#### LET'S GET EVERYTHING SET UP!

- 1. Navigate to the FEWD 45 Dashboard (<u>saraheholden.com/fewd45/</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 45 Slack (fewd45.slack.com) and join the class2 channel.

#### **WEEKLY OVERVIEW**

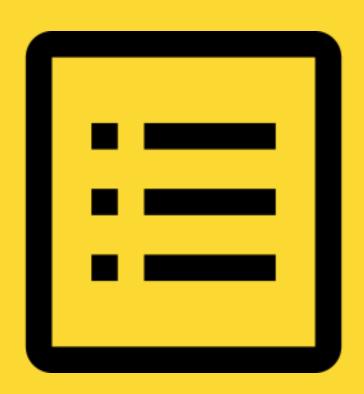
WEEK 1 HTML Basics / CSS Basics WEEK 2 CSS Box Model / CSS Layout **WEEK 3** Lab / Bootstrap

#### **HTML BASICS**

### **LEARNING OBJECTIVES**

- Predict image paths and apply relative paths to <img> and <a> tags.
- Differentiate between basic web color principles: RGB, RGBA, hexadecimal color.
- Use CSS to add basic styles to an HTML page.

#### **AGENDA**



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



#### **FEWD**

## QUESTIONS

#### **EXIT TICKET QUESTIONS**

- ▶ I would like to better understand how this shows up on the web eventually.
- ▶ How do we code relative links?
- More shortcuts for later on
- ▶ Shortcuts to detect any errors: CSS Validator, HTML Validator

#### **EXIT TICKET QUESTIONS**

▶ How do we submit assignments?

**FEWD** 

# REVIEW

#### HTML SYNTAX — TAGS

Opening tag

Closing tag

<tag name>content</tag name>

Element

#### HTML SYNTAX — ATTRIBUTES

Attribute Name

Attribute Value

#### **ACTIVITY**



#### **KEY OBJECTIVE**

Review HTML Tags

#### **TIMING**

15 *min* 

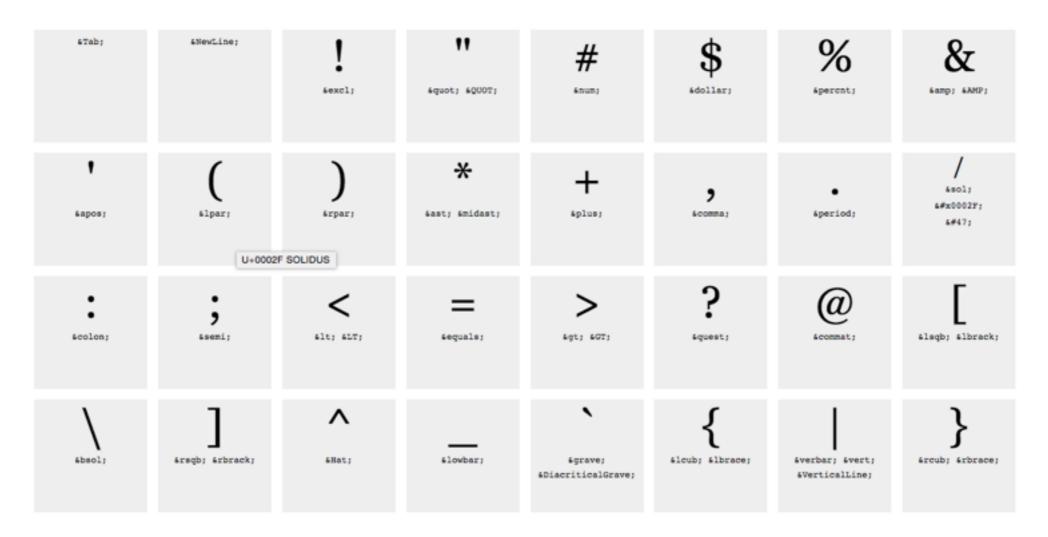
- 1. Look at review.png in homework > wendy\_bite folder.
- 2. Add markup to the text in homework > wendy\_bite > index.html
- 3. Google and implement <nav> <img> and <hr> tags.

#### **NAVIGATION AND HR**

ELEMENT	DESCRIPTION	EXAMPLE
nav	Contains navigational links. For major navigational blocks.	<pre><nav>      <a href="about.html">About</a>      <a href="contact.html">Contact</a> </nav></pre>
hr	Horizontal rule	He said, <q>Go for it!</q>

#### **HTML ENTITY CODES**

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



#### **FEWD**

### MORE HTML BASICS

#### **HTML BASICS**

### SEMANTIC MARKUP

#### **SEMANTIC TAGS** — **STRONG**, **EM**

ELEMENT	DESCRIPTION	EXAMPLE
strong	Strong Importance	Do <strong>not</strong> walk
em	Emphasis	I <em>think</em> Bill went.

- Default browser styles: **strong will be bold** and *em will be italic*
- <em> indicates emphasis that may *subtly change* the meaning of a sentence:

I think John was there

I think John was there

#### **MORE HTML BASICS**

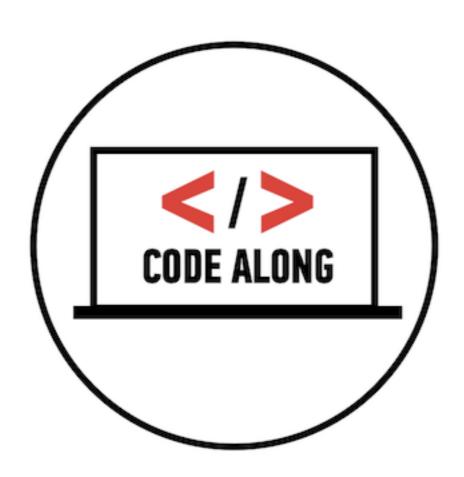
## HTML STRUCTURE

#### 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>
```

#### **CODE ALONG**



#### 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

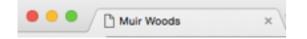
- Required
- Goes inside of head tags

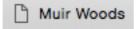
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Document</title>
</head>
<body>
</body>
</html>
```

#### 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

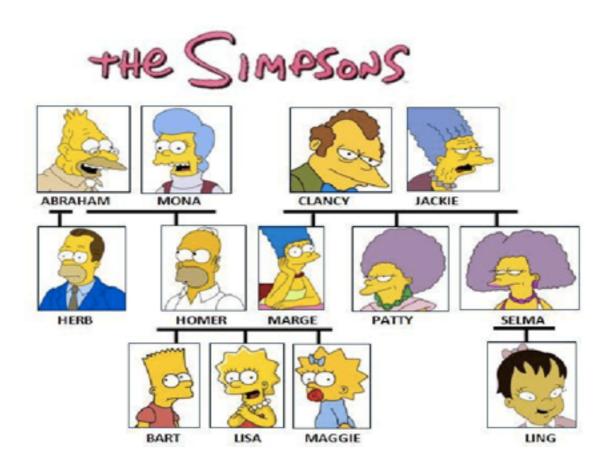
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Document</title>
</head>
<body>
</body>
</html>
```

- ▶ 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.

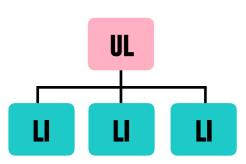
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>The Evolution of Denim</title>
</head>
<body>
   <h1>The Evolution of Denim</h1>
   <l
       Dark Wash <a href="linkgoeshere">Jeans</a>
       Stone Wash
       Chambray
   </body>
</html>
```

#### 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.

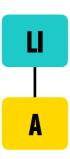


- ▶ Here we can say that our is the **parent** of our s
- ▶ We can also say that our s are children of the



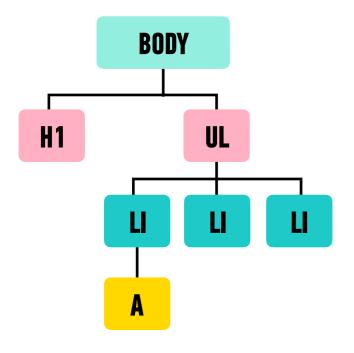
```
<!DOCTYPF html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>The Evolution of Denim</title>
</head>
<body>
   <h1>The Evolution of Denim</h1>
  <l
       Dark Wash <a href="linkgoeshere">Jeans</a>
       Stone Wash
       Chambray
   </body>
</html>
```

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

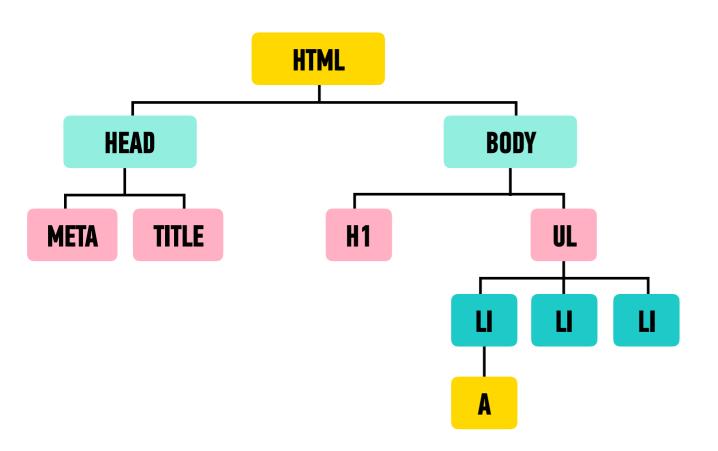
• Similarly, we can say that all of our HTML content, our h1, our ul, our li elements, are "wrapped" by the body, or "nested" inside the body since they are within the opening and closing body tags



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.

#### **KEY OBJECTIVE**

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!

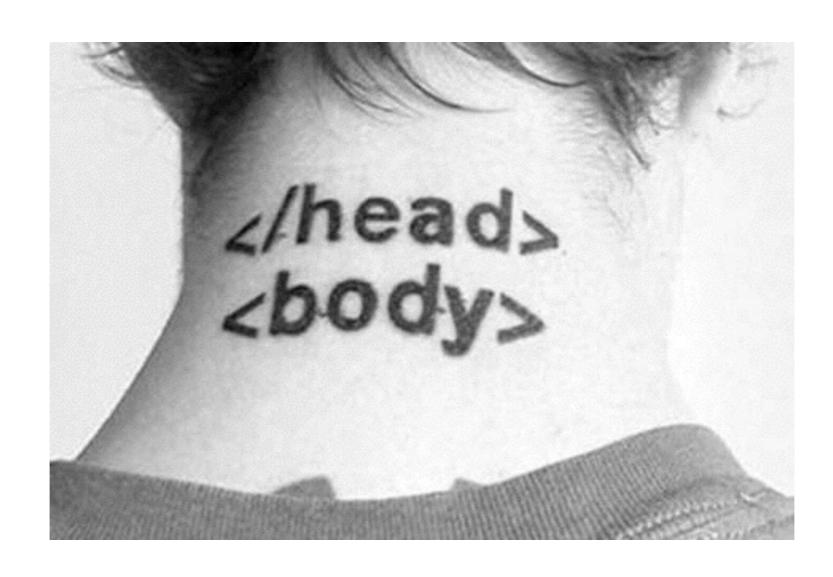
- ▶ It is best practice to indent any tags that are nested inside other tags.
- ▶ This makes our code easier to read and will help us see if we forget a closing tag.
- ▶ Indenting getting out of hand? In Sublime Edit > Line > Reindent

```
<!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



<img src="images/camera.jpg" alt="Girl holding a camera" />

#### **IMAGES**

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



Path to the image file

<img src="images/camera.jpg" alt="Girl holding a camera" />

### **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

<img src="images/camera.jpg" alt="Girl holding a camera" />

# **LET'S TAKE A CLOSER LOOK**

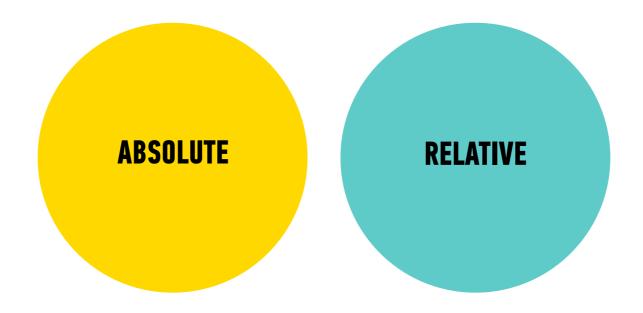


# **MORE HTML BASICS**

# URLS

# **TYPES OF URLS**

➤ There are two main types of URLs:



#### **LINKING TO OTHER SITES - ABSOLUTE URLS**

**ABSOLUTE** 

#### 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

<a href="http://www.amazon.com">Amazon</a>

<img src="http://saraheholden.com/img/aboutPhoto.jpg" alt="Profile Pic>

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

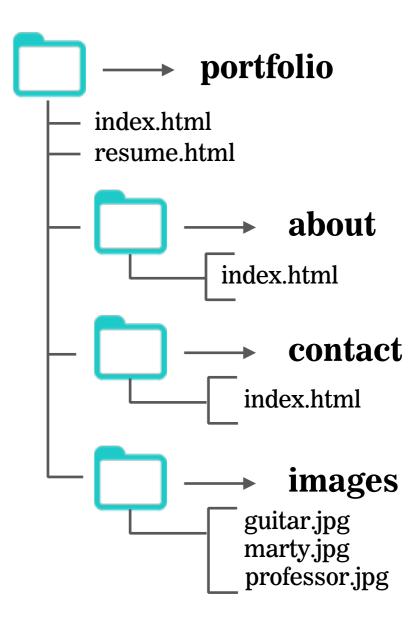
- You don't need to specify a domain name in the URL.
- Use **Relative URL:** indicates where pages are *in relation to the current page*

<a href="about.html">About Page</a>

<img scr="images/logo.png" alt="logo">

#### **DIRECTORY STRUCTURE**

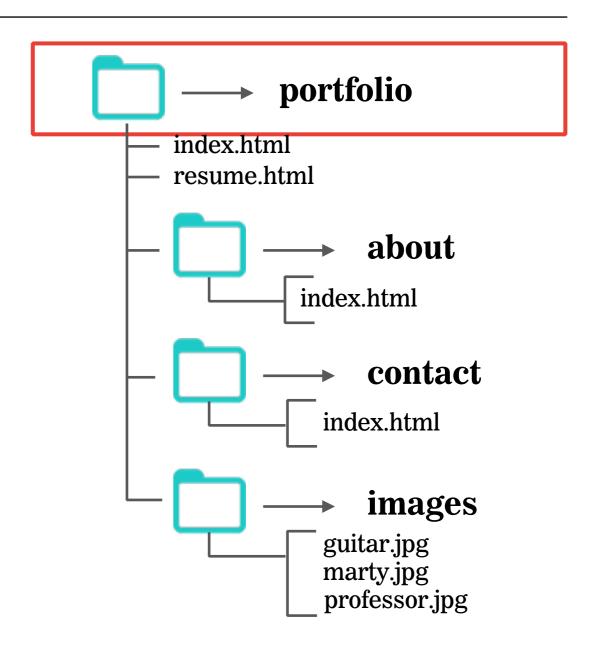
- On larger sites, it's *best practice* to organize code by placing the files for each major section of the site into a new folder
- These folders are often referred to as directories.



#### **DIRECTORY STRUCTURE** — ROOT

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



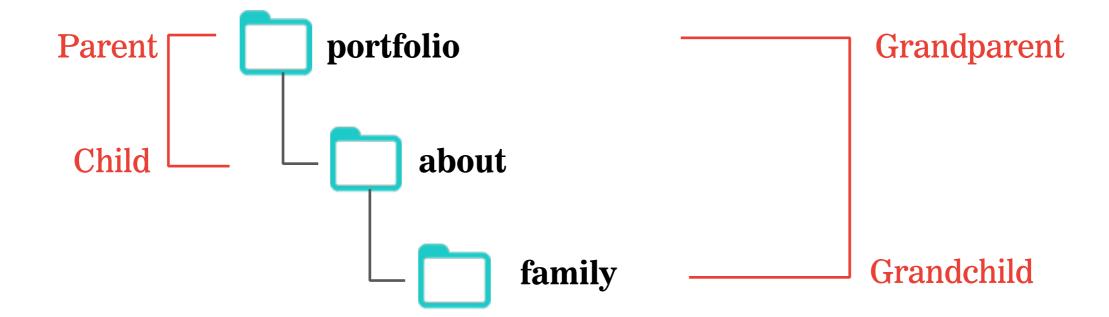


# **LET'S TAKE A CLOSER LOOK**



#### **DIRECTORY STRUCTURE**

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



## **RELATIVE URLS** — **SAME FOLDER**

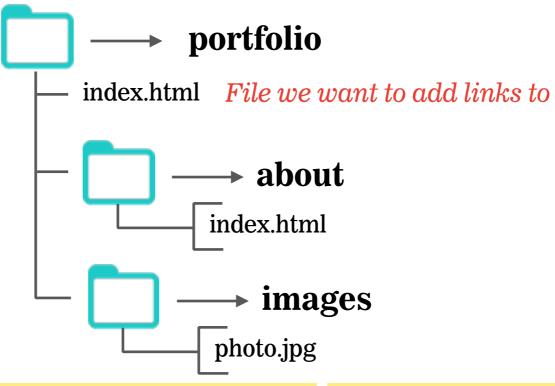


	RELATIVE URL	EXAMPLE
SAME FOLDER	File name	<a href="info.html">Info</a>
		<pre><img alt="" src="photo.jpg"/></pre>

# **LET'S TAKE A CLOSER LOOK**



## RELATIVE URLS — CHILD FOLDER



DESCRIPTION		EXAMPLE	
CHILD	Name of child folder + / + file name	<pre><img src="images/photo.jpg"/></pre>	
		<a href="about/index.html">About</a>	

# **LET'S TAKE A CLOSER LOOK**



# **ACTIVITY**



#### **KEY OBJECTIVE**

Practice adding relative URLs to a project

#### **KEY OBJECTIVE**

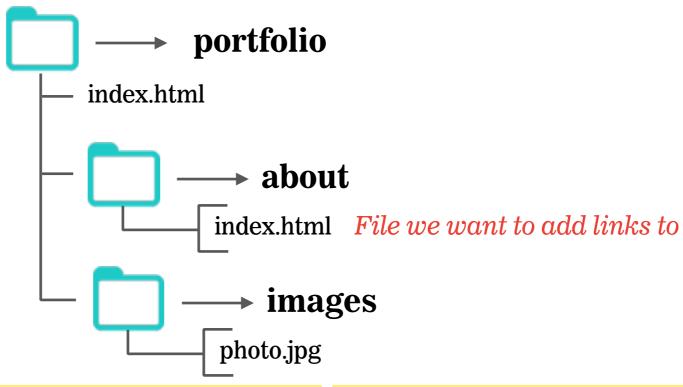
Starter code > Portfolio Folder

#### **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	<a href="/index.html">Home</a>
		<pre><img src="/images/photo.ipg"/></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 3 in resume.html
- 2. Test in browser!

## **RELATIVE URLS**

		DESCRIPTION	EXAMPLE
I OLDEN FILL 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

h1<sup>1</sup>{

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.

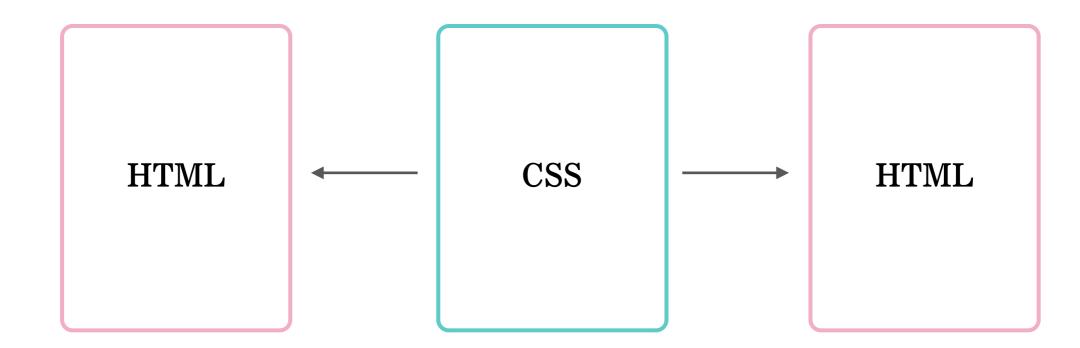
```
<head>
  <meta charset="UTF-8">
    <title>Document</title>
    <link rel="stylesheet" href="css/style.css">
  </head>
```

- **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;
}
```

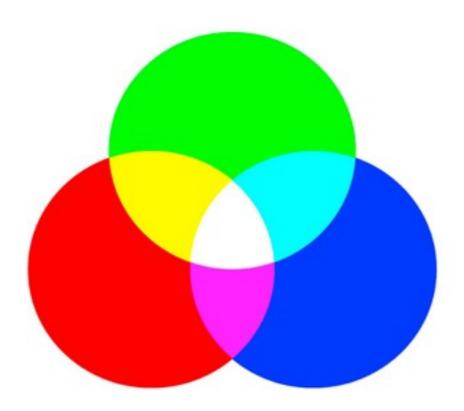
#### **Muir Woods**

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

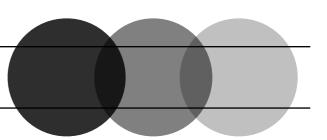
```
#48D1CC
```

### **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

<sup>\*</sup>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

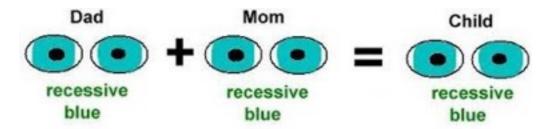
### **HOW CSS RULES CASCADE**

- 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.
- You can force a lot of properties to inherit values from their parent elements by using 'inherit' for the value of the properties.

### **ACTIVITY**



#### **KEY OBJECTIVE**

 Practice using CSS by styling Wendy Bite's Resume page

#### **TIMING**

Until 9:20

- 1. Review supplied .pngs starting with Lab...
- 2. (together) project set up
- 3. Style Wendy's About Me and Resume pages

### **HTML BASICS**

### **LEARNING OBJECTIVES**

- Predict image paths and apply relative paths to <img> and <a> tags.
- Differentiate between basic web color principles: RGB, RGBA, hexadecimal color.
- Use CSS to add basic styles to an HTML page.

### **WEEKLY OVERVIEW**

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

### **CSS BASICS**

## HOMEWORK

### **HOMEWORK**

Read through the homework specs on the FEWD 45 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

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