FOR INSTRUCTOR PURPOSES ONLY

LEARNING OBJECTIVES

- Experience a typical GA learning experience through active learning exercises.
- Gain an introductory understanding of a new skill or insight that can be utilized in a professional setting.
- Learn from materials created in conjunction with an experienced web-developer.
- 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.

FOR INSTRUCTOR PURPOSES ONLY

SUGGESTED TIMING

- < 5 min: Opening and Do Now Activity
- 10 min: How the Web Works + Front End vs. Back End Web Development
- 10 min: HTML code-along
- 10 min: HTML independent practice
- 10 min: CSS code-along
- 10 min: CSS independent practice
- 5 min: Wrap-up

FOR INSTRUCTOR PURPOSES ONLY

INSTRUCTOR TIPS

- There's a lot to fit into this class! Don't worry about diving too deep—this should be an introductory lesson.
- Keep track of time, so you can get through all the content.
- Be aware of differing skill levels and try to differentiate as needed.

FOR INSTRUCTOR PURPOSES ONLY

PREP

- Write learning objectives on board.
- Make sure wifi network and password (GA Guest, yellowpencil) is written on board, since students will need to be online to use codepen.io.

GENERAL ASSEMBLY

INTRO TO CODING

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INTRO TO CODING

DO NOW

DIRECTIONS

1. Find a partner; introduce yourself!

2. Identify one person to DRAW and one person to TALK.

3. The person TALKING chooses a shape or object (circle, star, heart, slice of pizza, etc).

4. Using explicit step-by-step directions, the talker must get their partner to draw the correct shape without ever stating what that shape is.

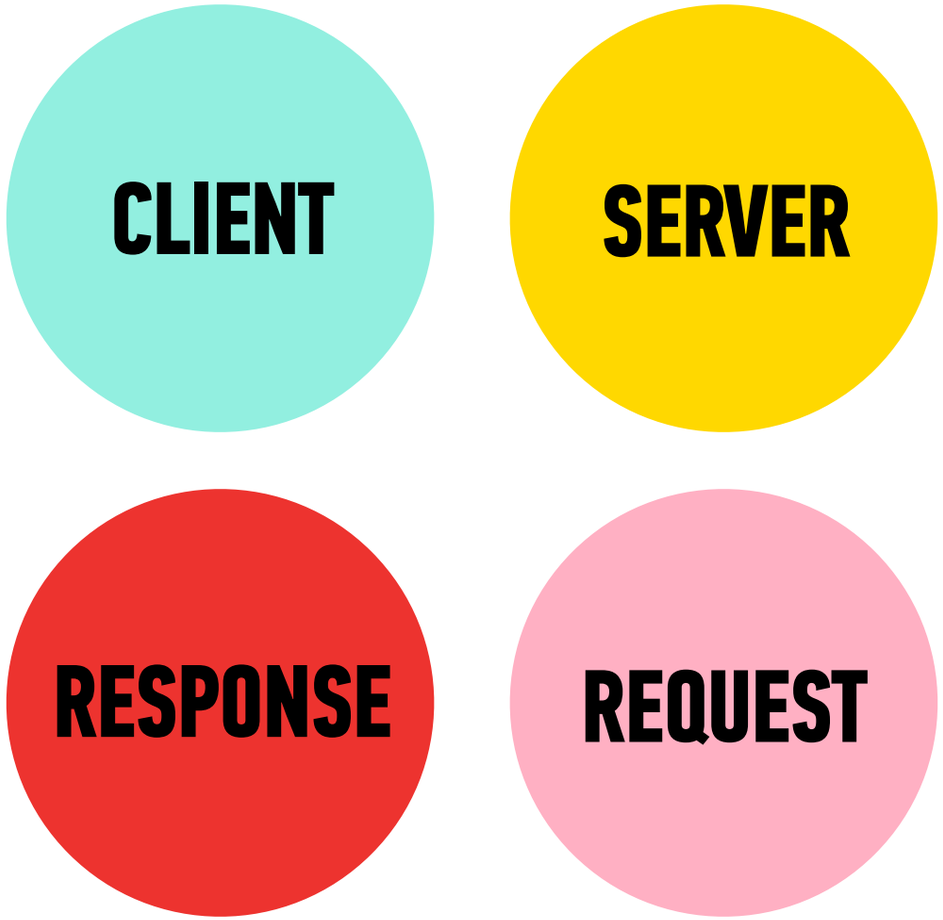
5. The person drawing must follow directions exactly, and **may not draw anything that their partner did not say exactly.**

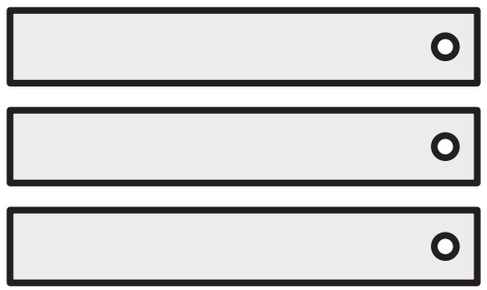
DELIVERABLE

Final image.

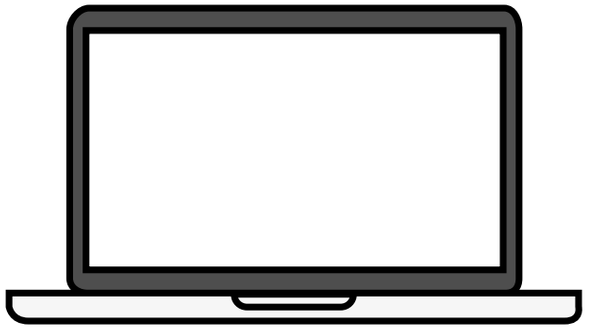
HOW THE WEB WORKS

HOW THE WEB WORKS





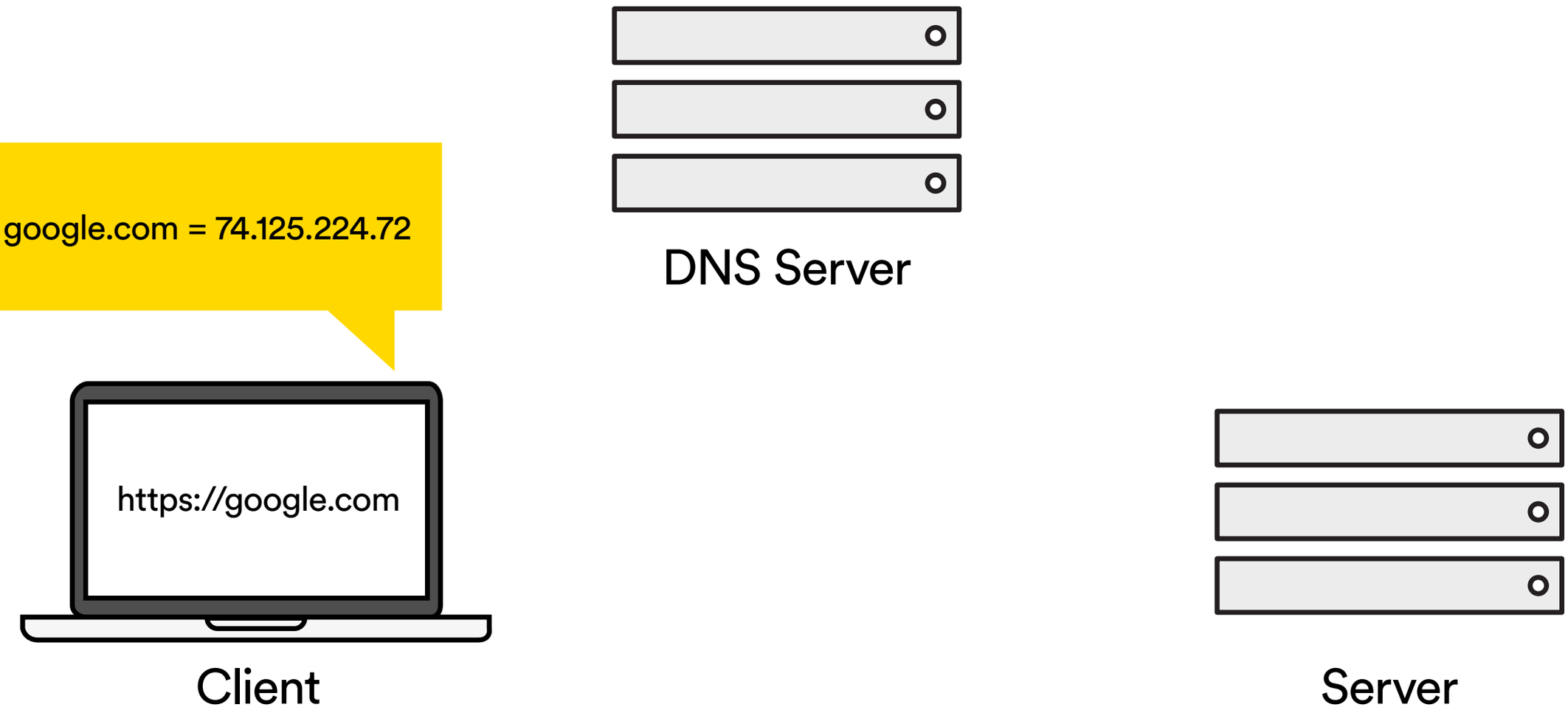
Server



Client

IP address 12.345.67.890

Facebook.com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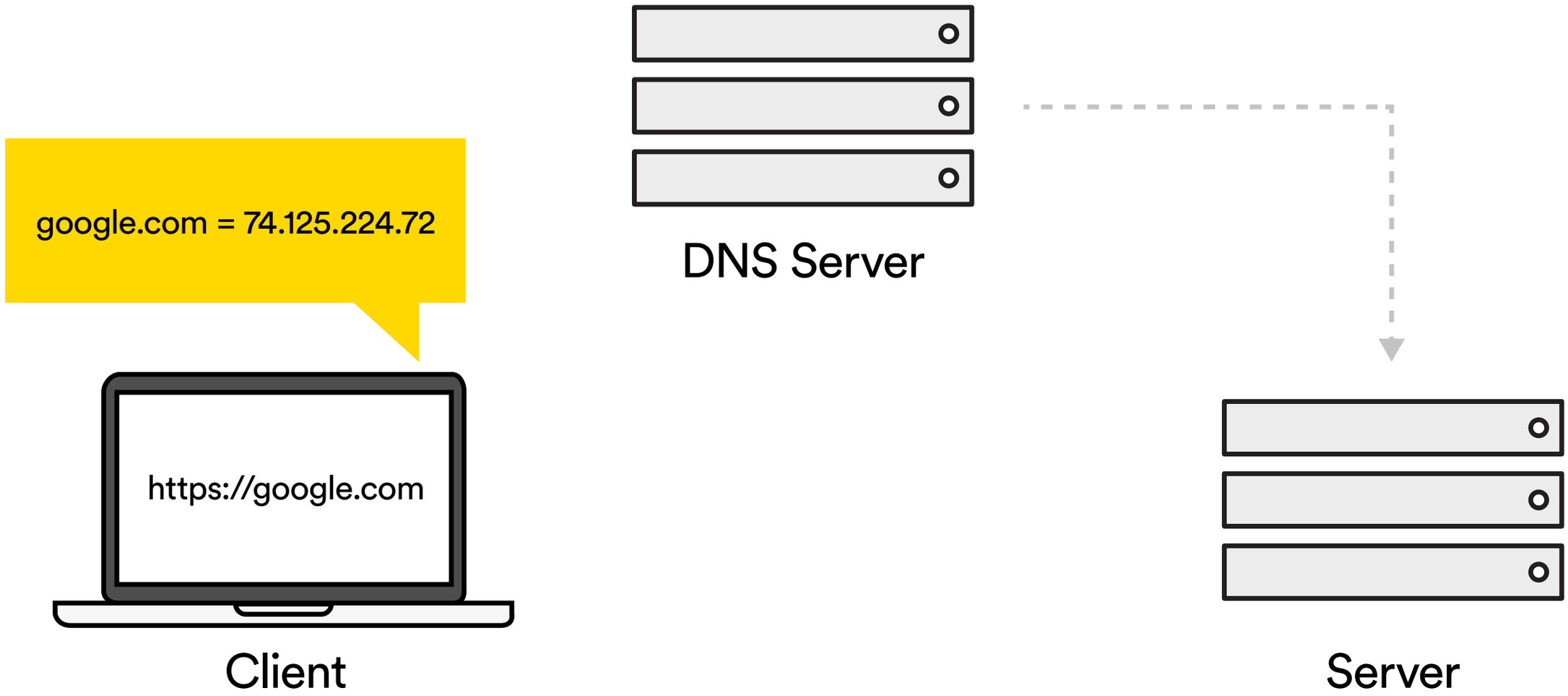
https://google.com
DNS Server
Client
Server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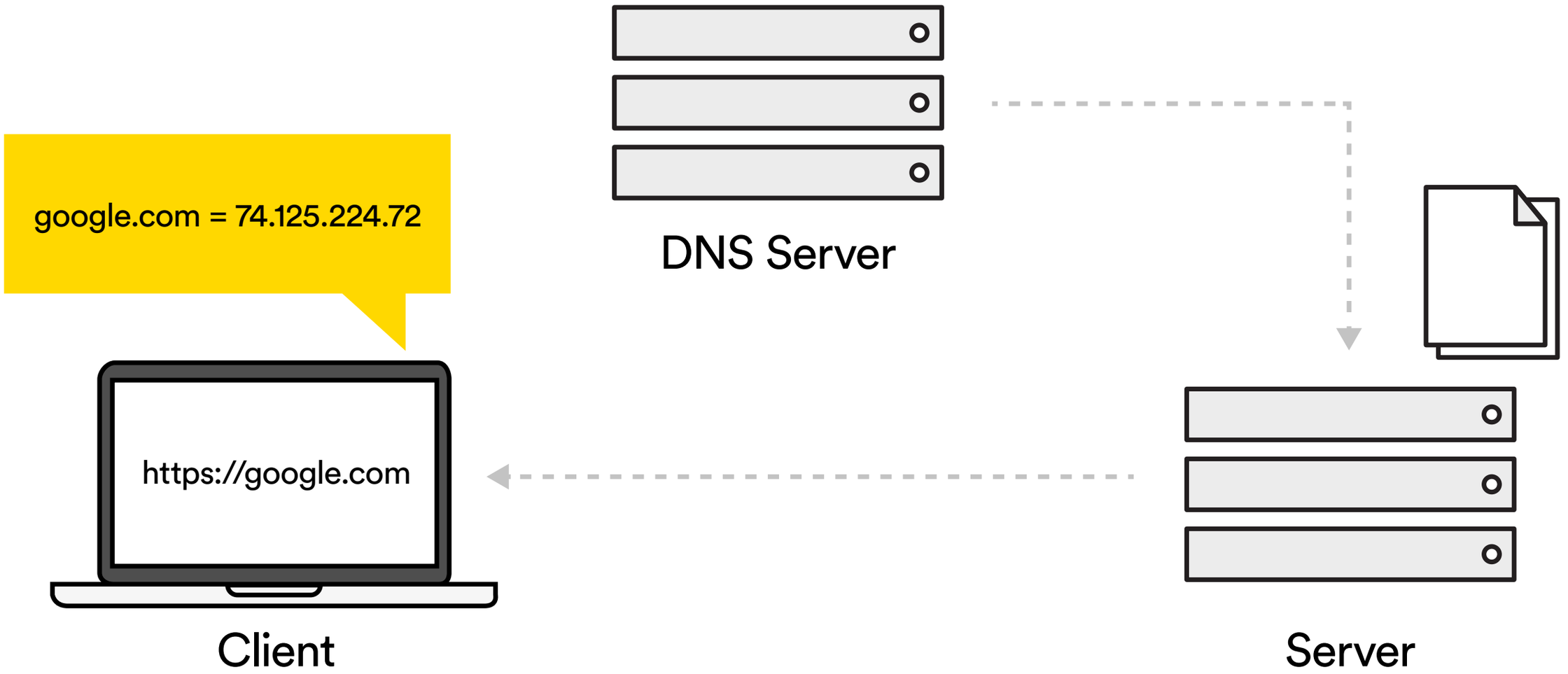
https://google.com
Client
DNS Server
Server


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

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).

THE FRONT END

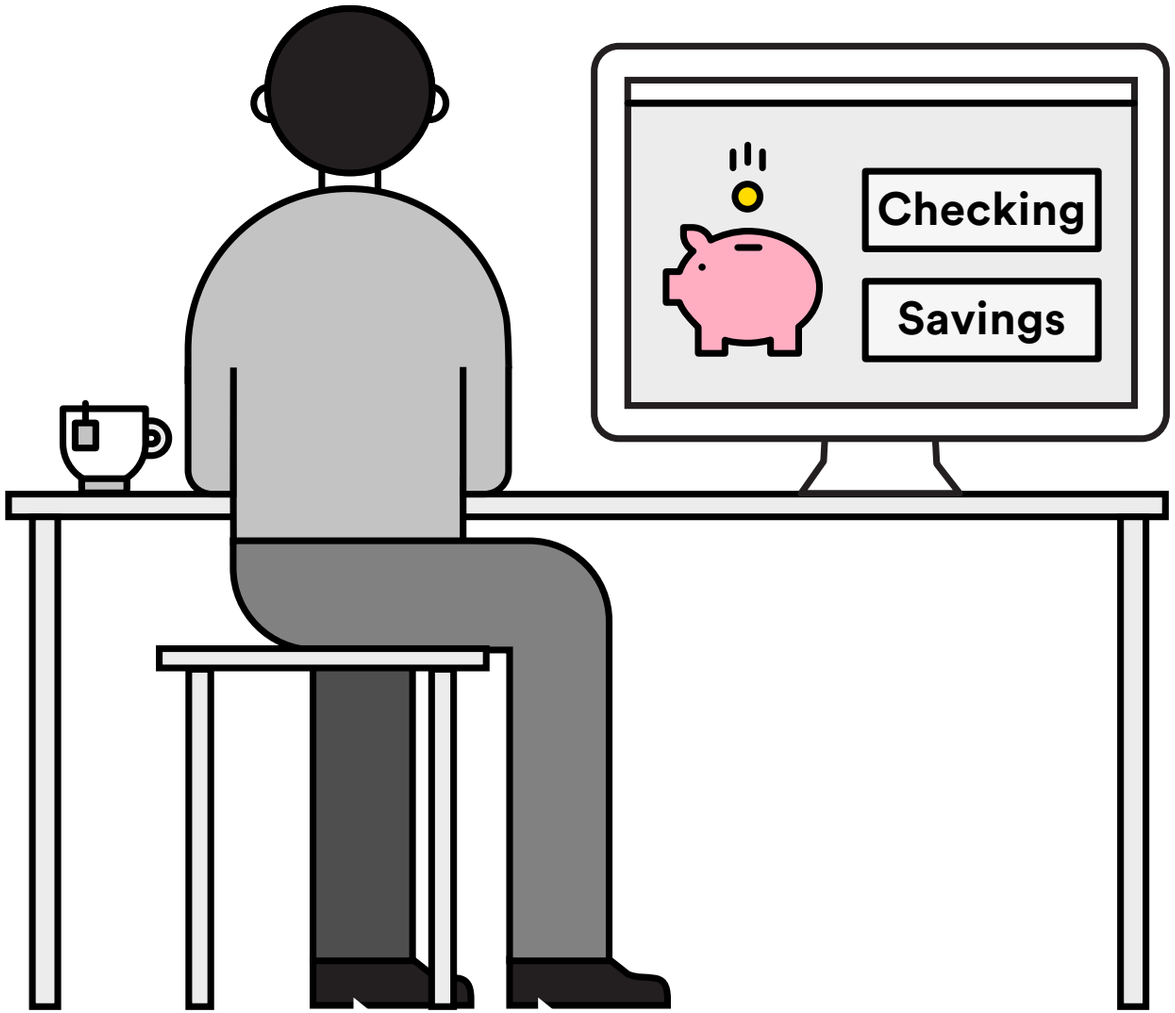
WHAT IS THE FRONT END?

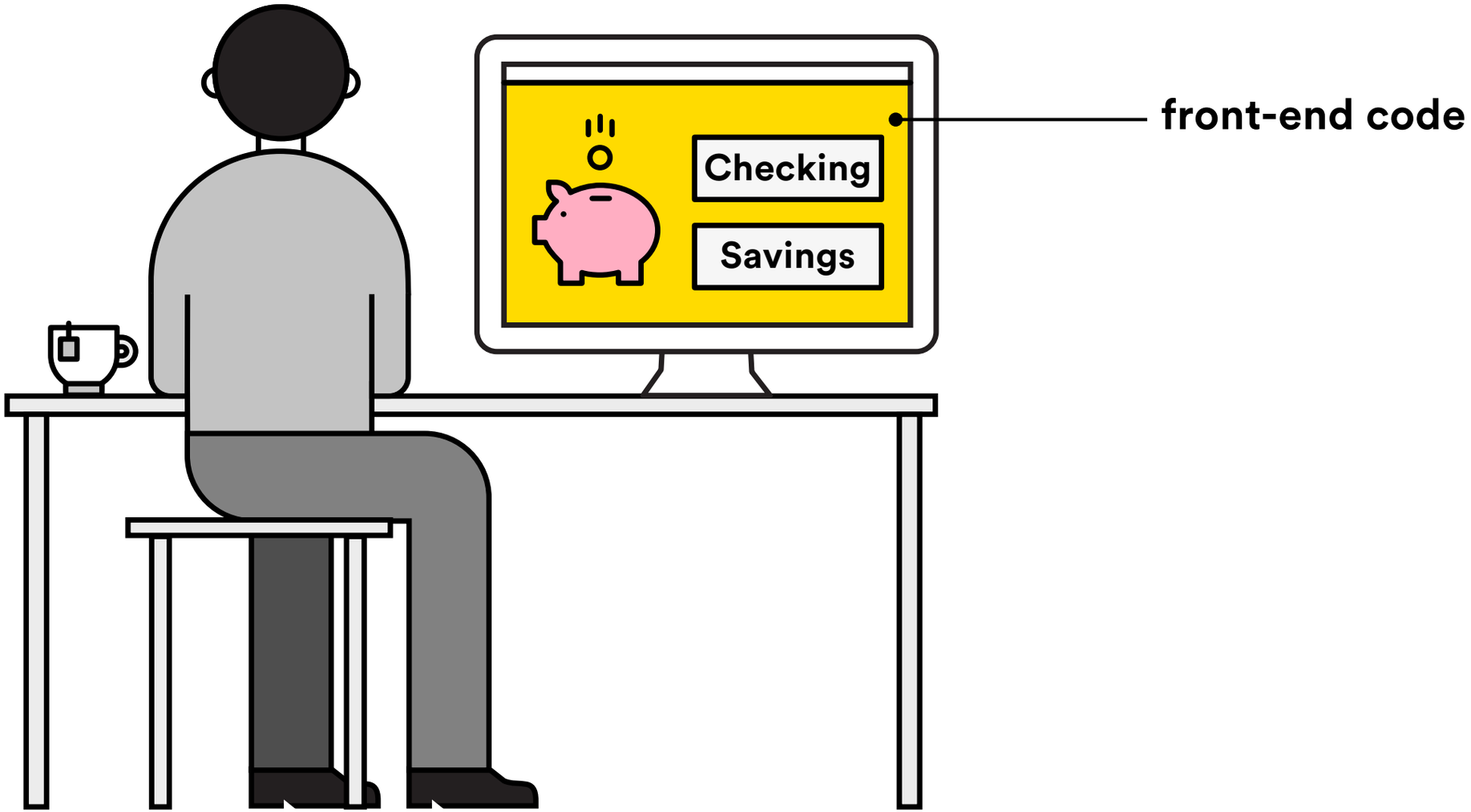
- The Front End is what the user sees.
- It powers the visuals and interactions of the web.
- It is meant to be pretty, but doesn't always happen that way.
- Made up of HTML, CSS and Javascript.

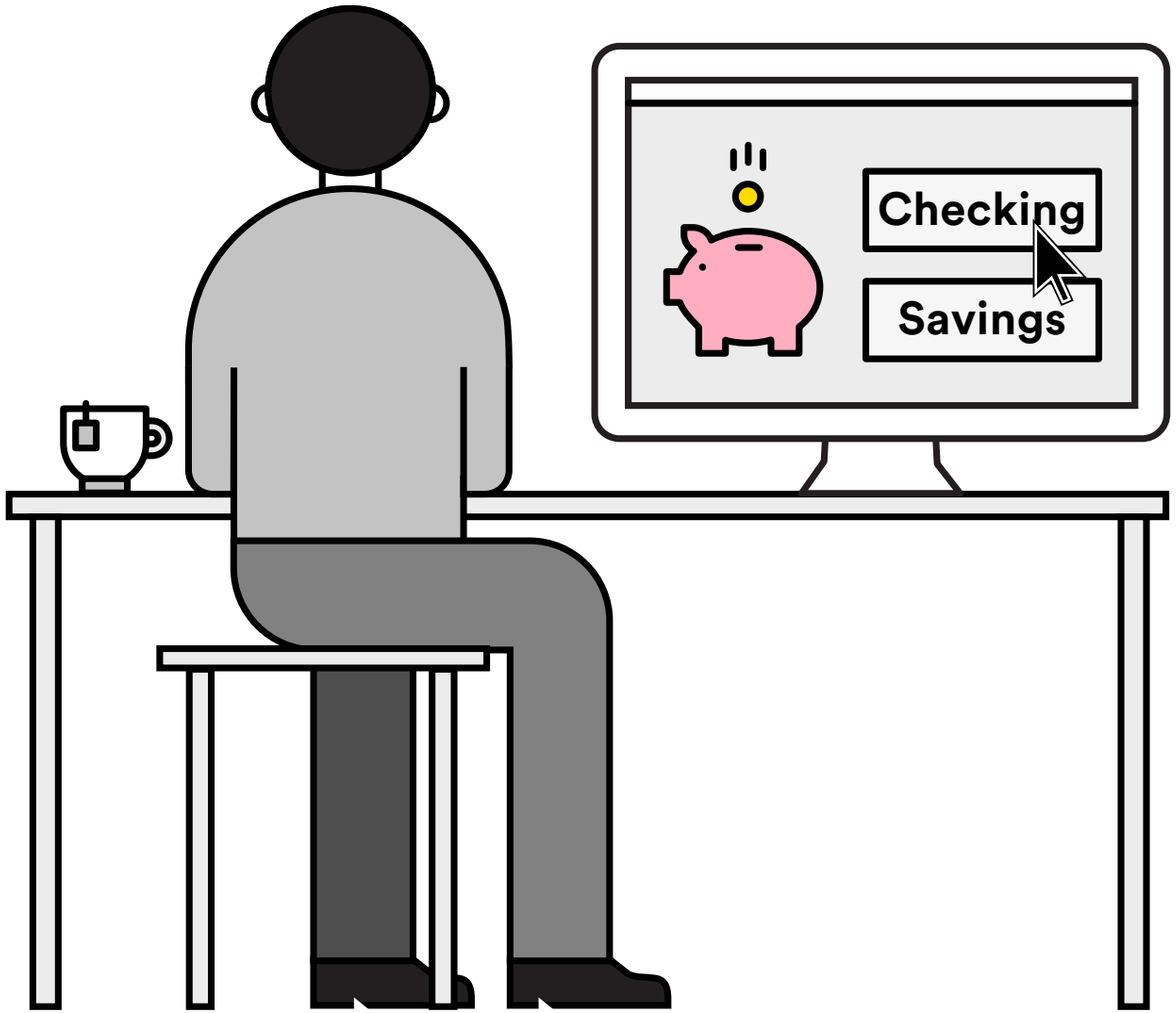
THE BACK END

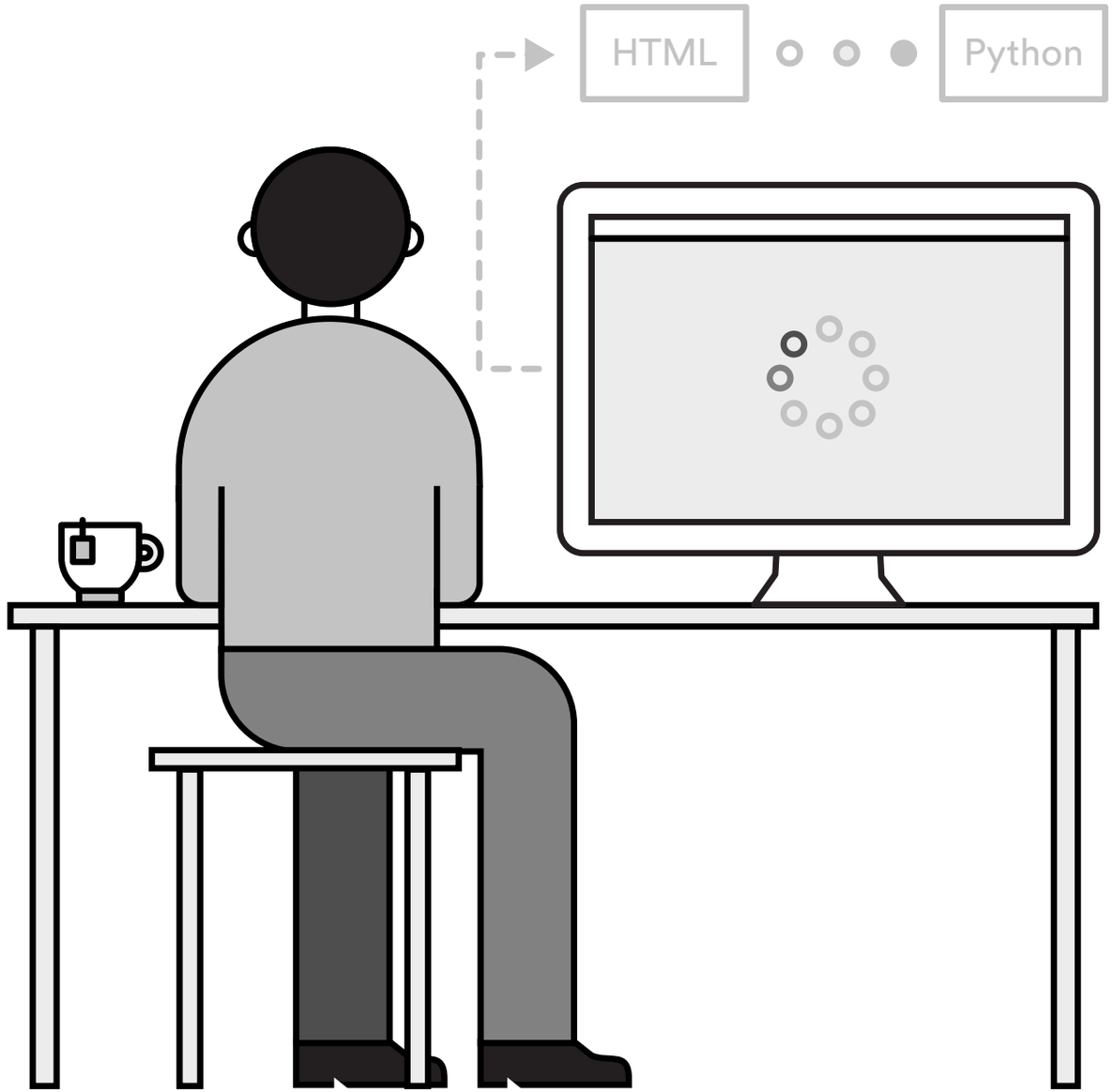
WHAT IS THE BACK END?

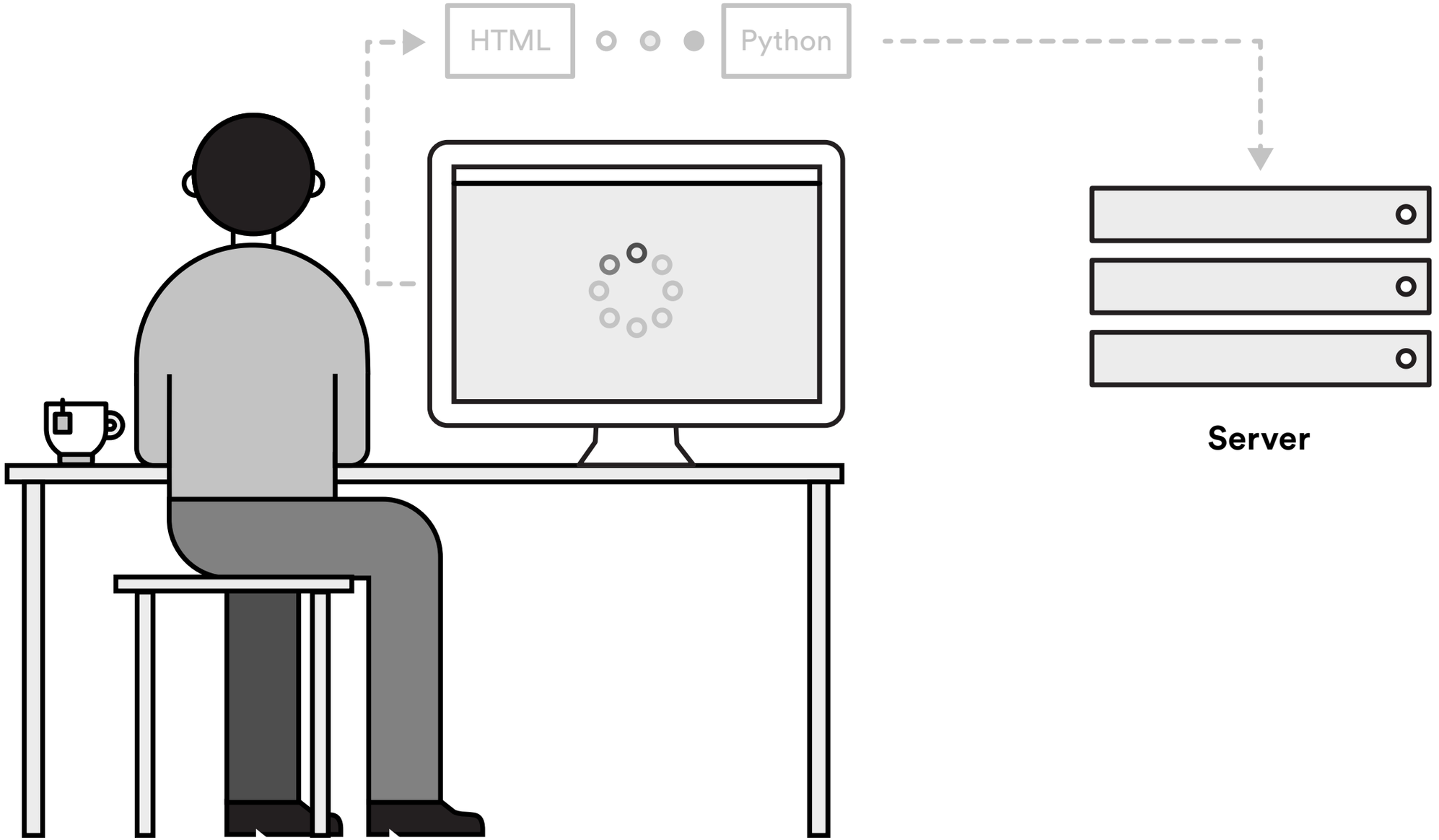
- It is what goes on behind the scenes.
- Consists of databases, servers etc.
- Lots of languages:
    - Ruby (Ruby on Rails), Node.js, PHP, Python, C++ etc.

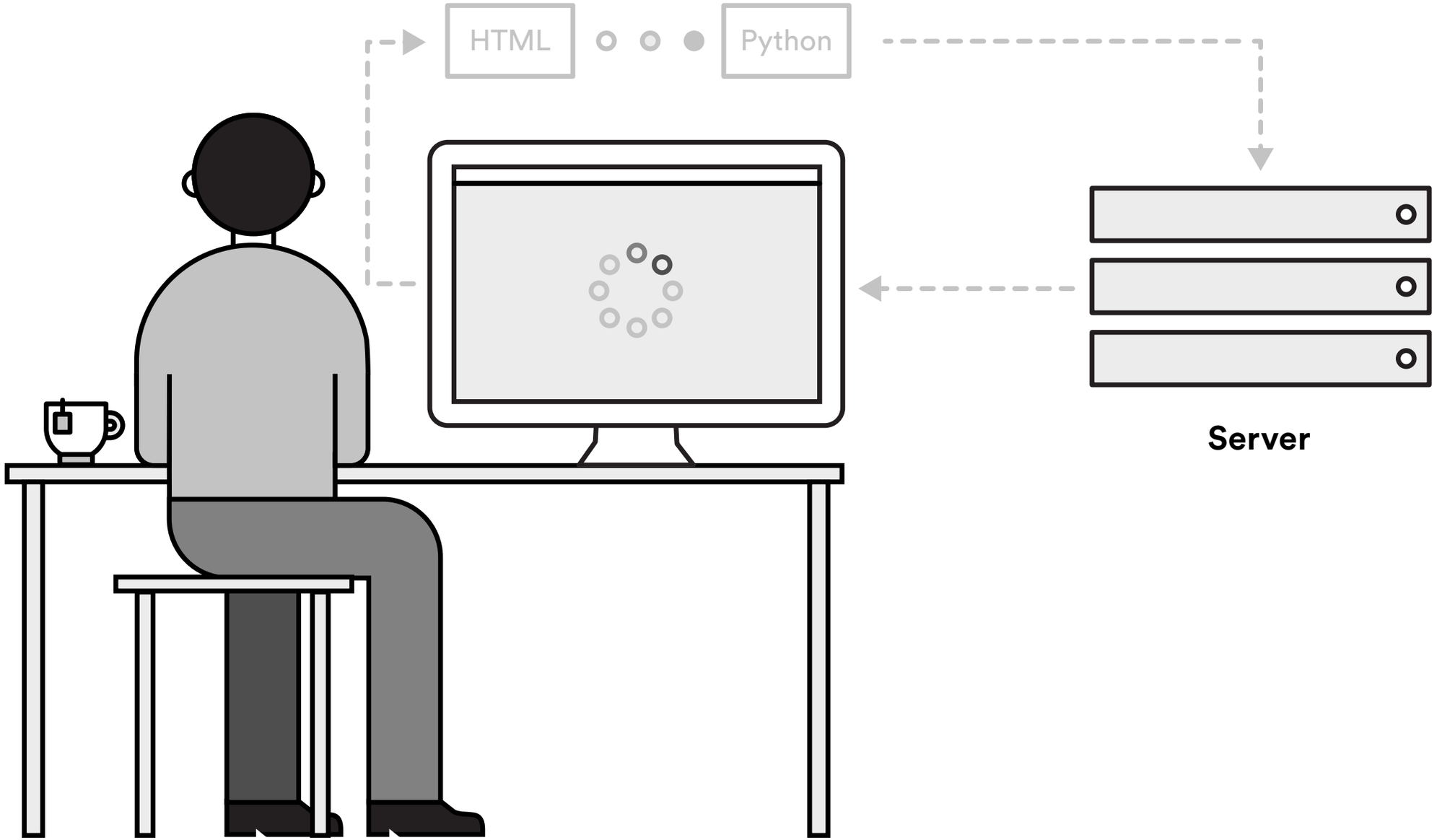

Checking
Savings

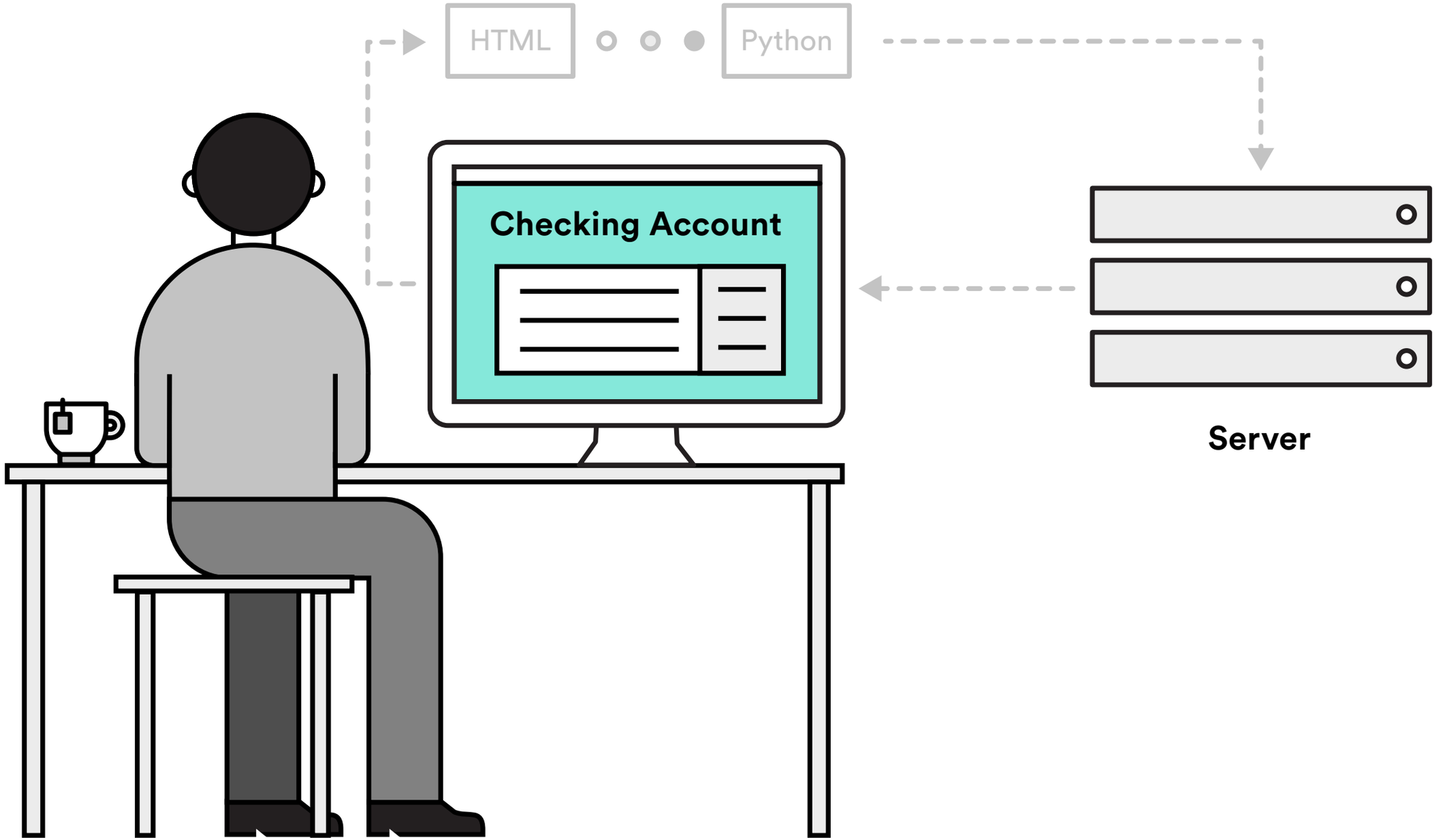

Checking
Savings
front-end code


Checking
Savings


HTML
Python


HTML
Python
Server


HTML
Python
Server


HTML
Python
Checking Account
Server

FRONT-END LANGUAGES

FRONT-END

HTML

CSS

JavaScript

THE LANGUAGES

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

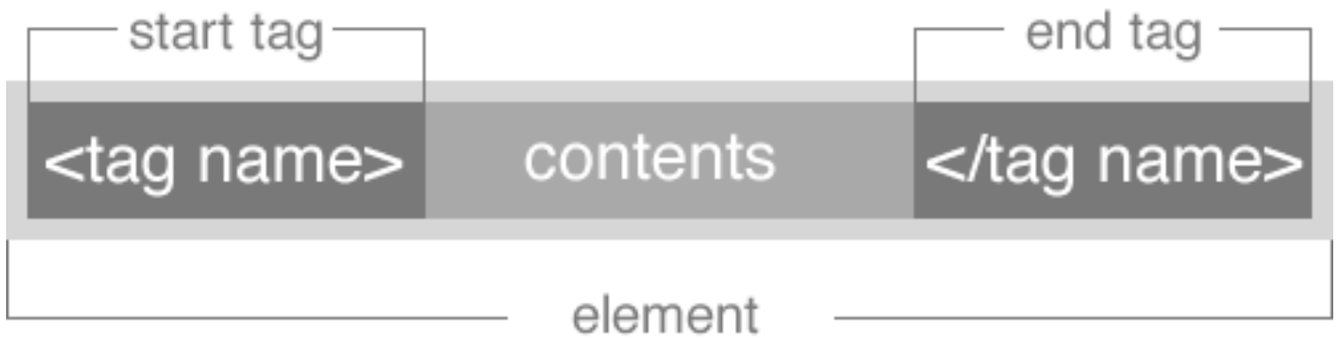
HTML – CONTENT (THE BONES)

Hyper **T**ext **M**arkup **L**anguage

It is a system for defining, or "tagging", pieces of text, inserting images, links, etc.

It looks like this…

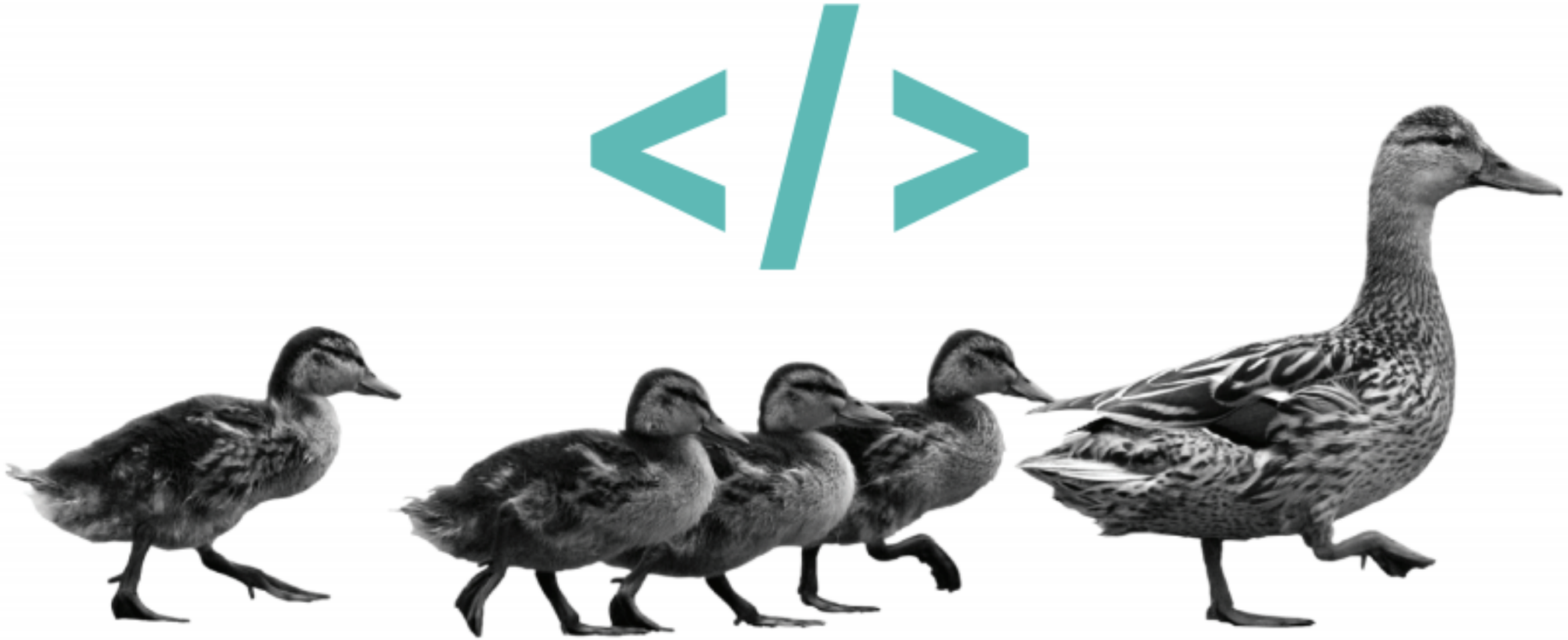
HTML SYNTAX



Ex:

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

HTML CODE-ALONG



1. OPEN YOUR BROWSER AND NAVIGATE TO

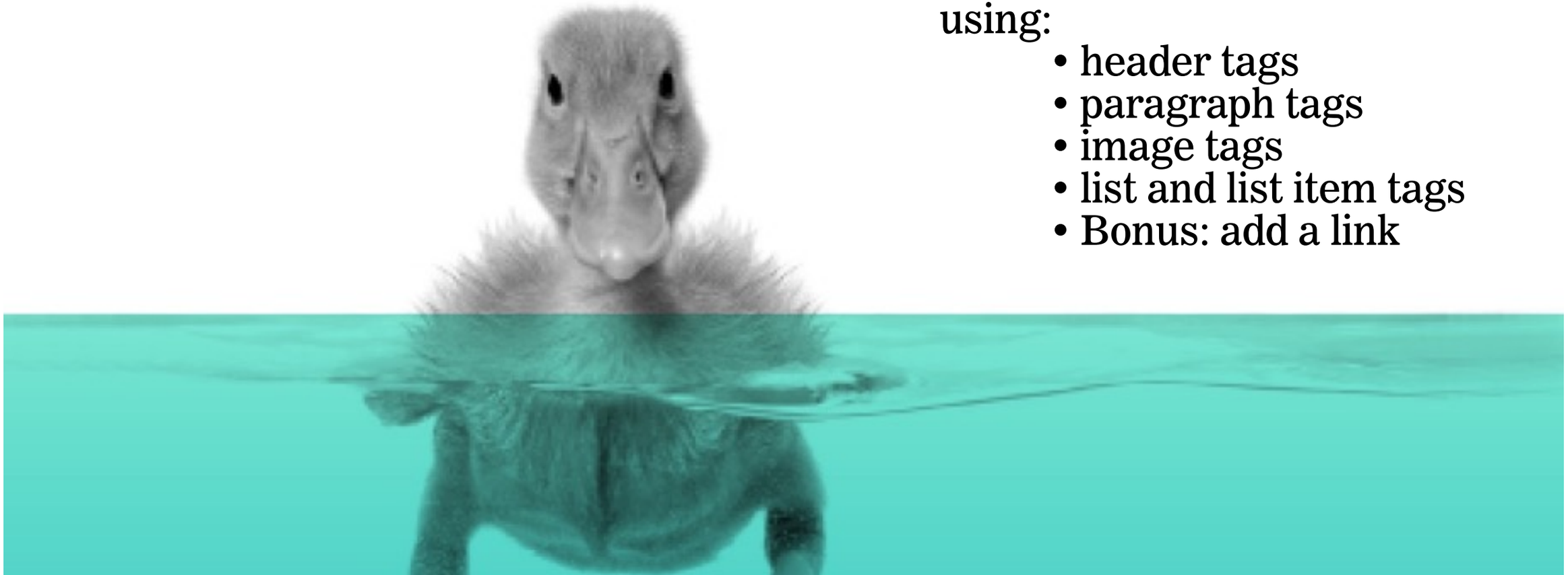
CODEPEN.IO

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

NOW, IT'S YOUR TURN!

1. Open a New Pen

2. Create a basic HTML page, using:
    - header tags
    - paragraph tags
    - image tags
    - list and list item tags
    - Bonus: add a link



CSS – STYLE (THE SKIN)

Cascading Style Sheets

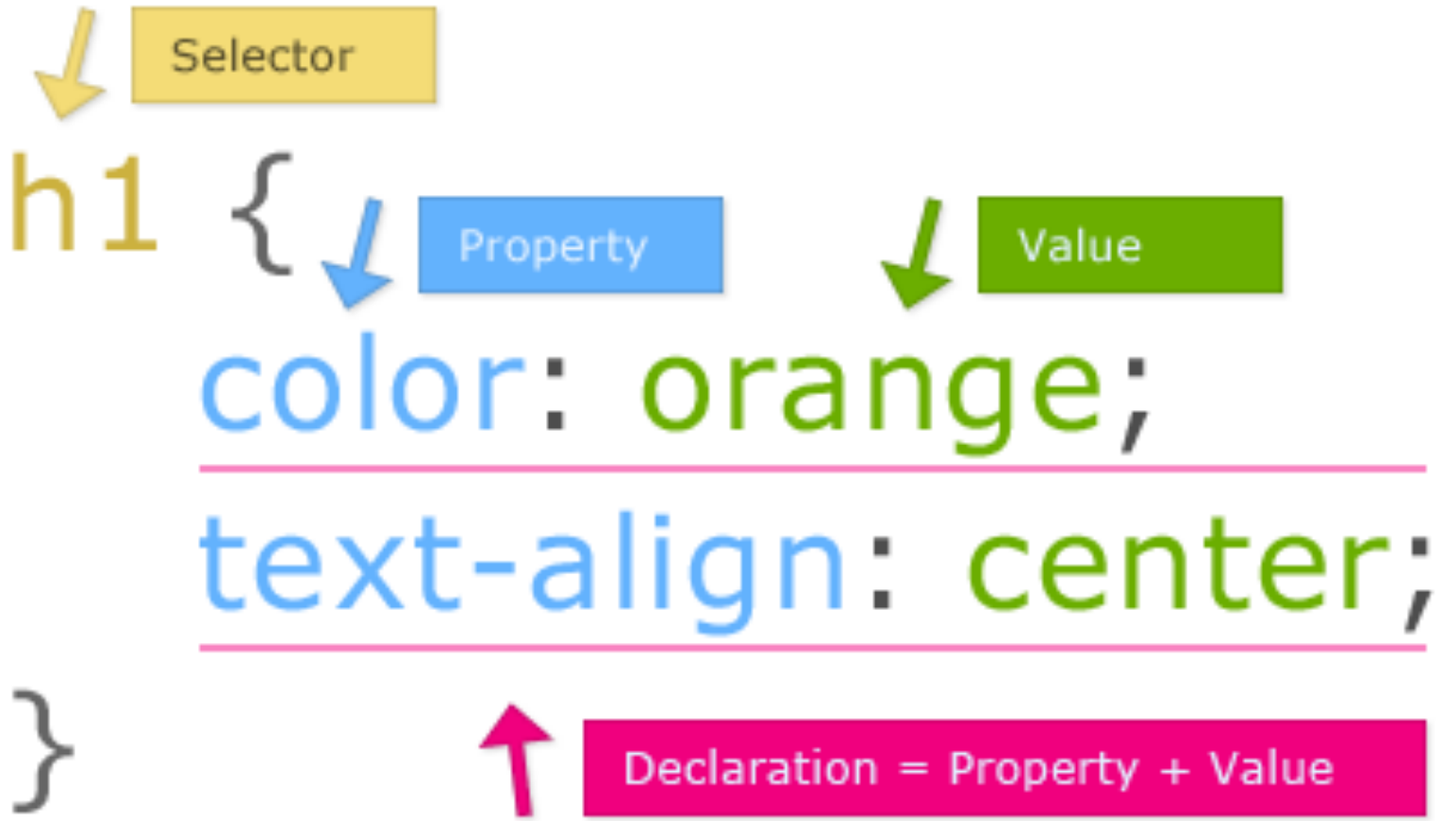
You apply properties and values to HTML elements.

It looks like this…

CSS SYNTAX

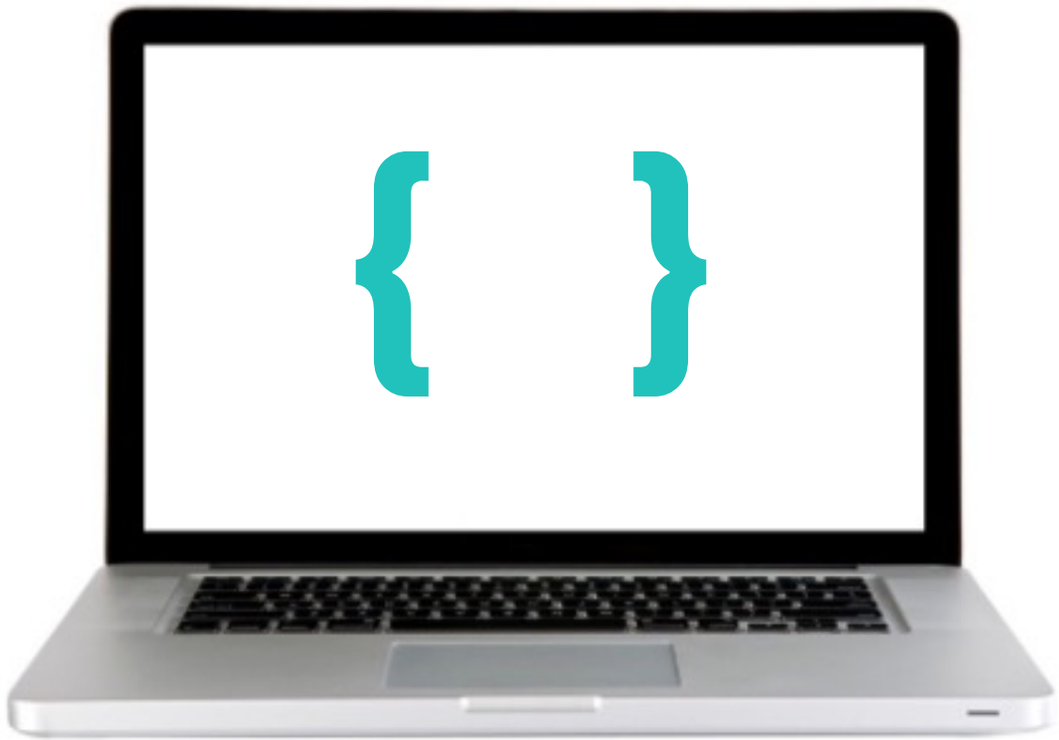
```
body {
  background-color: white;
  color: black;
}
```

ANATOMY OF A CSS RULE



FRONT END

CSS CODE-ALONG



STYLE YOUR PAGE!

1. Go to the pen where you practiced HTML.

2. Add styling to your page
    - background-color
    - color
    - font
    - text-align
    - text-decoration
    - BONUS: background-image

JAVASCRIPT – (THE BRAIN)

- Prompt
- Alert
- Events
  - Click
  - Hover
  - etc.

WRAP-UP

SO, WHO NEEDS TO KNOW ABOUT THÍS STUFF?

WRAP UP

Business Managers

Product Managers

Designers

Marketers

Programmers

HOW TO LEARN THIS AT GA?

PART-TIME:

JS/FEWD

ONLINE:

HCD

FULL-TIME:

WDI / WDIR

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.

Q&A