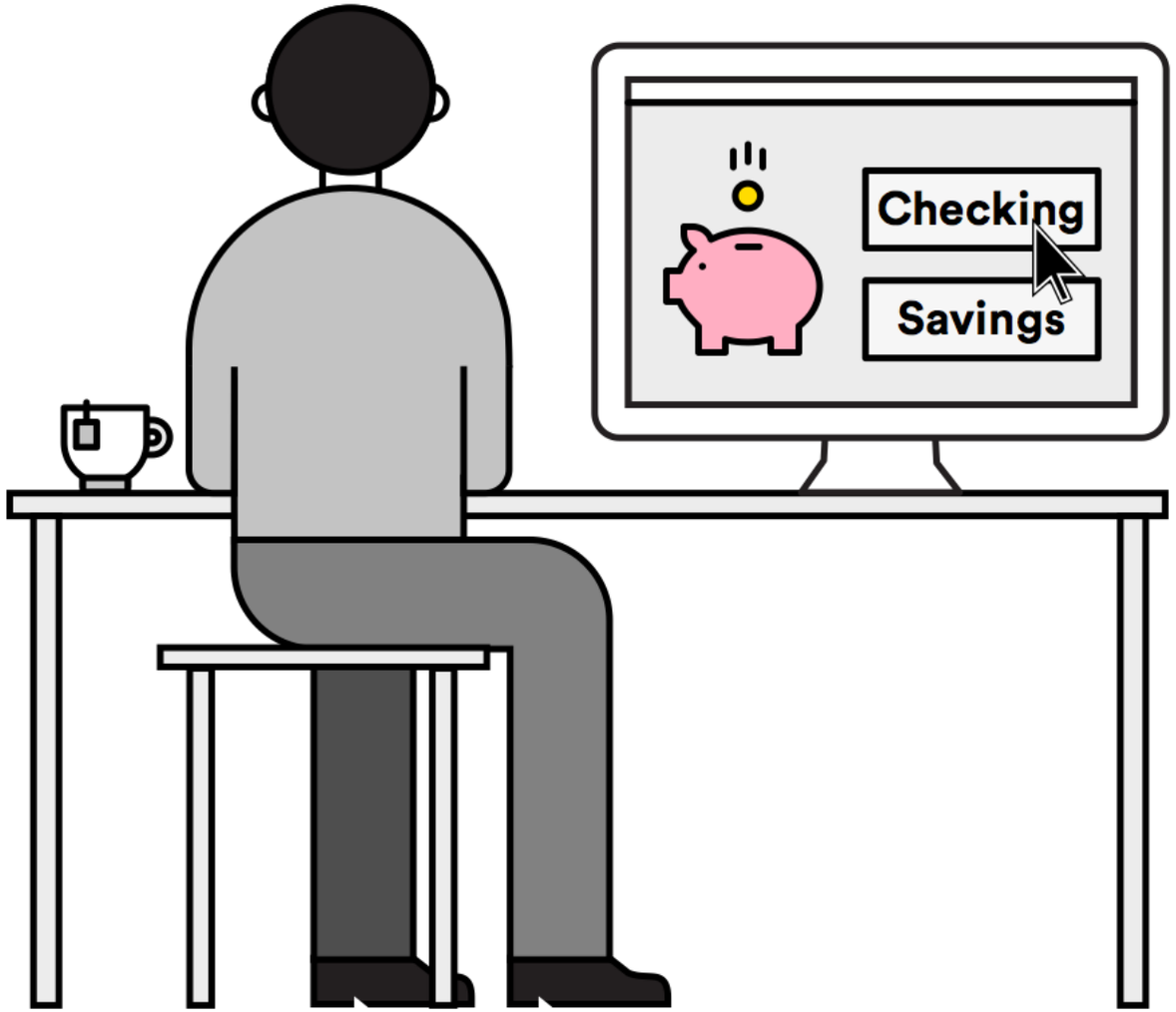
THE BACK END

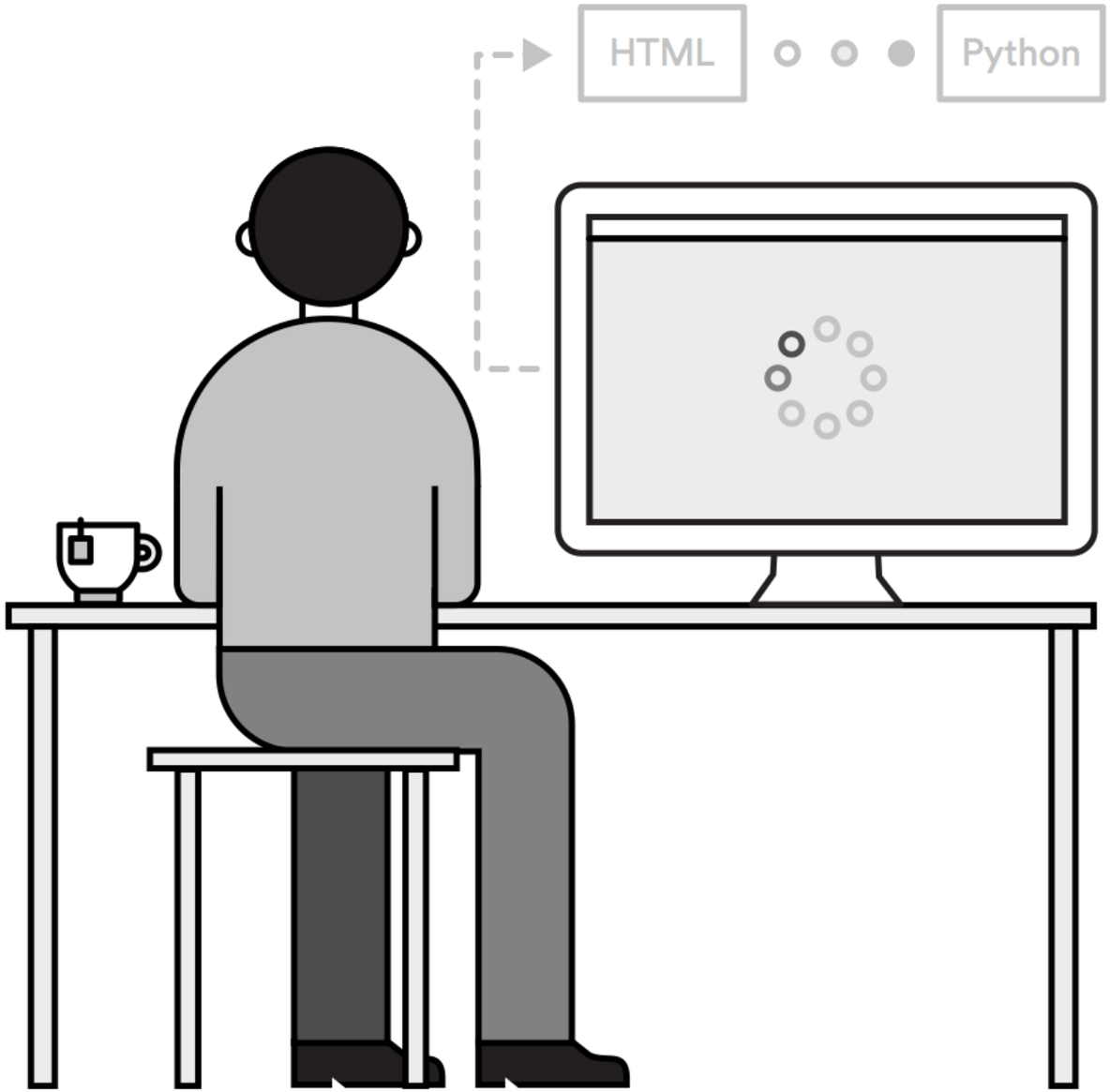
WHAT IS THE BACK END?

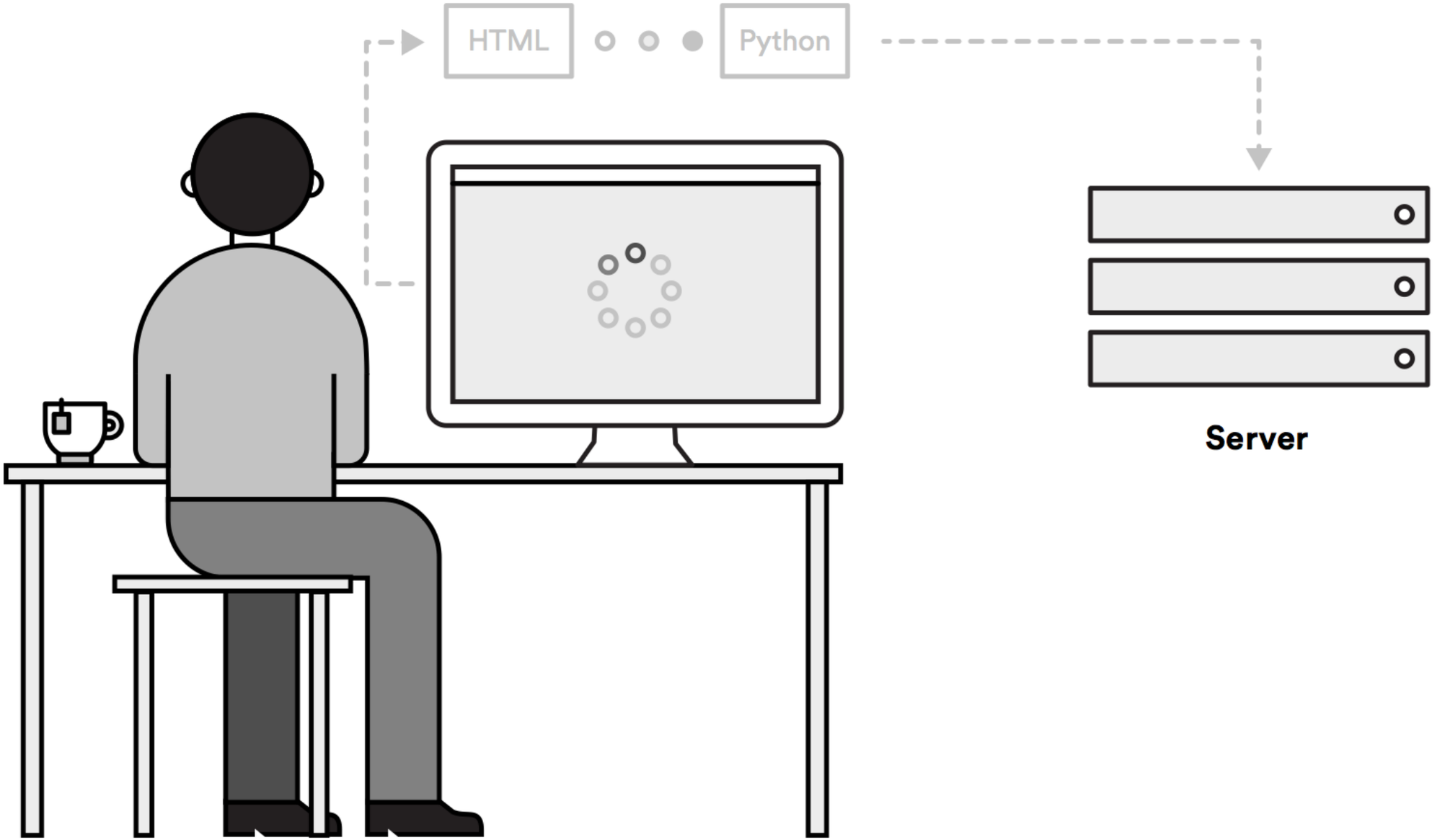
- It is what goes on behind the scenes
- Consists of databases, servers etc.
- Lots of languages:
    - Ruby (Ruby on Rails), Node.js, PHP, Python, C++ etc.

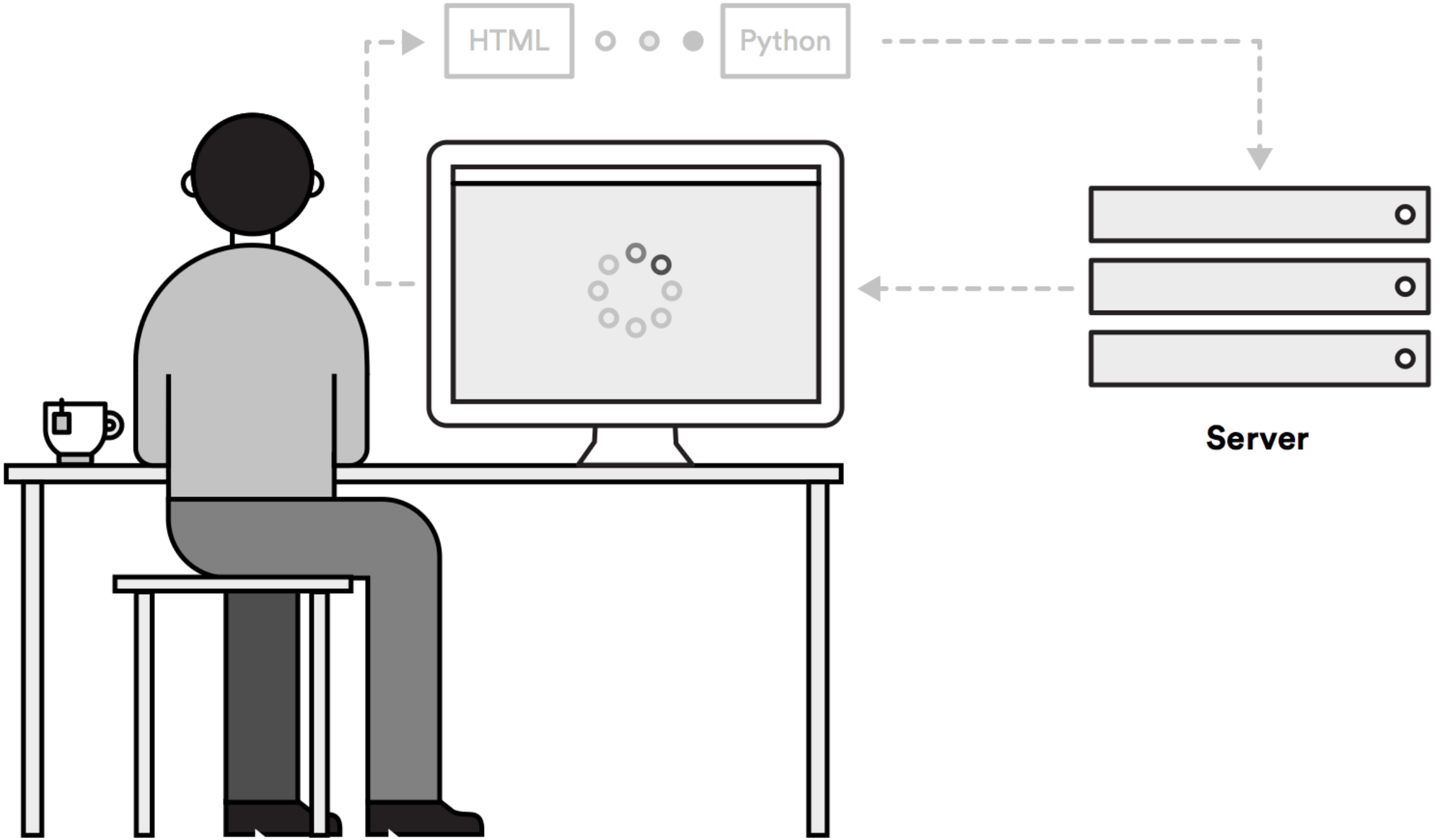

Checking
Savings

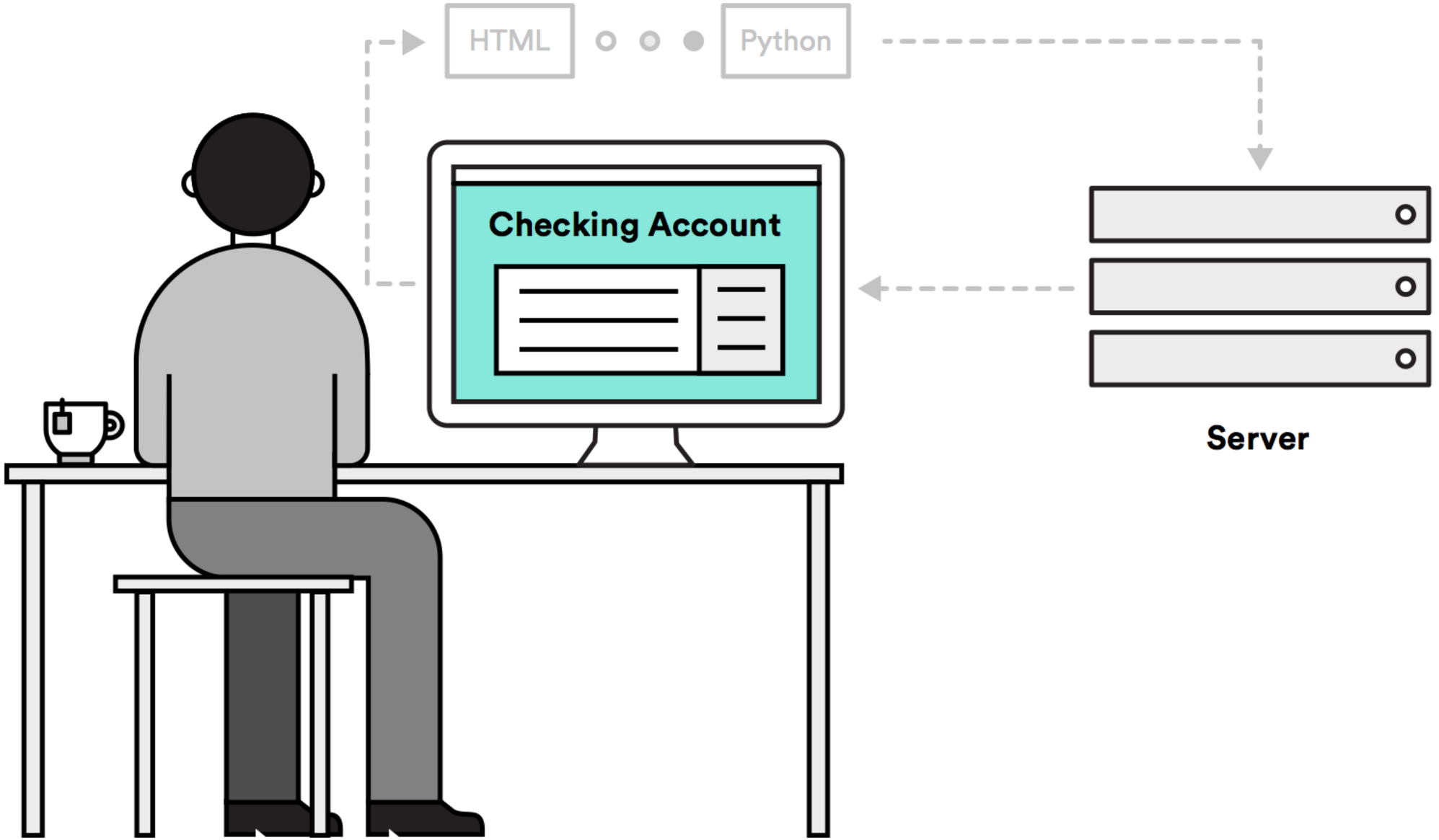
Checking
Savings
front-end code


Checking
Savings


HTML
Python


HTML
Python
Server


HTML
Python
Server


HTML
Python
Checking Account
Server

FRONT END LANGUAGES

FRONT END IS MADE UP OF…

HTML

CSS

JavaScript

THE LANGUAGES

HTML	***Defines the Content***	***“The Bones”***
CSS	***Assigns the style***	***“The Skin”***
JAVASCRIPT	***Adds the functionality***	***“The Brain”***

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

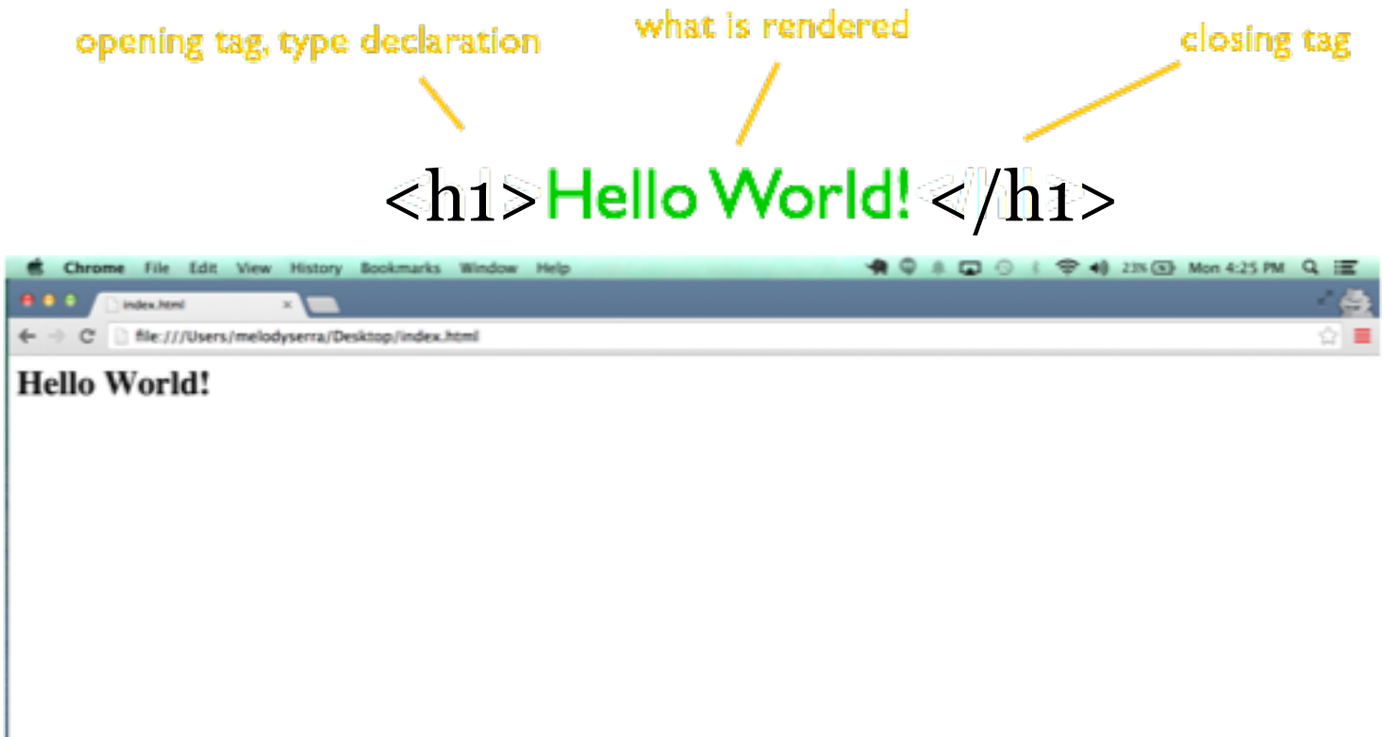
ACTIVITY: DISTINGUISH BETWEEN HTML, CSS, AND JS

DIRECTIONS

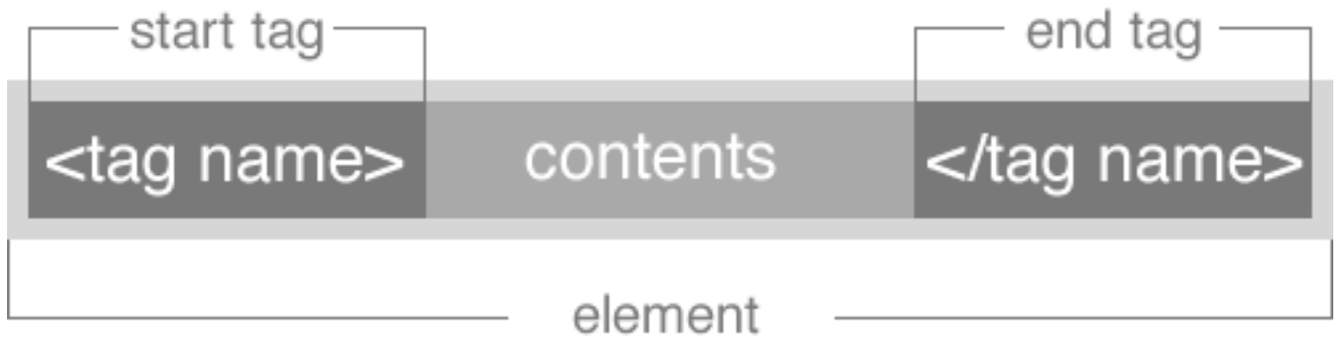
1. Let's visit lyft.com together
2. The words "Rides in Minutes" appears due to _____?
3. The reason for which "Rides in Minutes" is centered and white is due to _____?
4. Hover over the word "Explore" in the navigation menu. That animation is most likely due to _____?

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?



HTML SYNTAX



GUIDED PRACTICE

1. OPEN YOUR BROWSER AND NAVIGATE TO

CODEPEN.IO

2. SELECT “+NEW PEN” ON THE TOP RIGHT OF THE PAGE

HTML CODE-ALONG

"Browser, show 'Hello!' as a header."

HEADING TAGS CREATE TEXT HEADINGS IN A HIERARCHY

<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>

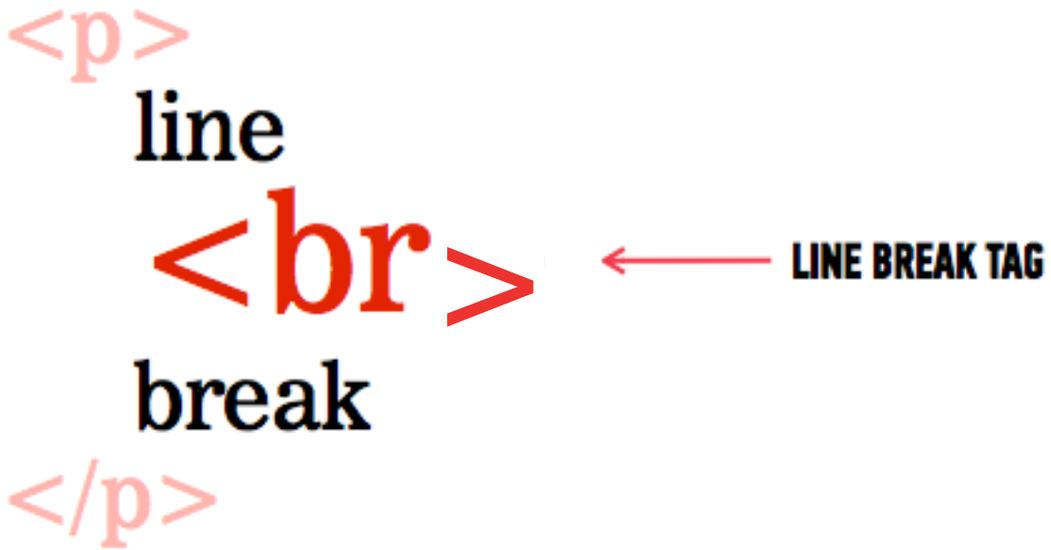
<h6>Least Important Heading</h6>

PARAGRAPH TAGS

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

NOT ALL TAGS HAVE CLOSING TAGS...

"Browser, please add a line break in my text"



OPEN TAGS

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

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

THE SAME AS...

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

TAGS CAN BE PLACED INSIDE OTHER TAGS

```
<ol>
  <li>First item</li>
  <li>Second item</li>
</ol>
```

ORDERED LISTS (NUMBERED LISTS)

```
<ol>
  <li>First item</li>
  <li>Second item</li>
  <li>Third item</li>
</ol>
```

ORDERED LISTS (NUMBERED LISTS)

1. First item
2. Second item
3. Third item

UNORDERED LIST (BULLET LISTS)

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

UNORDERED LIST (BULLET LISTS)

- Bullet item
- Bullet item

THE IMAGE TAG

PLACE KITTEN

<img src="https://placekitten.com/g/500/600"/>

<img src=""/>

LINKS

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

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

BASIC LAYOUT OF AN HTML DOCUMENT

HTML

```
<!DOCTYPE html>
<html>
<head>
    <title>My first webpage</title>
    <meta charset="UTF-8">
</head>
<body>
    <h1>Hello World!</h1>
</body>
</html>
```

sets off title and info that won't be displayed

sets character encoding

visible portion

ends the HTML document

ACTIVITY: CREATING YOUR FIRST HTML FILE

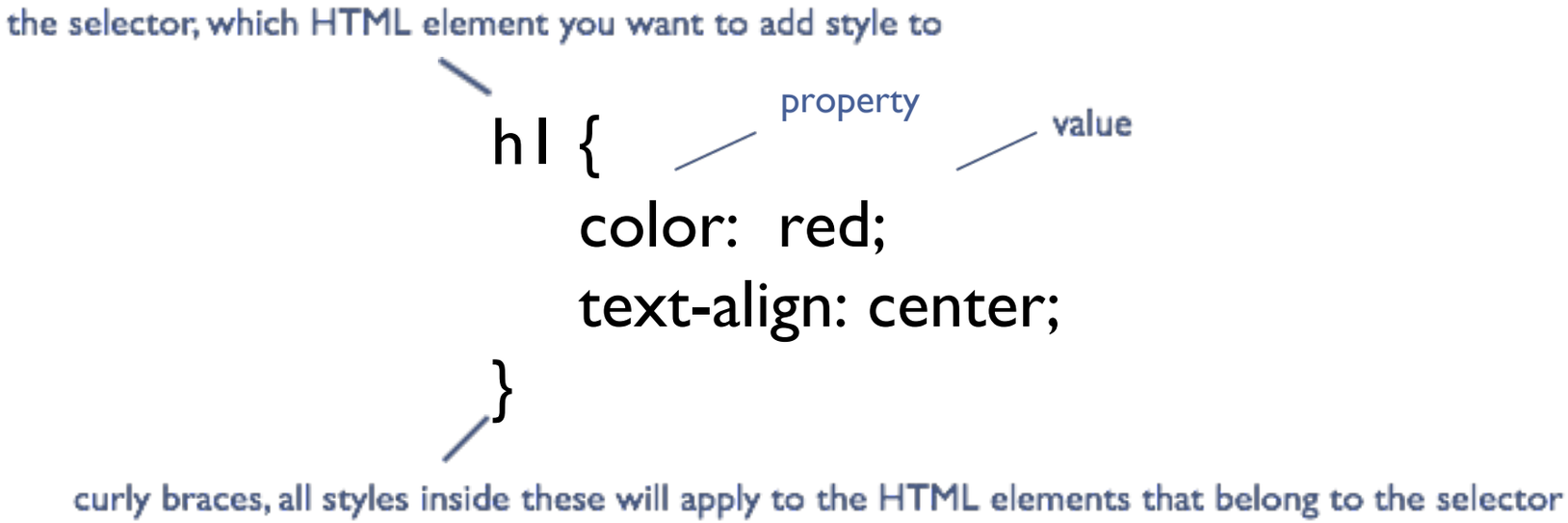
DIRECTIONS

1. Create a folder on your desktop and title it “webdev” (NO SPACES)
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. Save your file

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?

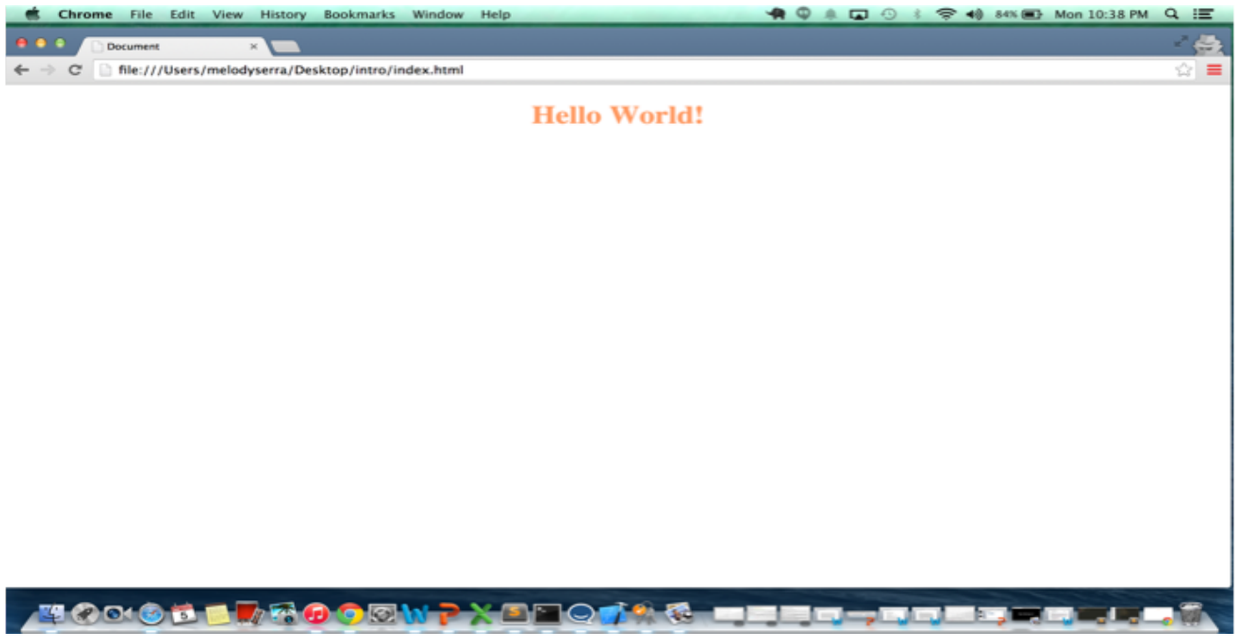


CSS CODE-ALONG

LOOK AT EXAMPLES ON CODEPEN.IO

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 “webdev” 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

FRONT END

HOW CAN YOU EDIT AN EXISTING WEBPAGE

HOW CAN YOU EDIT AN EXISTING WEBPAGE?

- Open the developer tools
- Can be used as a “console” to test new code/change code and see what it looks like
- Useful to see how someone else formatted their code

WRAP-UP

SO, WHO NEEDS TO KNOW ABOUT THIS STUFF?

WRAP UP

Business Managers

Product Managers

Designers

Marketers

Programmers

REFERENCE PAGES:

- Mozilla Developer Network
- W3Schools
- CSS Tricks
- Web Field Manual
- Free IT Books
- JSDB.io
- Site Point
- Codrops

STAYING CURRENT

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

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

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
2. There are 5 projects available to you that cover what we went over and more!

Q & A

THANKS!

Melody Serra

- mserra@yearup.org