HTML Basics

Giving our Content Structure

WHAT IS HTML?

- Hypertext Markup Language
  - A language for displaying content (text, images, table, links, etc..)
  - Structure for your site
  - Front-End language - Interpreted by the Browser

HTML STRUCTURE

“opening tag ” <tagname>myawesomecontent</tagname> “closing tag”

“Tag” is synonymous with “element” - so I may say either

Sample Tags:

- <title></title>
- <h1></h1> -- heading
- -- paragraph
- <a> -- link

HTML ATTRIBUTES

Defines certain characteristics about tag

<tag attribute=”value”>Content</tag>

Common attributes: href, style, class, id

Quick examples:

- <img src="photo.jpg">
- Google
- Awesome Class
- <h1 style="color: red;">Intense!</h1>

LAB TIME!

LET’S BUILD OUR FIRST SITE
Go this Github repo and clone it and pulling down class files from FEWD#—>Week1—>HTML Labs.

Open up the GA press release folder in Sublime and add relevant tags to the content to make it appear like the included image. ~25 min

MORE HTML TAGS

Tag	Description	Require Attr.
<hr>	horizontal rule	
<img>	image	src
	emboldens text	
	emphasizes text	
 	forces break line	

HTML Nesting

What is Nesting?

- Elements with elements
- parent > child
- The look / behavior is inherited to children

Lists

- ordered list (numbered):
- unordered list (bullets):
- each list has list elements

Tables

- <table></table>
- rows: <tr></tr>
- columns: <td></td>

BEST PRACTICE AND LAB!

COMMENTING - Best Practice

- <!-- comment -->
- Everything with the comment is ignored by the browser
- It helps people (and you) understand your code (BEST PRACTICE!)

LAB TIME

Open up the cookie recipe folder that's in your HTML Labs files folder in Sublime and add relevant tags to the content to make it appear like so (look at Arthur's screen!). ~25 min

Break Time!

CSS Basics

WE GET TO KNOW THE DOM

SO WHAT IS THE DOM?

The DOM stands for (Document Object Model).
It is an (API) application-programming interface for HTML.

Using the DOM programmers can build documents, navigate their structure, and add, modify, or delete elements and content.

WHAT DOES THIS DOM LOOK LIKE?

Great Question!!

LET'S WALK-THROUGH THIS TOGETHER USING CHROME’s DEVTOOLS

Useful for many things like inspecting the DOM, styling on the fly, and debugging. We'll get to all of these later. First the DOM!
Open CDT (right click, inspect element)

CSS BASICS (FINALLY)

- CSS, how does it work? - Rundown
  - It’s basically an elaborate way to search HTML
  - Check the “Syntax”
  - Basic selectors: classes, ids, tags
  - Specificity, Inheritance and you

WHAT IS CSS

- Cascading Style Sheets
  - A language for changing the appearance of HTML elements/ tags
  - Enables reuse
- Aspects of appearance
  - font, color, padding, margins, backgrounds, layout, borders, gradients

CHECK THE SYNTAX

HTML reference
<tag class="someclassname">

CSS definition
.someclassname {
property1: value1;
property2: value2;
}

Common properties: font-weight, font, color, font-size, background-color, text-shadow

Multiple classes: <tag class="c1 c2 c3">

CSS SELECTORS

CSS Selector	HTML	Scope
Any HTML TAG (ul, p, a)		All elements with tag
.my-class		All element of class
#my-id		Only one element

BASIC CSS PROPERTIES

Property	Value	Description
color	#aabbcc, red	font color
font-size	12px, 12pt, 1em	
font-family	arial, helvetica	font-type
font-weight	bold,normal	
background-color	#aabbcc, red	
padding	1px, 1pt, 1em	surrounding space
border	1px solid blue	
margin	1px, 1pt, 1em	outer space
text-align	left, right, center	

HOW TO STYLE YOUR SITE

There are three different ways to style your website.

1. Inline Styles
2. Internal Stylesheets
3. External Stylesheets

Internal Stylesheets

Standard Elements of internal stylesheets

- <style> [CSS ME UP] </style>
- Usually within <head></head> tag
- Not recommended (not a best practice)

But we're going to use it anyway when learning (Great for learning or prototyping)

LAB TIME!

Create the HTML Structure described in the instructions below:

- Give it a DOCTYPE
- It must have an opening and closing html tag
- It must have an opening and closing head tag with a title tag called 'My Structure'

It must have an opening and closing body tag with:

- A header tag with some content
- A section tag with some content
- A footer tag with some content
- Make a couple of paragraphs in the section area

External Stylesheets

Standard Elements of external stylesheets

- <link rel="stylesheet" href="[url of stylesheet]">
- Link tag placed in the <head></head> tag area
- Best Practice for live/production ready websites/apps.

GET THOSE STYLES OUT OF THAT PAGE!

- In your Github repo create a new folder called css_lab
- In that folder create a new index.html file based on that work above aka copy and paste
- Create a new file called main.css and let’s move the styles into there
- Finally link the stylesheet to your HTML page

SPECIFICITY, INHERITANCE AND YOU

Specificity! (Arthur to fall on knees and scream to the heavens) It will one of the most important things you'll need understand about CSS and therefore, will be your nemesis!

Specificity determines which CSS rule is applied by the browsers. There are four distinct categories which define the specificity level of a given selector: inline styles, IDs, classes, and elements.

WAIT WHY?

Order of the most specific to the least specific:

1. <style> (style attribute) -- most
2. #id (ids)
3. .class (classes)
4. p (tags/elements) -- least

In other words if we think about it as points:

1. If the element has inline styling, that automatically wins (1,0,0,0 points)*
2. For each ID value, apply 0,1,0,0 points
3. For each class value (or pseudo-class or attribute selector), apply 0,0,1,0 points
4. For each element reference, apply 0,0,0,1 point

WHAT WE'VE LEARNED

CSS - a way to style HTML
Basic syntax properties
How to link a stylesheet and page
#id, .class, and tag selectors
Specificity and Inheritance

CSS IS IMPORTANT AND AWESOME:
Separates the fine details of appearance (css) with basic display of content (html)
One CSS can set the style an infinite amount HTML pages
A Single stylesheet sets the "branding" for an entire site
Can "add" CSS properties to create a new style (live example)

HOMEWORK

For the first assignment, you will begin creating the beginnings of your first website. Take what you've learned from class and build either a resume or a portfolio site.

The portfolio starter code is in Assignment Choice 1.
The resume starter code is in Assignment Choice 2.

Both have examples of how your final project should look.

HOMEWORK

Items that either assignment should have to be considered complete:

- Link both pages together using a tag
- Create an external CSS file, link it to your site to style your pages
- Use a unique title and a single unique h1 tag
- Show images using img tags including unique alt attributes
- Use at least 6 different HTML tags (h1, h2, h3, h4, h5, h6, p, ul, ol, a, img) on your pages
- Follow naming conventions, maintain consistency across your .html files
- Indent nested elements to increase your code's readability

Put your homework in a folder “/FEWD#_yourname/assignment1or2“