LET'S GET EVERYTHING SET UP!

- 1. Navigate to the FEWD 47 Dashboard (<u>saraheholden.com/fewd47/</u>) and download the Lesson 2 starter code and slides. You'll want to keep the dashboard open for other links and resources we'll be referencing in class.
- 2. Move the starter code and slides from your Downloads folder to the **fewd** folder we added to your Desktop last class.
- 3. Double-click on starter_code_lesson_2.zip to unzip it
- 4. After you've unzipped, be sure to delete the original .zip file to avoid confusion and make sure you don't unzip it again later!
- 5. Open the entire **fewd** folder with Sublime Text (either drag and drop the folder on the Sublime icon in the dock on Mac, or open Sublime and go to file > open... and select starter_code_lesson_2 folder.
- 6. Log in to the FEWD 47 Slack (fewd47.slack.com) and join the class2 channel.

WEEKLY OVERVIEW

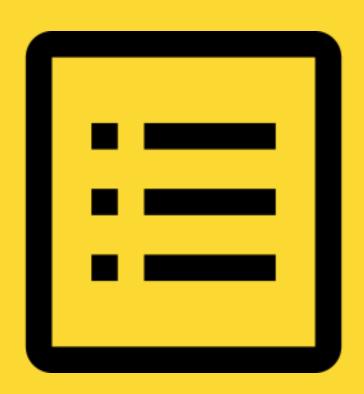
WEEK 1 **HTML Basics** WEEK 2 CSS Basics / CSS Box Model WEEK 3 CSS Layout / Lab

HTML BASICS

LEARNING OBJECTIVES

- Apply relative paths to and <a> tags.
- Differentiate between basic web color principles: RGB, RGBA, hex.
- Use CSS to add basic styles to an HTML page.

AGENDA



- Review
- More HTML Basics
- Intro to CSS
- Lab



FEWD

QUESTIONS

- ▶ Where can we find out about <u>networking/community events</u>?
- Where can I find the reference for commands/shortcuts we can use in Sublime? <u>Mac</u> and <u>Windows</u>
- ▶ I'd be interested in learning more best practices (i.e. formatting) of what we learned.
- ▶ What's the correct (or most readable) space and tab style?
- Using <u>blockquote</u>
- ▶ How much can you do with JS? What are the limitations?
- ▶ Are there versions of HTML other than HTML5?

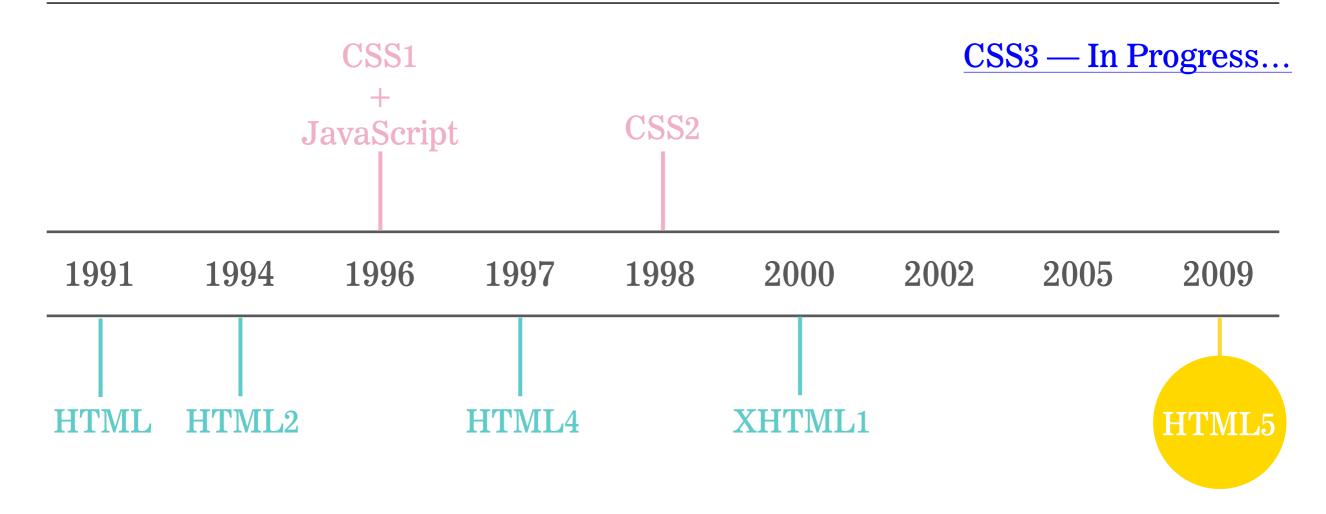
Mac: $\mathbb{X} = \text{Command}$, $\mathcal{D} = \text{Shift}$

PC: $\mathbb{H} = \text{Control}$, $\mathcal{O} = \text{Shift}$

- → Comment Selection/Line: # + /
- → Select Next Match of a Selection: # + D
- Indent selection: Select text then Tab
- ▶ Unindent Selection: Select text then ☆ + Tab
- ► Multiple Columns: # + (number of tabs) Example: # + 2
- → Create multiple cursors: # + click
- ▶ Drag to create multiple cursors: alt + hold down mouse/finger and drag

- ▶ Where can we find out about <u>networking/community events</u>?
- Where can I find the reference for commands/shortcuts we can use in Sublime? <u>Mac</u> and <u>Windows</u>
- Using blockquote
- ▶ I'd be interested in learning more best practices (i.e. formatting) of what we learned.
- What's the correct (or most readable) space and tab style?
- ▶ How much can you do with JS? What are the limitations?
- ▶ Are there versions of HTML other than HTML5?

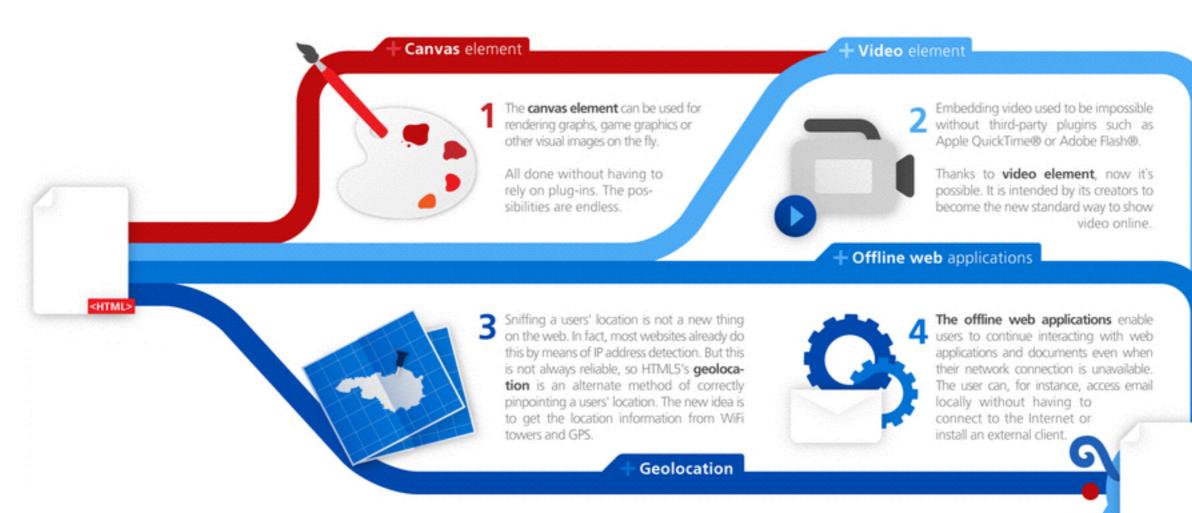
HTML — A BRIEF HISTORY

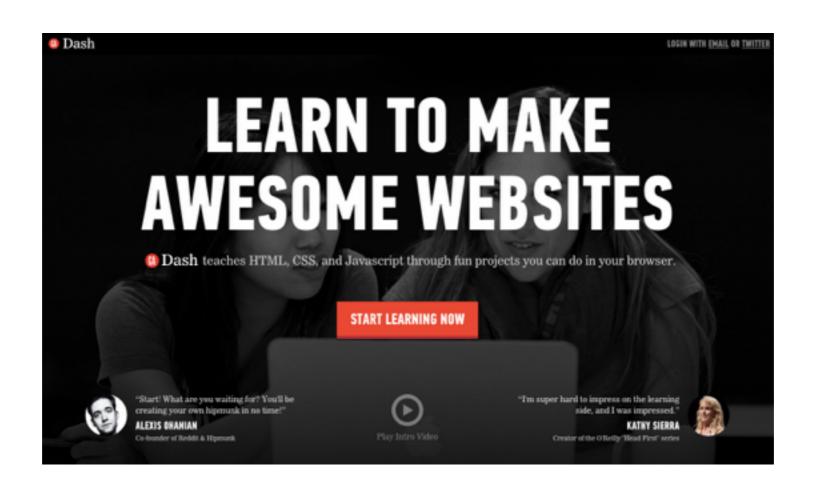






HTML5 introduces a number of new elements and attributes.





- ▶ How do we submit assignments?
- Spotify
- Slack

FEWD

REVIEW

HTML SYNTAX — TAGS

Opening tag

Closing tag

<tag name>content</tag name>

Element

HTML SYNTAX — ATTRIBUTES

Attribute Name

Attribute Value

LET'S TAKE A CLOSER LOOK — MARTY MCFLY

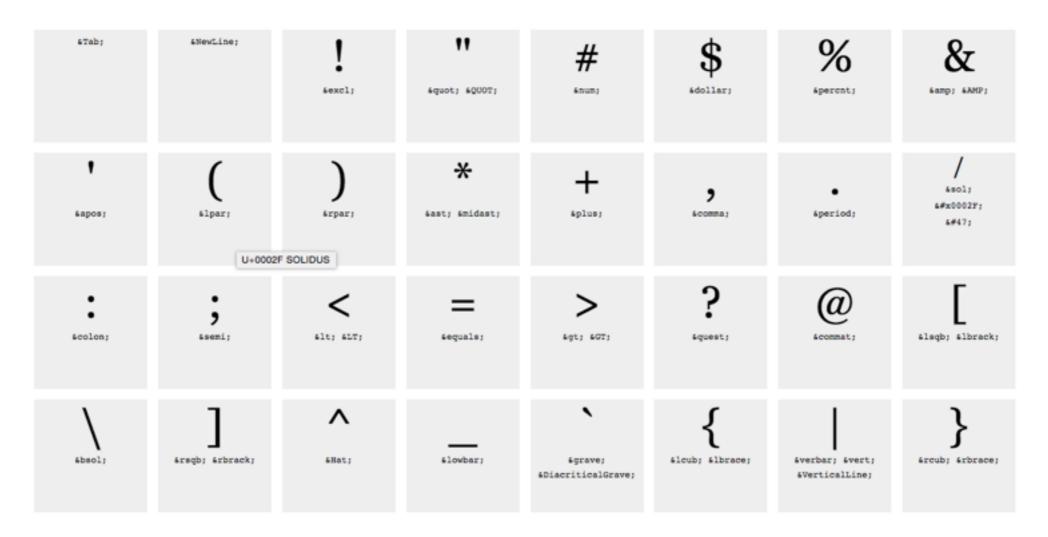


NAVIGATION AND HR

ELEMENT	DESCRIPTION	EXAMPLE
nav	Contains navigational links. For major navigational blocks.	<pre><nav> About Contact </nav></pre>
hr	Horizontal rule	<hr/>

HTML ENTITY CODES

Use HTML entity codes to add special characters to your HTML.



FEWD

MORE HTML BASICS

MORE HTML BASICS

HTML STRUCTURE

HTML STRUCTURE

▶ To generate HTML boilerplate in Sublime: ! + tab.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Document</title>
</head>
<body>
</body>
</html>
```

HTML STRUCTURE — DOCTYPE

DESCRIPTION:

▶ Tells browser file is written in latest version of HTML — HTML5

BEST PRACTICES:

▶ Must be very first thing in HTML file!

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Document</title>
</head>
<body>
</body>
</html>
```

HTML STRUCTURE — HTML

DESCRIPTION:

► ALL of our HTML code should go within these tags.

- Directly after DOCTYPE
- ▶ Opening tag Line 2
- Closing tag Last line

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Document</title>
</head>
<body>
</body>
</html>
```

HTML STRUCTURE — HEAD

DESCRIPTION:

- ▶ For behind-the-scenes info
- Metadata that's not displayed
- ▶ Info used by browser, search engines

- ▶ Opens right after opening html tag
- ▶ Closes right before opening body tag
- Only one in each HTML file

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Document</title>
</head>
<body>
</body>
</html>
```

HTML STRUCTURE — META CHARSET

DESCRIPTION:

- Tells our browser which character set to use
- ► Should always use UTF-8

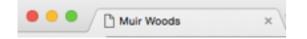
- Required
- Goes inside of head tags

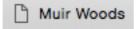
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Document</title>
</head>
<body>
</body>
</html>
```

HTML STRUCTURE — TITLE

DESCRIPTION:

- ▶ Tells browser what site is called
- Used for browser tab
- Used for browser bookmarks
- Used by search engines





- Required
- Goes inside of head tags

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Document</title>
</head>
<body>
</body>
</html>
```

HTML STRUCTURE — BODY

DESCRIPTION:

- Wraps all content for our site
- Everything we want displayed in the browser window gets placed between the body tags — all our HTML elements such as <h1>, <a>, , etc.

- Required
- Opens Right after closing head tag
- Closes Right before closing html tag
- ▶ Only one in each HTML file

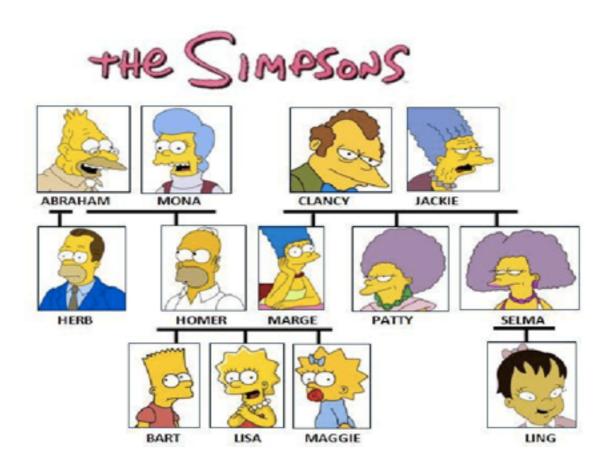
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Document</title>
</head>
<body>
</body>
</html>
```

- ▶ In our HTML files, there are certain tags that "live" or get placed inside other tags.
- elements get placed between opening and closing tags.
- ▶ We say that the "wraps" our elements.
- ▶ We can also say that our elements are "nested" inside our element.

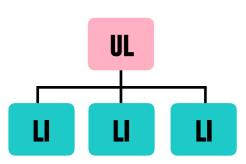
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>The Evolution of Denim</title>
</head>
<body>
   <h1>The Evolution of Denim</h1>
   <l
       Dark Wash <a href="linkgoeshere">Jeans</a>
       Stone Wash
       Chambray
   </body>
</html>
```

PAGE STRUCTURE — RELATIONSHIPS

• We often use the same terms we would use to describe relationships between family members to describe the relationships between HTML elements.

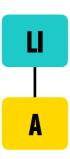


- ▶ Here we can say that our is the **parent** of our s
- ▶ We can also say that our s are children of the



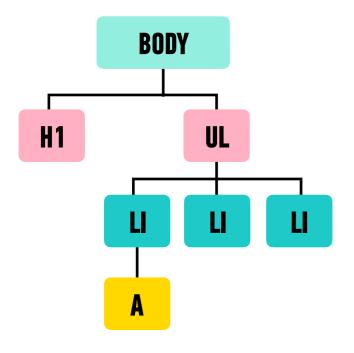
```
<!DOCTYPF html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>The Evolution of Denim</title>
</head>
<body>
   <h1>The Evolution of Denim</h1>
  <l
       Dark Wash <a href="linkgoeshere">Jeans</a>
       Stone Wash
       Chambray
   </body>
</html>
```

ightharpoonup Similarly, we can have an <a> tag that is nested inside, or wrapped by, our element.



```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>The Evolution of Denim</title>
</head>
<body>
   <h1>The Evolution of Denim</h1>
                                   <a>>
   <u1>
       |Dark Wash <a href="linkgoeshere">Jeans</a>
       Stone Wash
                             <
       Chambray
   </body>
</html>
```

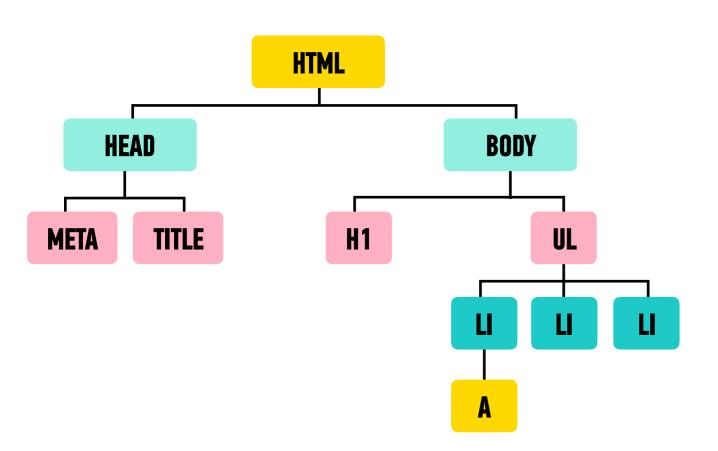
• Similarly, we can say that all of our HTML content, our h1, our ul, our li elements, are "wrapped" by the body, or "nested" inside the body since they are within the opening and closing body tags



body

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>The Evolution of Denim</title>
</head>
<body>
   <h1>The Evolution of Denim</h1>
   <u1>
       Dark Wash <a href="linkgoeshere">Jeans</a>
                                                        HTMI
       Stone Wash
       Chambray
   </body>
</html>
```

DOM TREE



ACTIVITY



KEY OBJECTIVE

▶ Be able to describe relationships between elements.

LOCATION

Starter code > dom_tree

TIMING

2 min

- 1. Which elements are "parents" of other elements? What are their "children"? Descendants?
- 2. Which Elements are "children"? What are their parents? What are their ancestors?

PAGE STRUCTURE — INDENT!

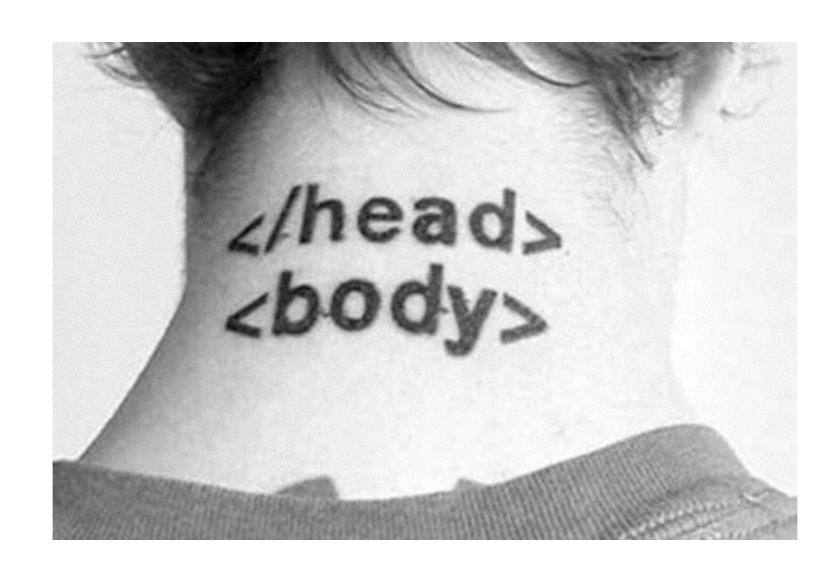
- ▶ It is best practice to indent any tags that are nested inside other tags.
- ▶ This makes our code easier to read and will help us see if we forget a closing tag.
- ▶ Indenting getting out of hand? In Sublime Edit > Line > Reindent

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <title>The Evolution of Denim</title>
</head>
<body>
   <h1>The Evolution of Denim</h1>
   <ul>
       Dark Wash <a href="linkgoeshere">Jeans</a>
       Stone Wash
       Chambray
   </body>
</html>
```

CODE ALONG



HTML STRUCTURE



MORE HTML BASICS

IMAGES

IMAGES - THE IMG ELEMENT

Images are added to the page with the img element

- ▶ Void element Doesn't need a closing tag
- ▶ Two required attributes src and alt



IMAGES

The **src** attribute tells the browser where it can find an image.



Path to the image file

IMAGES

The alt attribute provides a text description of the image that:

- Replaces the image if it doesn't load
- ▶ Is used by screen readers



Text description

LET'S TAKE A CLOSER LOOK

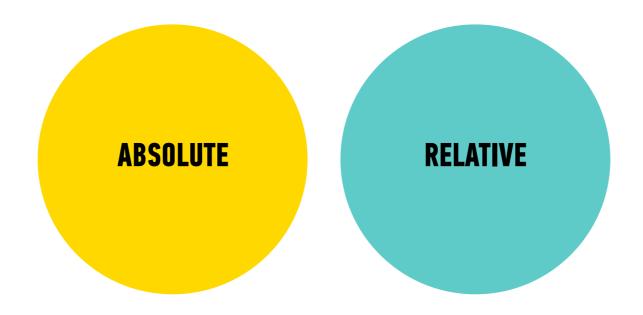


MORE HTML BASICS

URLS

TYPES OF URLS

➤ There are two main types of URLs:



WHEN YOU LINK TO ANOTHER SITE:

- ▶ Value of the href attribute will be the *full web address* for the site
- This is known as the **absolute** URL.

Absolute URL

Amazon

```
<img src="http://i.imgur.com/vKA0ld0.gif" alt="Guess who?">
```

WHEN YOU LINK TO ANOTHER PAGE OR FILE ON THE SAME SITE:

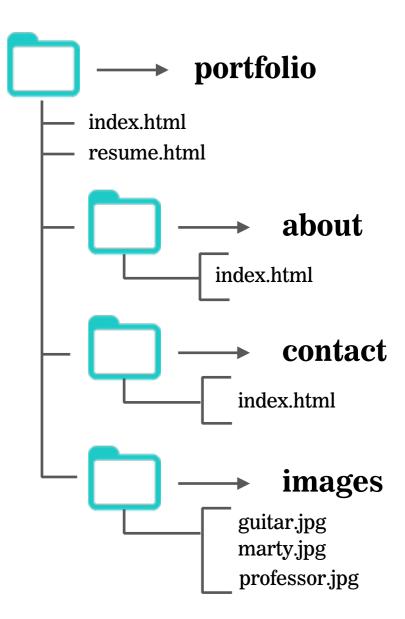
- You don't need to specify a domain name in the URL.
- Use **Relative URL**: indicates where pages are *in relation to the current page*

```
Relative URL

<a href="about.html">About Page</a>
<img scr="images/logo.png" alt="logo">
```

DIRECTORY STRUCTURE

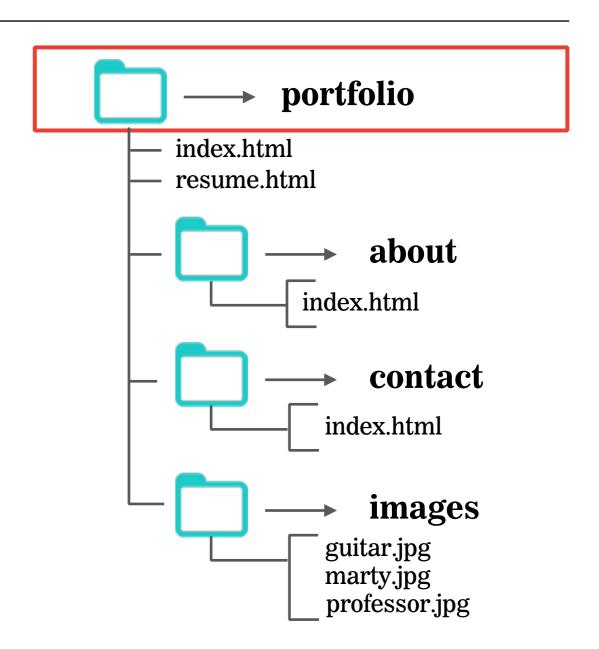
- On larger sites, it's *best practice* to organize code by placing the files for each major section of the site into a new folder
- > These folders are often referred to as directories.



DIRECTORY STRUCTURE — ROOT

The topmost folder is called the **root** folder. It contains all other files and folders for a website.



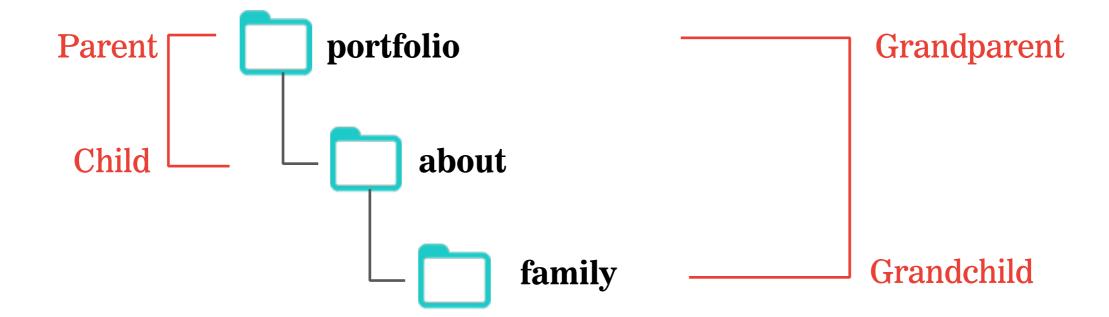


LET'S TAKE A CLOSER LOOK



DIRECTORY STRUCTURE

Relationships between folders can be described using similar language to that of a family tree



RELATIVE URLS — **SAME FOLDER**

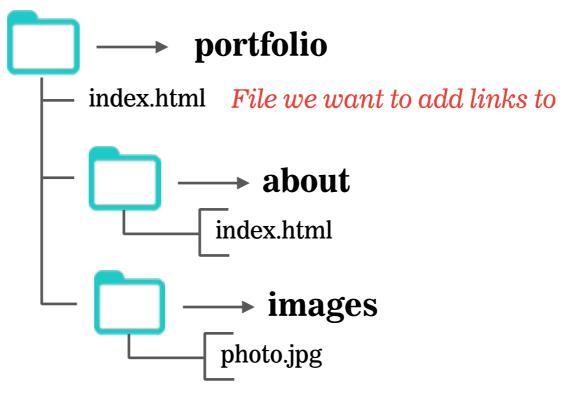


	RELATIVE URL	EXAMPLE	
SAME FOLDER	File name	Info	
		<pre></pre>	

LET'S TAKE A CLOSER LOOK



RELATIVE URLS — CHILD FOLDER



	DESCRIPTION	EXAMPLE	
CHILD	Name of child folder + / + file name	<pre></pre>	
		About	

LET'S TAKE A CLOSER LOOK



ACTIVITY



KEY OBJECTIVE

Practice adding relative URLs to a project

KEY OBJECTIVE

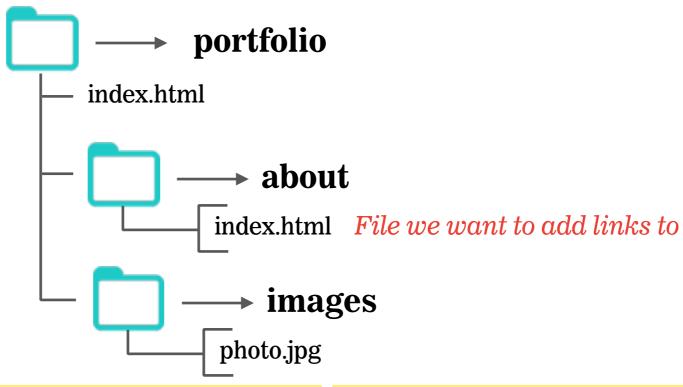
Starter code > Portfolio Folder

TIMING

4 min

- 1. With a partner Follow steps 1 3 in resume.html
- 2. Test in browser!

RELATIVE URLS — CHILD FOLDER



	DESCRIPTION	EXAMPLE	
PARENT	/ + path	Home	
		<pre></pre>	

LET'S TAKE A CLOSER LOOK



ACTIVITY



KEY OBJECTIVE

Practice adding relative URLs to a project

KEY OBJECTIVE

Starter code > Portfolio > Folder

TIMING

4 min

- 1. With a partner Follow steps 1 4 in About > index.html
- 2. Test in browser!

RELATIVE URLS

		DESCRIPTION	EXAMPLE
LOLDER FILE IS IN:	SAME	File name	info.html
	CHILD	Name of child folder + / + file name	people/index.html
	GRANDCHILD	Name of child folder + / + Name of grandchild folder + / + file name	people/culture/index.html
	PARENT	/ + path	/index.html
	GRANDPARENT	// + path	//index.html

Note that ../ means to go up one directory, and can be used repeatedly: ../../ would go up two directories.

FOLDER FILE IS IN:

HTML BASICS

INTRO TO CSS

WHAT IS CSS?



A demonstration of what can be accomplished through CSS-based design. Select any style sheet from the list to load it into this page.

Download the example & HTML FILE and & CSS FILE

THE ROAD TO ENLIGHTENMENT

Littering a dark and dreary road lay the past relics of browser-specific tags, incompatible DOMs, broken CSS support, and abandoned browsers.

We must clear the mind of the past. Web enlightenment has been achieved thanks to the tireless efforts of folk like the W3C, WASP, and the major browser creators.

The CSS Zen Garden invites you to relax and meditate on the important

MID CENTURY MODERN

by Andrew Lohman

GARMENTS

by Dan Mall

STEEL

by Steffen Knoeller

APOTHECARY

by Trent Walton

HTML BASICS

THE BASICS

WHAT IS CSS?

Muir Woods

Keffiyeh next level retro, brunch *sriracha* dreamcatcher mixtape jean shorts XOXO master cleanse keytar **Kickstarter**. Neutra kale chips Vice health goth ethical, flannel single-origin coffee stumptown meditation Kickstarter mumblecore yr cronut master cleanse keytar.

Bushwick sartorial pickled, quinoa church-key before they sold out drinking vinegar put a bird on it readymade organic lumbersexual. Four dollar toast chia *Intelligentsia* YOLO Marfa. Migas raw denim photo booth authentic, roof party shabby chic pop-up flexitarian *skateboard* blog.

Muir Woods

Keffiyeh next level retro, brunch sriracha treamcatcher mixtape jean shorts XOXO master cleanse keytar Kickstarter. Neutra kale chips Vice health goth ethical, flannel single-origin coffee stumptown meditation Kickstarter mumblecore yr cronut master cleanse keytar.

Bushwick sartorial pickled, quinoa church-key before they sold out drinking vinegar put a bird on it readymade organic lumbersexual. Four dollar toast chia *Intelligentsia* YOLO Marfa. Migas raw denim photo booth authentic, roof party shabby chic pop-up flexitarian *skateboard* blog.

WHAT IS CSS?

- CSS is what handles the presentation layer of our webpage.
- CSS allows us to associate style rules with HTML elements.





CSS SYNTAX

Selector

h1¹{

color: yellow;

Declaration

CSS SYNTAX

```
h1 {
       color: yellow;
       font-size: 16px;
```

Property

Value

USING INTERNAL CSS — :(

You can include CSS rules by placing them inside a <style> element, which usually sits inside the <head>.

```
<head>
  <meta charset="UTF-8">
  <title>Visit Big Sur</title>

  <style>
    h1 {
       color: yellow;
    }
  </style>
</head>
```

USING EXTERNAL CSS — :)

- < link> tells browser where to find the CSS file that should be used to style the page.
- Should live inside the <head> of the document.

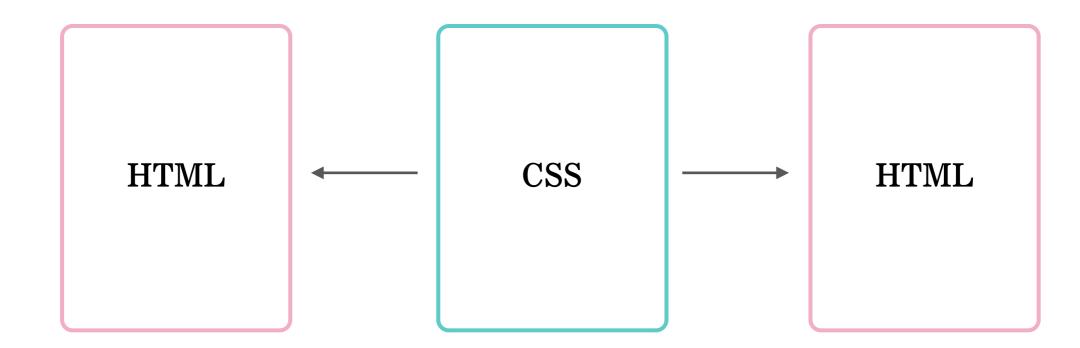
```
<head>
  <meta charset="UTF-8">
    <title>Document</title>
    <link rel="stylesheet" href="css/style.css">
  </head>
```

- **href** path to the CSS file.
- rel relationship between the HTML page and the file it is linked to.

INTERNAL VS. EXTERNAL CSS

BENEFITS OF USING AN EXTERNAL STYLESHEET:

- Multiple pages can use same stylesheet (Don't repeat yourself!)
- Only have to make changes in one file
- Keep content separate from presentation



ACTIVITY



KEY OBJECTIVE

Practice adding relative URLs to a project

KEY OBJECTIVE

Starter code > Portfolio Folder

TIMING

4 min

1. Add link to main.css file in resume.html and about > index.html

INTRO TO CSS

COLOR

COLOR

PROPERTY	VALUE	DESCRIPTION	EXAMPLE
color	color	Text color	color: #22475E;
background-color	color	Background color	background-color: green;

Muir Woods

Keffiyeh next level retro, brunch *sriracha* dreamcatcher mixtape jean shorts XOXO master cleanse keytar **Kickstarter**. Neutra kale chips Vice health goth ethical, flannel single-origin coffee stumptown meditation Kickstarter mumblecore yr cronut master cleanse keytar.

```
body {
  background-color: #22475E;
}
```

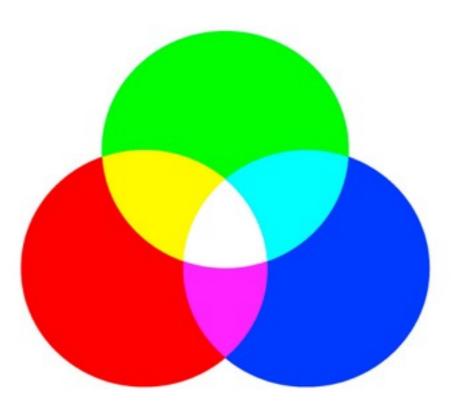
Muir Woods

Keffiyeh next level retro, brunch sriracha dreamcatcher mixtape jean shorts XOXO master cleanse keytar Kickstarter. Neutra kale chips Vice health goth ethical, flannel single-origin coffee stumptown meditation Kickstarter mumblecore yr cronut master cleanse keytar.

```
h1, p {
  color: #98D2BF;
}
```

COLOR

• Every color on a computer screen is created by mixing amounts of red, green, and blue



COLOR

RGB VALUES

▶ Values for red, green and blue are expressed as numbers between 0 and 255

```
rgb(72, 209, 204)
```

HEX CODES

Represent values for red, green and blue in hexadecimal (base 16) code

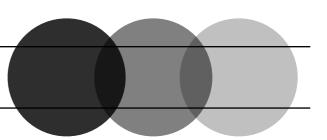
```
#48D1CC
```

COLOR NAMES

Colors are represented by predefined names. They are not used very much but are helpful for basic colors such as black and white. Full list of color names

MediumTurquoise

OPACITY



RGBA

- ▶ RGBA works the same as RGB, except that it takes a 4th value called 'alpha'.
- This is a value between 0 and 1 which can be used to determine a color's opacity on the page.



LET'S TAKE A CLOSER LOOK



ACTIVITY



KEY OBJECTIVE

▶ Use CSS to add basic styles to an HTML page.

TIMING

3 min

- 1. (together) Add a link to the style.css file
- 2. Open starter_code > css_practice > index.html
- 3. Follow the instructions under Part 1

INTRO TO CSS

TYPE

TYPEFACE TERMINOLOGY — PART 1

PROPERTY	VALUES	EXAMPLE
text-align	left, center, right, justify	text-align: center;
text-transform	UPPERCASE, lowercase, Capitalize	text-transform: uppercase;
text-decoration	none, <u>underline</u>	text-decoration: underline;
line-height	number, px value	line-height: 22px;

TYPEFACE TERMINOLOGY — PART 2

PROPERTY	VALUES	EXAMPLE
font-weight	normal, bold	font-weight: bold;
font-style	regular, italic	font-style: italic;
font-family	sans-serif, serif	font-family: serif;
font-size	px value	font-size: 20px;

FONT-FAMILY

- If we want to use a specific system font, the user will <u>need to have it installed on their</u> computer for the font to show up.
- We can provide a comma-separated list with our preferred font-family, followed by "fallback" fonts.
- ▶ We usually want to end this list with either 'serif' or 'sans-serif'.

```
h1 {
  font-family: Arial, Verdana, sans-serif;
}
```

SOME COMMON SYSTEM FONTS:

- Georgia
- orgia Arial
- Times

Verdana

Times New Roman

Helvetica

^{*}We'll take a look at how we can extend our font options by using a web font next week

ACTIVITY



KEY OBJECTIVE

▶ Use CSS to add basic styles to an HTML page.

TIMING

3 min

- 1. Refer back to starter_code > css_practice > index.html
- 2. Follow the instructions under Part 2

HTML BASICS

CASCADING STYLE SHEETS

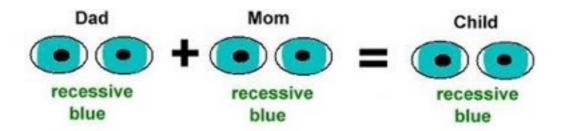
HOW CSS RULES CASCADE

- Cascading Style Sheets
- Cascade: CSS rules are able to override one another and cancel each other out, depending on their order. In other words, the rules are able to cascade downward until they are canceled out by another rule.

LAST RULE

If the two selectors are identical, the latter will take precedence

INHERITANCE



- Inheritance in CSS is how certain properties are passed on from a parent element down to its children
- If you specify the font-family or color properties on the <body> element, they will apply child elements. This is because the font-family property is inherited by child elements.
- Not all properties are inherited. For example, it wouldn't make sense for the border to be inherited since it's unlikely that a child element should need the same border as its parent.

ACTIVITY



KEY OBJECTIVE

 Practice using CSS by styling Marty McFly's Resume page

TIMING

Until 9:20

- 1. Review supplied .pngs in marty_mcfly folder
- 2. (together) project set up
- 3. Style Marty's About Me and Resume pages

HTML BASICS

LEARNING OBJECTIVES

- Apply relative paths to and <a> tags.
- Differentiate between basic web color principles: RGB, RGBA, hex.
- Use CSS to add basic styles to an HTML page.

WEEKLY OVERVIEW

WEEK 1 **HTML Basics** WEEK 2 CSS Basics / CSS Box Model WEEK 3 CSS Layout / Lab

CSS BASICS

HOMEWORK

HOMEWORK

Read through the homework specs on the FEWD 47 Dashboard

HIGHLY RECOMMENDED COURSE MATERIALS:

Jon Duckett - Web Design with HTML, CSS, JavaScript and jQuery Set



SNACK CALENDAR

SIGN UP HERE

HTML BASICS

EXIT TICKETS

Bookmark this link!

Fill it out here