Seminar: HTML & CSS

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Enough acronyms already...

- HTML (Hyper Text Markup Language)
 - Provides layout and structure of webpage content
 - The actual tree part of a Christmas tree
- CSS (<u>Cascading Style Sheets</u>)
 - Stylizes appearance of webpage content
 - The ornaments and all other decorations on a Christmas tree
- Common misconceptions
 - Neither HTML nor CSS is a real programming language
 - HTML and CSS are actually two separate things
 - HTML → content itself
 - CSS → appearance of content



Behind the scenes!

- 1. Pick your favorite website
- 2. Navigate to it in Google Chrome
- 3. Go to View \rightarrow Developer \rightarrow Developer Tools
- 4. (A moment of awe)
- 5. Click through the HTML in the Developer Tools box
- 6. See if you can match various parts of the website to their respective HTML "tags"
 - <header>
 - <div>
 - -
 - <nav>
 - and more!

Breakdown of HTML

Elements

- Refer to various objects within a webpage
- Most helpful in describing general/overall structure of webpage
- Ex.) Paragraph elements are denoted by the tag

Tags

- The anchors or "bookends" of an element
- Nested to allow for hierarchical structure of a webpage
- Ex.) I am a paragraph. (Okay a sentence, but you get the idea.)

Attributes

- Used to specify additional properties of an element (or multiple elements)
- This can include CSS but that can sometimes become messy
- Ex.) Four score and seven years ago...

Breakdown of CSS

Selectors

 Identify exactly which element(s) within HTML to target and apply styles

Properties

Determine what type of style will be applied

Values

 Specify the "behavior" of the style for the element selected

```
1
2
3 p .eventname #meal {
4    color: lightblue;
5    font-size: 16px;
6    text-align: center;
7 }
8
9
```

"Hello, World" makes a comeback

https://www.w3schools.com/tryit/

https://codepen.io/pen/

Introducing Bootstrap

- So what is it?
 - Frontend development framework
 - Enables developers/designers to quickly build fully responsive websites
 - Free and open source
 - A "giant collection of handy, reusable bits of code written in HTML, CSS, and JavaScript"
- And why should you care about it?
 - Take ownership of your website
 - Get your website up and running quickly
 - Avoid painful maintenance as you change the website to suit your needs



Advantages of Bootstrap

- The real meaning of responsive
 - A website should resize automatically based on size of the browser window
 - Monitor vs. mobile
- Components galore
 - Navigation bars
 - Dropdowns
 - Thumbnails
 - And more!
- Templates
 - Importance of website to company image
 - Getting the aesthetics/UX design right is much harder than it looks!



Helpful resources

- Tutorials
 - https://www.w3schools.com/bootstrap/default.asp
 - https://www.toptal.com/front-end/what-is-bootstrap-a-short-tutorial-onthe-what-why-and-how
 - https://www.taniarascia.com/what-is-bootstrap-and-how-do-i-use-it/
- Documentation
 - http://bootstrapdocs.com/v3.0.3/docs/
- Examples
 - http://expo.getbootstrap.com/
 - https://bootstrapbay.com/blog/built-with-bootstrap/

Takeaways

- HTML/CSS are not programming languages but they form the basis of web development
- This duo is powerful and even more so when you add JavaScript
- Bootstrap is a helpful web development library that allows you more control than sites like Wordpress
- Bootstrap templates are a great starting point but knowing HTML/CSS helps you customize further
- and...
- CS is awesome!!!



Any questions?

Thank you all for coming!