USF CPH - Week 2
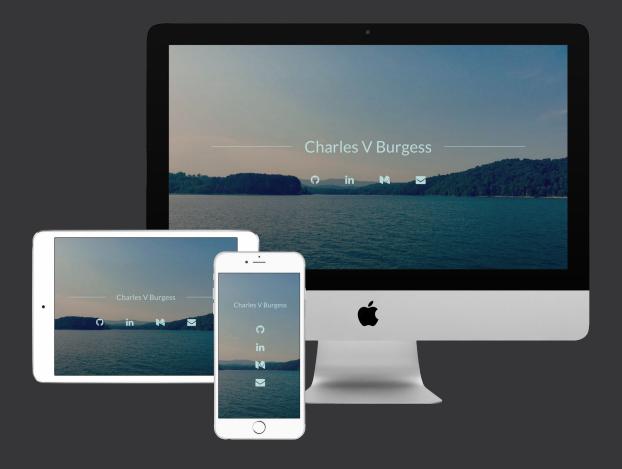
Zero to prototype in 35 days

Getting Set Up

1. Go to github.com / cvburgess / usfcph-week2

2. Fork the repository to your account

3. Clone the repository to your computer

4. Open with VSCode

How the web works

Ridiculously simplified, of course

Today the web is more complex, but the code is the same

Exercise

Let's peek under the hood of cvburgess.com

Reading source code

1. Open cvburgess.com in Google Chrome

2. Right-click anywhere and click "Inspect"

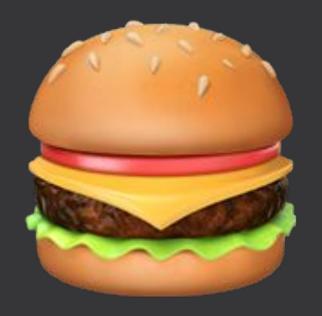# HTML + CSS + JavaScript

Content + Style + Interaction

HTML

The blueprint of every web page

HTML

- Tag-based language

- Based on an evolving standard

- Defines the structure of a page and its content

- Can be nested

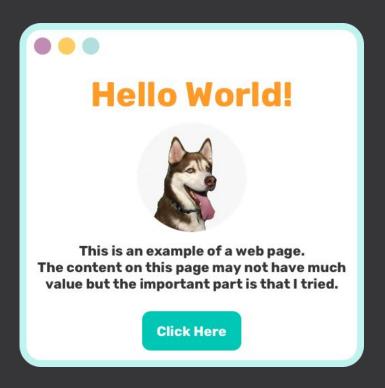- House analogy: walls, floors, roof, sink, appliances, etc

```
<bun flavor="sesame">
  <tomato />
  <cheese shape="square" />
  <patty type="veggie" />
  <lettuce />
</bun>
```

You can describe anything with tags

Tags

- Can be infinitely nested

- Can have properties

- Can be… a bit verbose

```html
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>Hello World</title>
    <link rel="stylesheet" href="bulma.min.css">
  </head>
  <body>
  <section class="section">
    <div class="container">
      <h1 class="title">
        Hello World
      </h1>
      <img src="dexter.png" height="25%" width="25%" />
      <p class="subtitle">
        This is an example of a web page.
        The content on this page may not have much
        value but the important part is that I tried.
      </p>
      <button onClick="alert('hello')">Click Here</button>
    </div>
  </section>
  </body>
</html>
```

A more practical example

Common tags / elements

- Text: < p > + < h1 > … < h6 >

- Section: < div >

- Media: < img > + < video >

- Metadata: < head > + < meta >

- Links: < a > (short for "anchor")

- Forms: < form > + < input > + < button >

Common properties / attributes

- Reference to a css style: class="my-button"

- Specific sizing: height="50px" + width="100px"

- Source for media: src="http://mysite.com/image.jpeg"

Exercise

Let's make a web page

Working with HTML

1. Open exercise-1.html in VSCode

2. Add some tags (use RESOURCES.md for help)

3. Open exercise-1.html in Google Chrome

4. Repeat as many times as you would like

CSS

How we make pages pretty

CSS

- Style sheet language（not tag-based）

- Based on an evolving standard

- Defines the style of HTML elements

- Can be nested and overwritten

- House analogy: finishes, trim, colors, furniture arrangement, etc

Exercise

Let's make a that page pretty

Working with CSS

1. Open exercise-2.html in VSCode

2. Add some classes to the < style > tag (use RESOURCES.md for help)

3. Open exercise-2.html in Google Chrome

4. Repeat as many times as you would like

Shortcuts

Saving time, money, and sanity

Exercise

Activate the powers of open source

Adding a library

1. Open exercise-3.html in VSCode

2. Add some BULMA classes to the HTML (use RESOURCES.md for help)

3. Open exercise-3.html in Google Chrome

4. Repeat as many times as you would like

Deployment

Getting your code on the big (and little) screen

How deployment works

1. The files (code and assets) are packaged up

2. Files are sent to a server somewhere in "the cloud"

3. Files are "hosted" on a server that anyone in the world can see

4. When new files are uploaded they replace the old ones

Easy button

Netlify does all this for us

Deploy with Netlify

1. Commit and push your code back to GitHub

2. Log in to Netlify

3. Create a new site and link your Week 2 GitHub repo

4. Publish and go to the url provided + /exercise-3.html

   a.   EXAMPLE: https://vibrant-beaver-a18f24.netlify.com/exercise-3.html

5. Every push to GitHub will trigger a new deploy

Holy guacamole

We built and deployed a website to the internet

Homework

1. Review your notes and convert them to HTML (see RESOURCES.md)

2. Watch a video or skim a course from RESOURCES.md

3. Make a landing page for your idea

- Email me for "office hours" if you need help

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