

Welcome to Web Foundations!



WEB 1.0



Welcome!



Check-In (5 minutes)

In a group of 3:

- **Share** your name, pronouns, & where you're currently living
- **Answer:** If you could build one website, what would it be?

After the breakouts, have 2 or 3 groups share their most interesting website ideas.

- Check-In
- Learning Outcomes
- What is HTML?
- What is Semantic HTML?
- Activity: Mark Up a Wikipedia Article
- **BREAK**
- Lab Time
- Wrap-Up

By the end of today, you should be able to...

1. **Identify** the parts of a HTML element.
2. **Describe** the purpose of semantic HTML.
3. **Use** semantic HTML to mark up web content.

What is HTML?

Warm-Up (5 minutes)

Let's say you were tasked with **building a house**, from scratch, and getting it ready to sell to a customer.

What are the **steps you'd need to complete**, and in what order? Write down at least 5.



Students, write your response!

HTML forms the **structure** of the house - what rooms are placed where. CSS and JavaScript form the “interior design” of the house, or how each room looks.

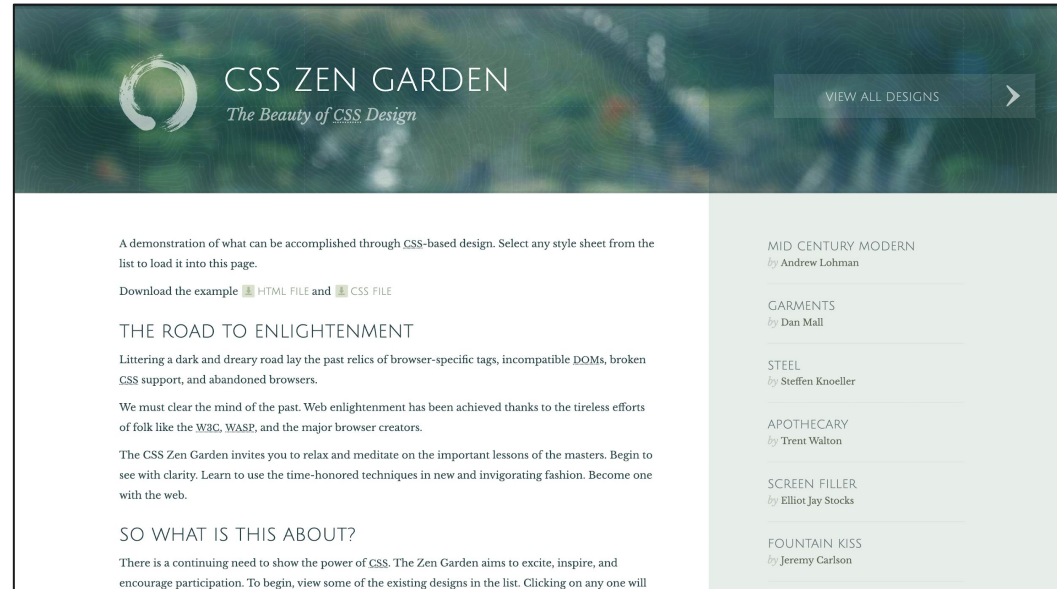


HTML

HTML is Structure (5 minutes)

When you're building out your own websites, you'll complete the steps in this order: first HTML, then CSS and JS.

Explore the [CSS Zen Garden](#) to see what can be made from a single HTML file. Then, post your favorite!



Students, write your response!

Why should I know this?

With this knowledge of HTML, you can **build websites!**

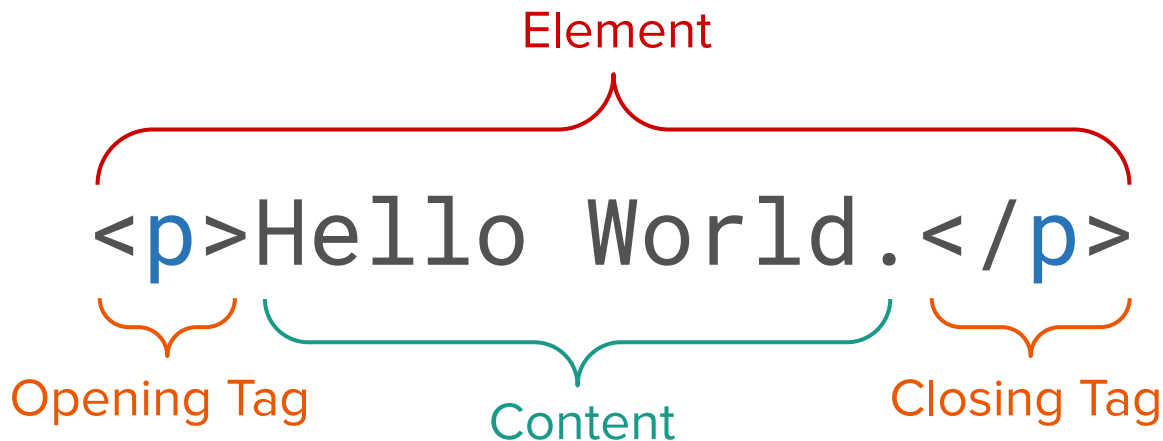
If you want to build a custom website, or even do any customization on website builders like Squarespace or Wix, you need to know HTML.

Knowing which elements to use for which scenario not only improves your website's structure, but also improves its **SEO** (Search Engine Optimization).

How do I use HTML?

HTML uses tags to “markup” a document. Tags describe and provide context to content.

Below the p, or paragraph, tag describes the text Hello World as a paragraph.



Many different tags can be combined and nested one within another.

```
<article>  
  <h1>HTML</h1>  
  <p>  
    <abbr>HTML</abbr> is the best!  
  </p>  
</article>
```

How many **elements** are there in this code?



Students, enter a number!

Tags cannot overlap!

Good:

```
<p><abbr>HTML</abbr> is the best!</p>
```

Bad:

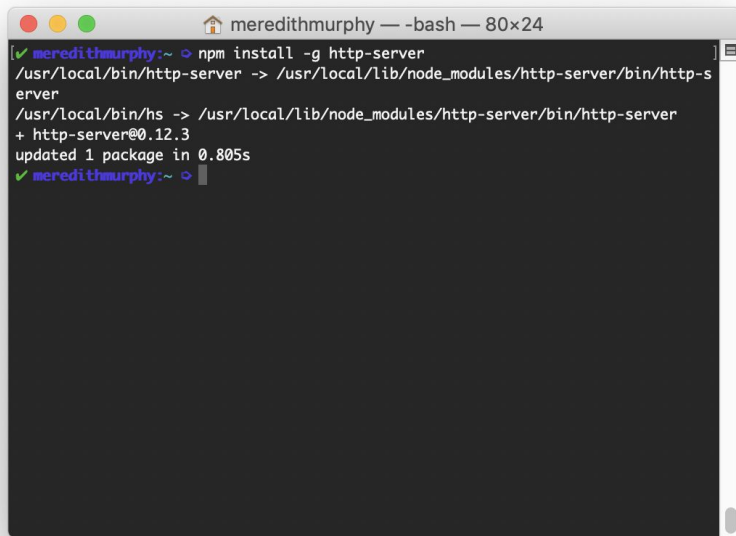
```
<p><abbr>HTML</p></abbr> is the best!
```

My First HTML Page

**This is the first, and hopefully only, code-along we'll do in this class.*

***If you get stuck along the way, type your error into the Zoom chat and see if someone can help! I'll go over all of the issues at the end.*

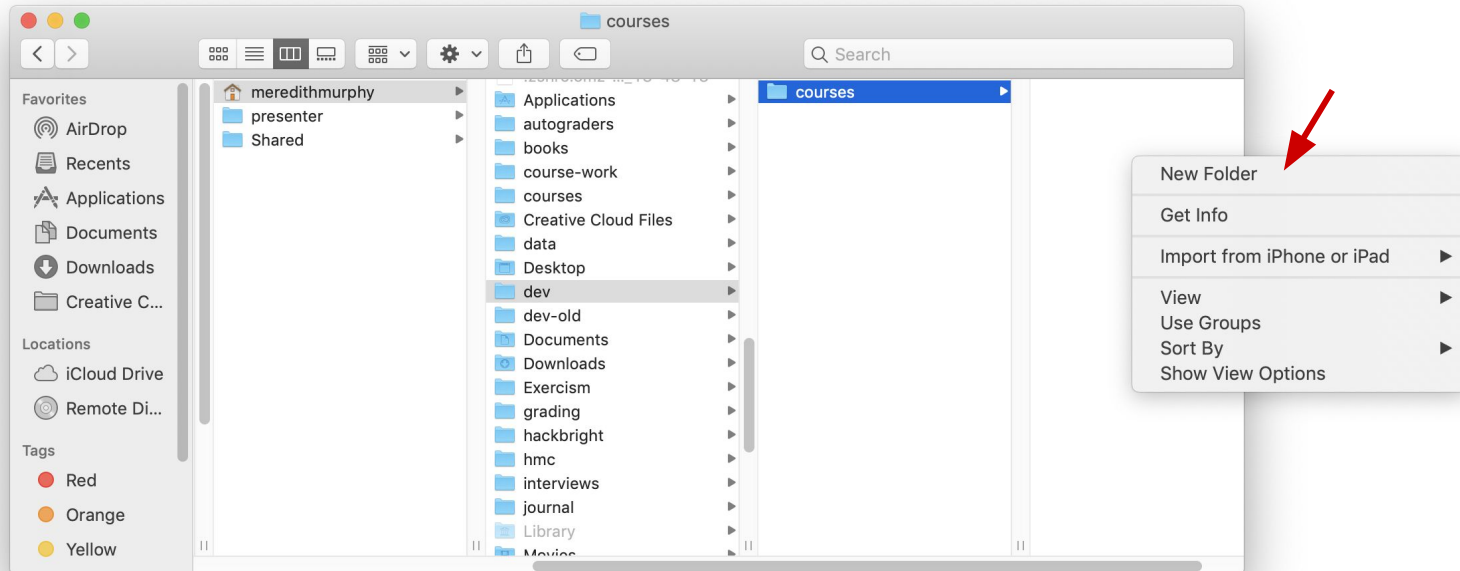
Open up a terminal and type “**npm install -g http-server**”. (If that doesn’t work, you may need to install Node with “**brew install node**”).



```
meredithmurphy — -bash — 80x24
✓ meredithmurphy:~ ▹ npm install -g http-server
/usr/local/bin/http-server -> /usr/local/lib/node_modules/http-server/bin/http-server
+ http-server@0.12.3
updated 1 package in 0.805s
✓ meredithmurphy:~ ▹
```

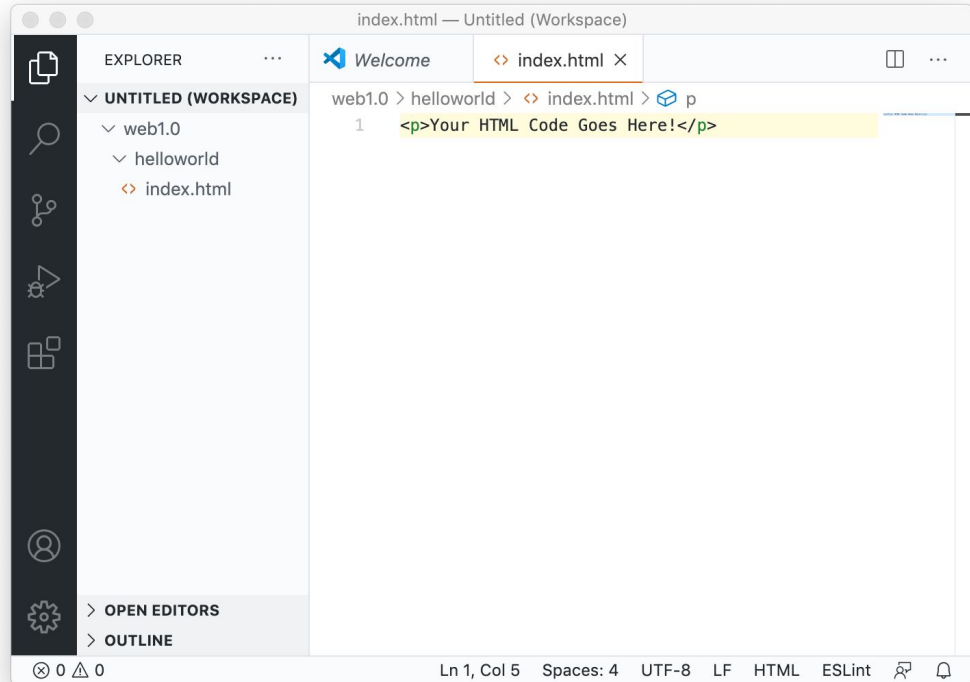
Hello, World!

Go to **Finder** and create a folder for this class. (Should be in the “dev/courses” folder.)



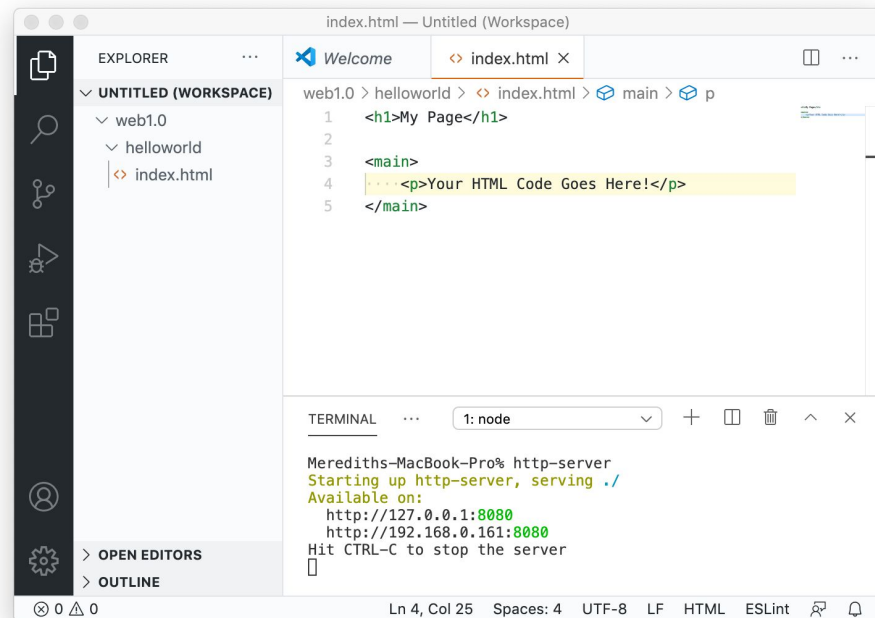
Go to **VSCode** and select File -> Add Folder to Workspace. Then do the following:

- Add your class folder
- Create a new folder in it called “helloworld”
- Create a new file in that called “index.html”

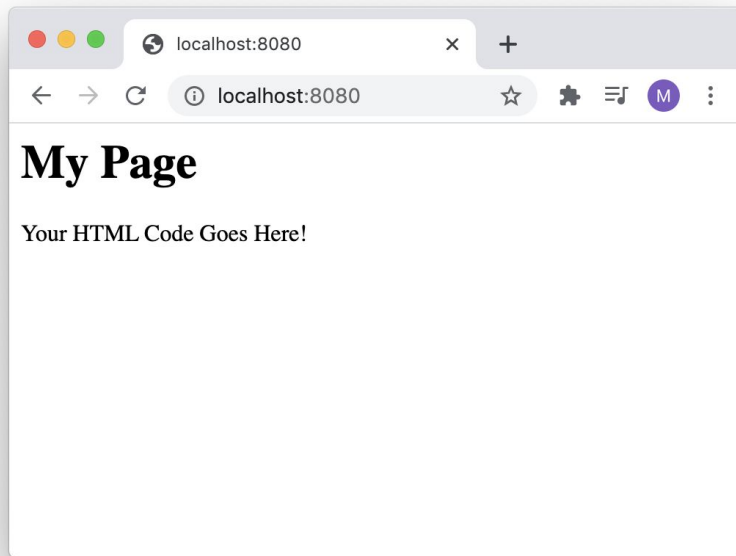


Hello, World!

Right-click on “helloworld” in the folder tree and click “Open in Terminal”. Then type in “**http-server**” to run.



Open any browser and type “localhost:8080” into the URL bar. You should see your page content!



What is Semantic HTML?

Syntax, *noun*: the arrangement of words and phrases to create *well-formed* sentences in a language.

Semantics, *noun*: the branch of linguistics and logic concerned with *meaning*.

“Colorless green ideas sleep furiously.”

(This sentence is *syntactically* correct, but *semantically* wrong.)

Which one of these has more *semantic* meaning?

Page 1:

```
<div>
  <span class="header">HTML
</span>
  <p>
    <u>HTML</u> is the best!
  </p>
</div>
```

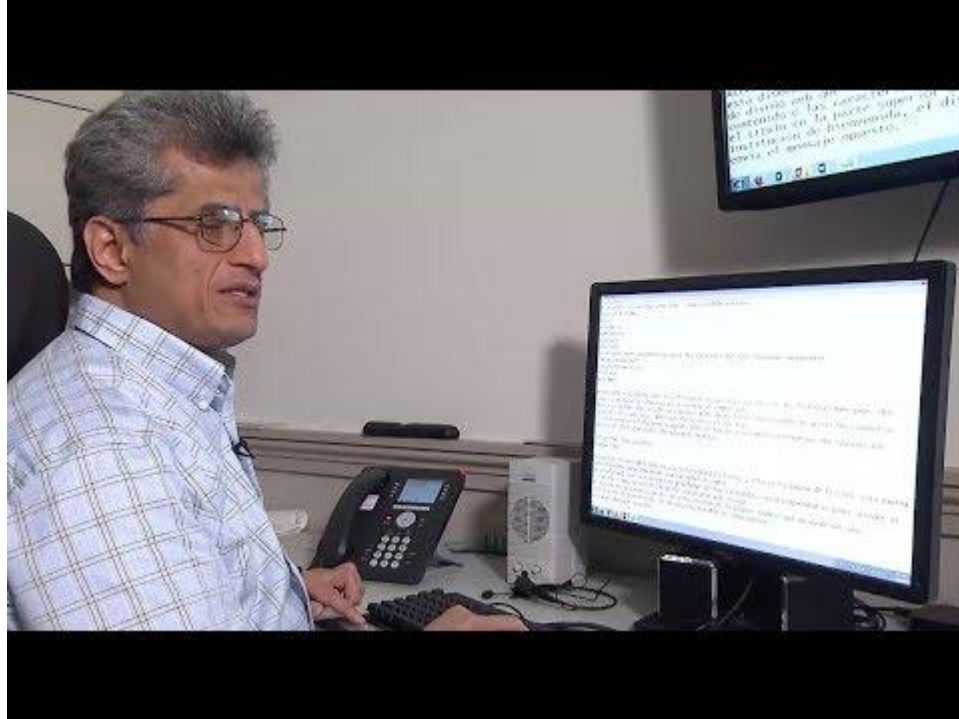
Page 2:

```
<article>
  <h1>HTML</h1>
  <p>
    <abbr>HTML</abbr> is the
best!
  </p>
</article>
```



Students choose an option

Let's watch a video to learn how a visually impaired person relies on semantic HTML.



In a group of 3, discuss:

- How was Hadi's experience different when navigating the "Accessible" vs. "Inaccessible" university web page? Why?
- What is one thing from the video that surprised you?
- What is one question that you still have about accessibility?

Having accessible web pages isn't just a *good practice*... it's also a **legal requirement**!

Title III of the **Americans with Disabilities Act (ADA)** has been interpreted to include websites as “places of public accommodation” ([source](#)).

However, the visually impaired aren't the only group we need to accommodate!

Our web pages also need to be readable for... *(dun dun dun)* **robots!!!**



When a search engine, like Google, crawls your web page, you want it to easily find and label the important content, like headers.

This is called **Search Engine Optimization (SEO)**.

Which one of these has more *semantic* meaning?

Page 1:

```
  
<span>  
  Photo taken by Dani  
  Roxberry  
</span>
```

Page 2:

```
<figure>  
    
  <figcaption>  
    Photo taken by Dani Roxberry  
  </figcaption>  
</figure>
```



Students choose an option

Break - 10 min

“Take a 10 minute break and wrap a tag around everything you see.”

Semantic HTML Practice

Activity (15 minutes)

Complete the [Combining Tags Activity](#) with a partner. You and your partner **must agree** on where to put each tag!

TIP: Have 1 partner share their screen; the other partner tells them what to do.
(This is called pair programming! We'll practice it more later.)

Have 1 or 2 groups show off their marked-up article!

Here are some examples of “block” tags.

```
<p>This is a paragraph of text.</p>
```

```
<article>  
  <h1>This is a title.</h1>  
  <p>This is the article body.</p>  
</article>
```

```
<nav>This is a navbar.</nav>  
<main>  
  <p>This is the page body.</p>  
</main>  
<footer>This is a page footer.</footer>
```


We can use the `time` tag for time & date:

```
<p>  
  <strong>Hey</strong> it's <time  
datetime="2021-02-14">Valentines day</time>❤!  
</p>
```

We can use the `abbr` tag for abbreviations & acronyms:

```
<abbr>HTML</abbr> was invented by Tim  
Berners-Lee.
```

Or, better yet:

```
<abbr title="Hyper Text Markup  
Language">HTML</abbr> was invented by Tim  
Berners-Lee.
```

`em` and `strong` are inline tags that control the voice of what you are saying.

```
<p>  
  How would <em>you</em> mark this up?  
  <strong>(seriously)</strong>  
</p>
```

Always use **inline** tags inside a **block**!

What is this class all about, anyway?

Go over the [course syllabus](#) together & answer any questions.

Lab Time

Portfolio Part 1: HTML

Homework 1: Due Tuesday night

Stay in the main Zoom room if you'd like to stay for more Q&A, homework help, etc.

Go to your individual breakout room if you'd prefer to have quiet time!