

---

# LET'S GET EVERYTHING SET UP!

---

1. Open your Terminal
  2. Go to your FEWD-52 folder: `cd ~/Desktop/fewd/FEWD-52`
  3. Download the new material: `git pull`
  4. Open the FEWD-52 folder in finder
  5. Drag it to your Sublime Text icon to open it, also open your homework in Sublime and in Chrome
  6. Also... Please sign the attendance sheet.
-

---

GA GENERAL ASSEMBLY

---

# CSS BASICS

*Alex White*



---

## HTML SYNTAX — TAGS

---

Opening tag

Closing tag



The diagram illustrates the structure of an HTML element. It features the text `<tag name>content</tag name>` in a large, monospaced font. The opening tag `<tag name>` and the closing tag `</tag name>` are colored pink, while the content `content` is colored yellow. Above the opening tag, a bracket labeled "Opening tag" spans its width. Above the closing tag, a bracket labeled "Closing tag" spans its width. Below the entire sequence, a large bracket labeled "Element" spans the full width of the code.

```
<tag name>content</tag name>
```

Element

# SEMANTIC MARKUP

---

## SEMANTIC TAGS — STRONG, EM

---

ELEMENT	DESCRIPTION	EXAMPLE
strong	Strong Importance	<code>&lt;p&gt;Do &lt;strong&gt;not&lt;/strong&gt; walk&lt;/p&gt;</code>
em	Emphasis	<code>&lt;p&gt;I &lt;em&gt;think&lt;/em&gt; Bill went.&lt;/p&gt;</code>

- 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 — 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.

## BEST PRACTICES:

- 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

## BEST PRACTICES:

- 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

## BEST PRACTICES:

- Required
- Goes inside of head tags

```
<!DOCTYPE html>

<html lang="en">

<head>
  <meta charset="UTF-8">
  <title>Document</title>
</head>

<body>

</body>

</html>
```

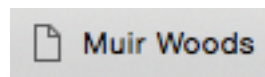
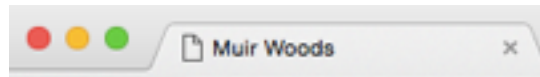
---

# HTML STRUCTURE — TITLE

---

## DESCRIPTION:

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



## BEST PRACTICES:

- 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>`, `<p>`, etc.

## BEST PRACTICES:

- 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>
```

---

## PAGE STRUCTURE — NESTING

---

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

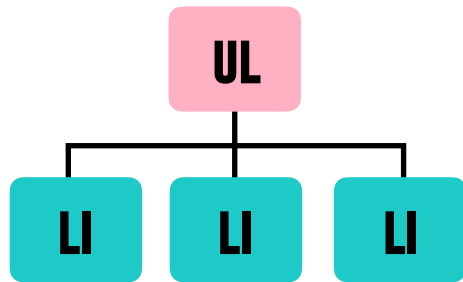
```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>The Evolution of Denim</title>
</head>
<body>
  <h1>The Evolution of Denim</h1>
  <ul>
    <li>Dark Wash <a href="linkgoeshere">Jeans</a></li>
    <li>Stone Wash</li>
    <li>Chambray</li>
  </ul>
</body>
</html>
```

---

## PAGE STRUCTURE — NESTING

---

- ▶ Here we can say that our `<ul>` is the **parent** of our `<li>`s
- ▶ We can also say that our `<li>`s are **children** of the `<ul>`

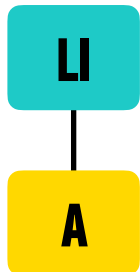


```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>The Evolution of Denim</title>
</head>
<body>
  <h1>The Evolution of Denim</h1>
  <ul>
    <li>Dark Wash <a href="linkgoeshere">Jeans</a></li>
    <li>Stone Wash</li>
    <li>Chambray</li>
  </ul>
</body>
</html>
```



## PAGE STRUCTURE — NESTING

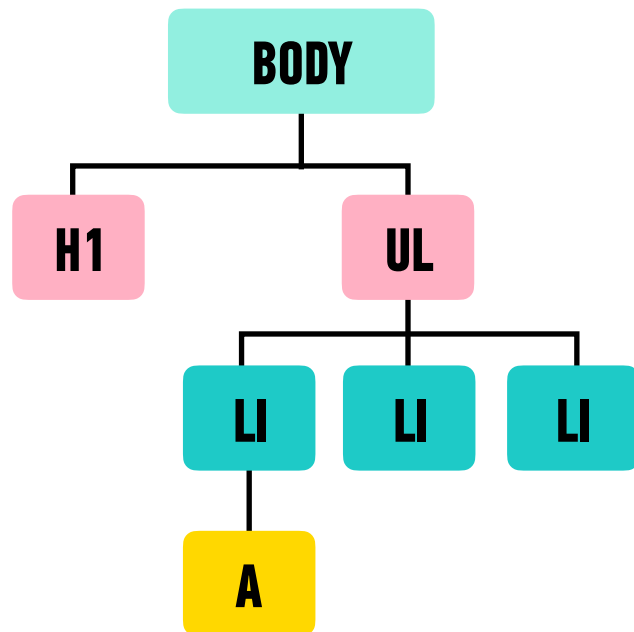
- ▶ Similarly, we can have an `<a>` tag that is nested inside, or wrapped by, our `<li>` element.



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

## PAGE STRUCTURE — NESTING

- ▶ 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

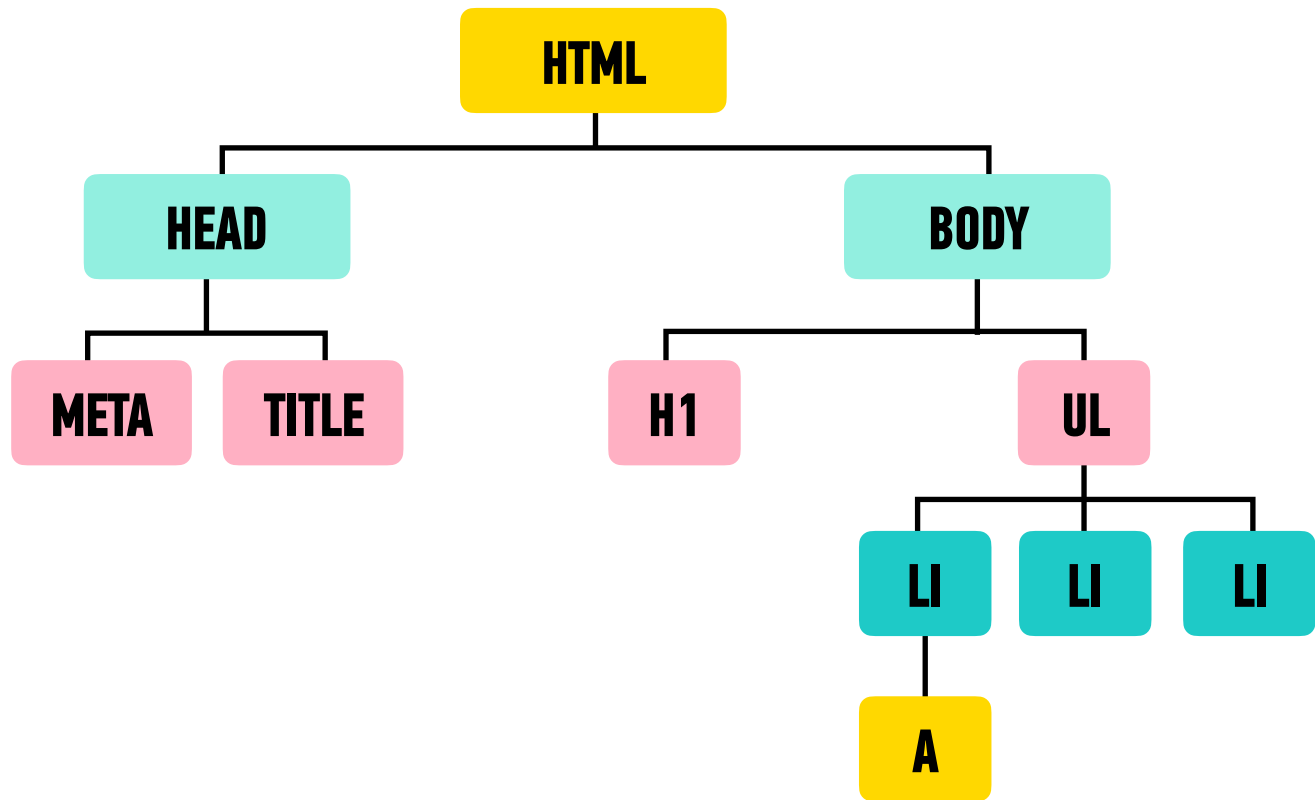


body

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

HTML

# DOM TREE



```
<!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>
    <li>Dark Wash <a href="linkgoeshere">Jeans</a></li>
    <li>Stone Wash</li>
    <li>Chambray</li>
  </ul>
</body>
</html>
```

# ACTIVITY

---



## EXERCISE

### 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?

---

**MORE HTML REVIEW**

---

# 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 **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

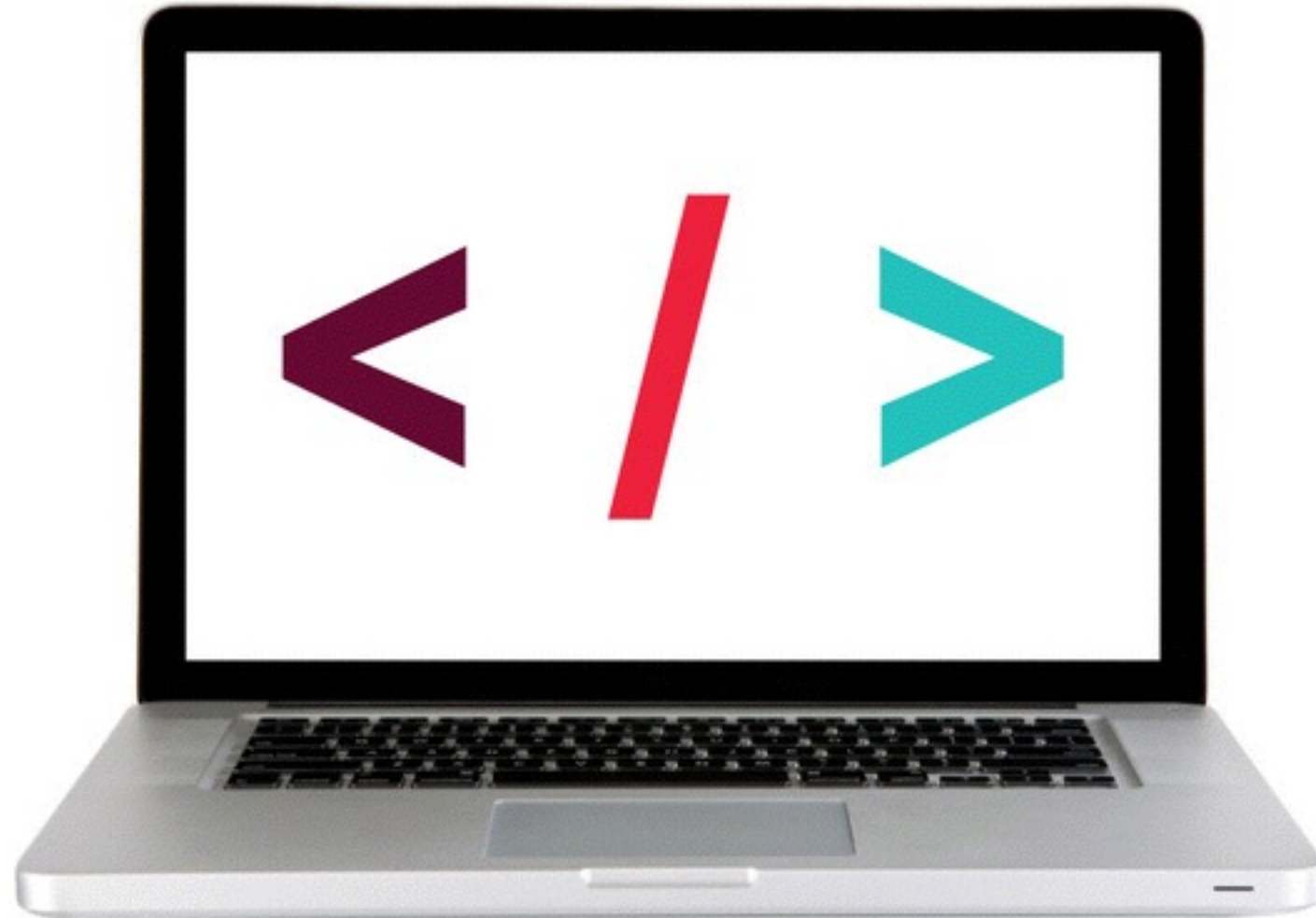
```

```

---

## LET'S TAKE A CLOSER LOOK

---



---

**MORE HTML REVIEW**

---

# URLS

---

## TYPES OF URLS

---

- There are two main types of URLs:



**ABSOLUTE**



**RELATIVE**

---

## 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

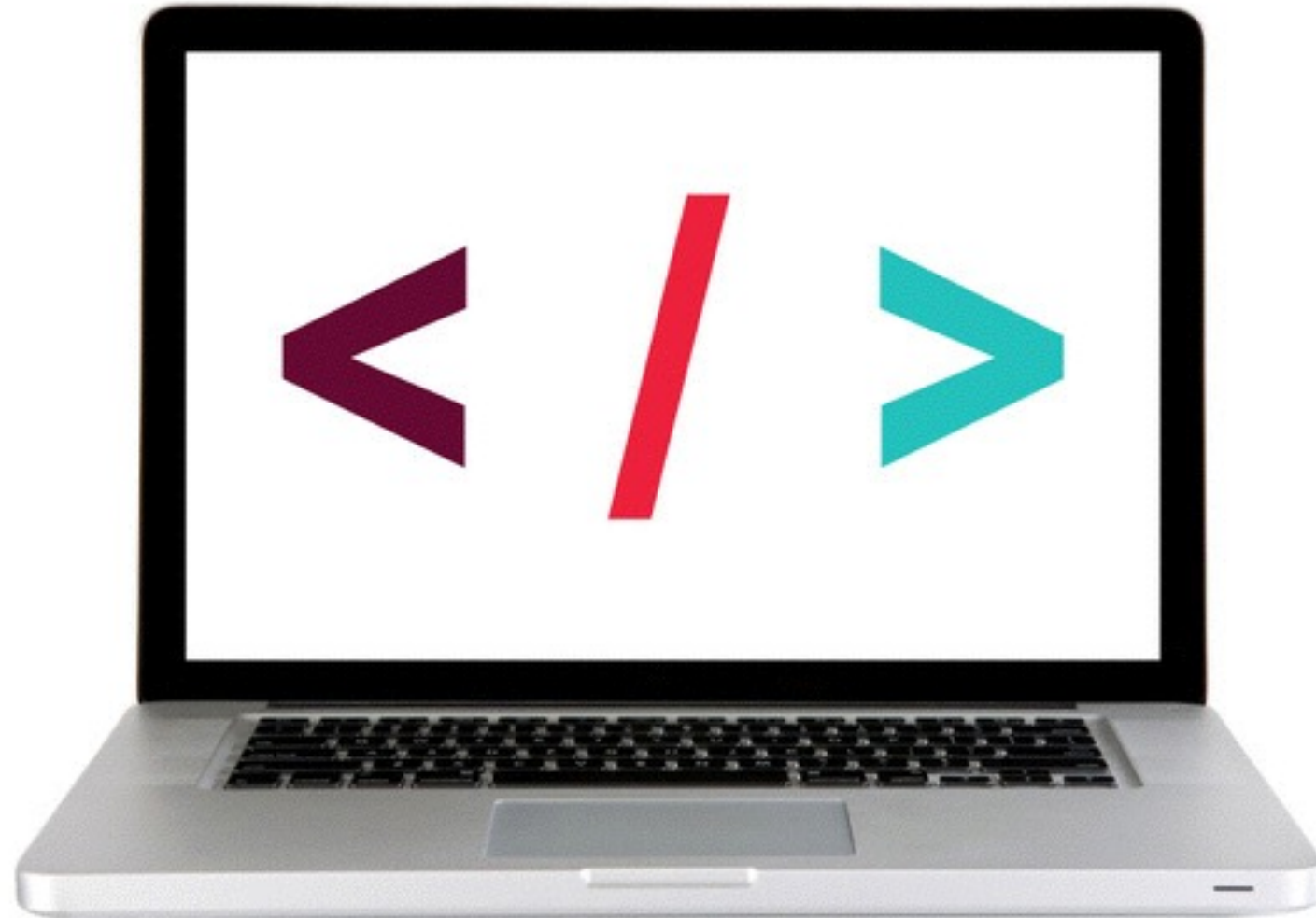
  
<a href="http://www.amazon.com">Amazon</a>



---

## LET'S TAKE A CLOSER LOOK

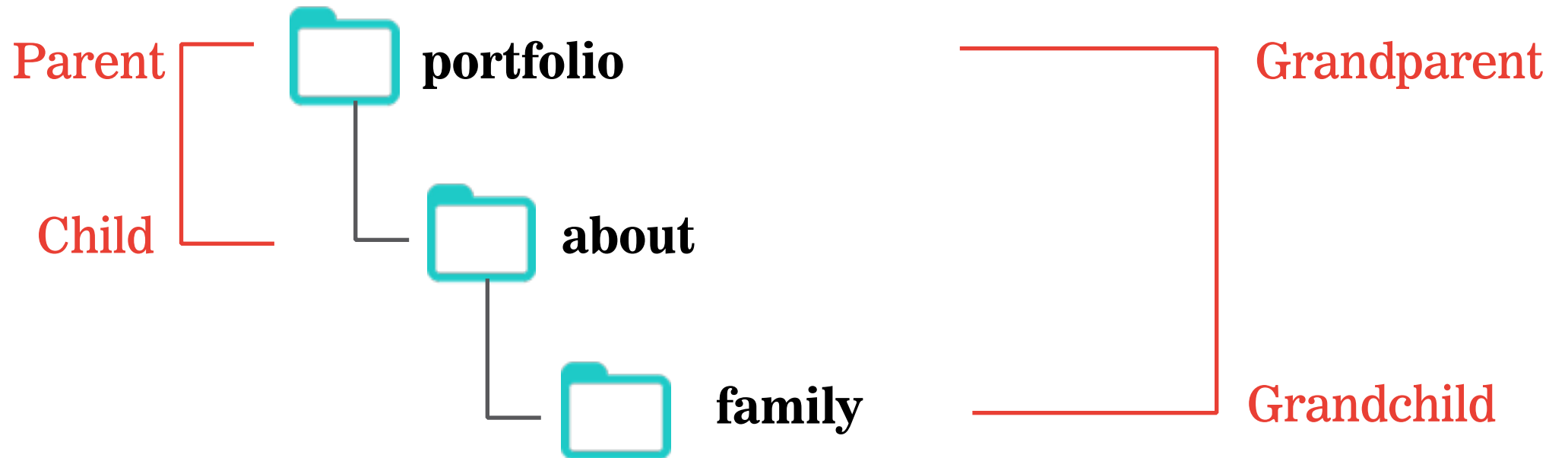
---





## DIRECTORY STRUCTURE

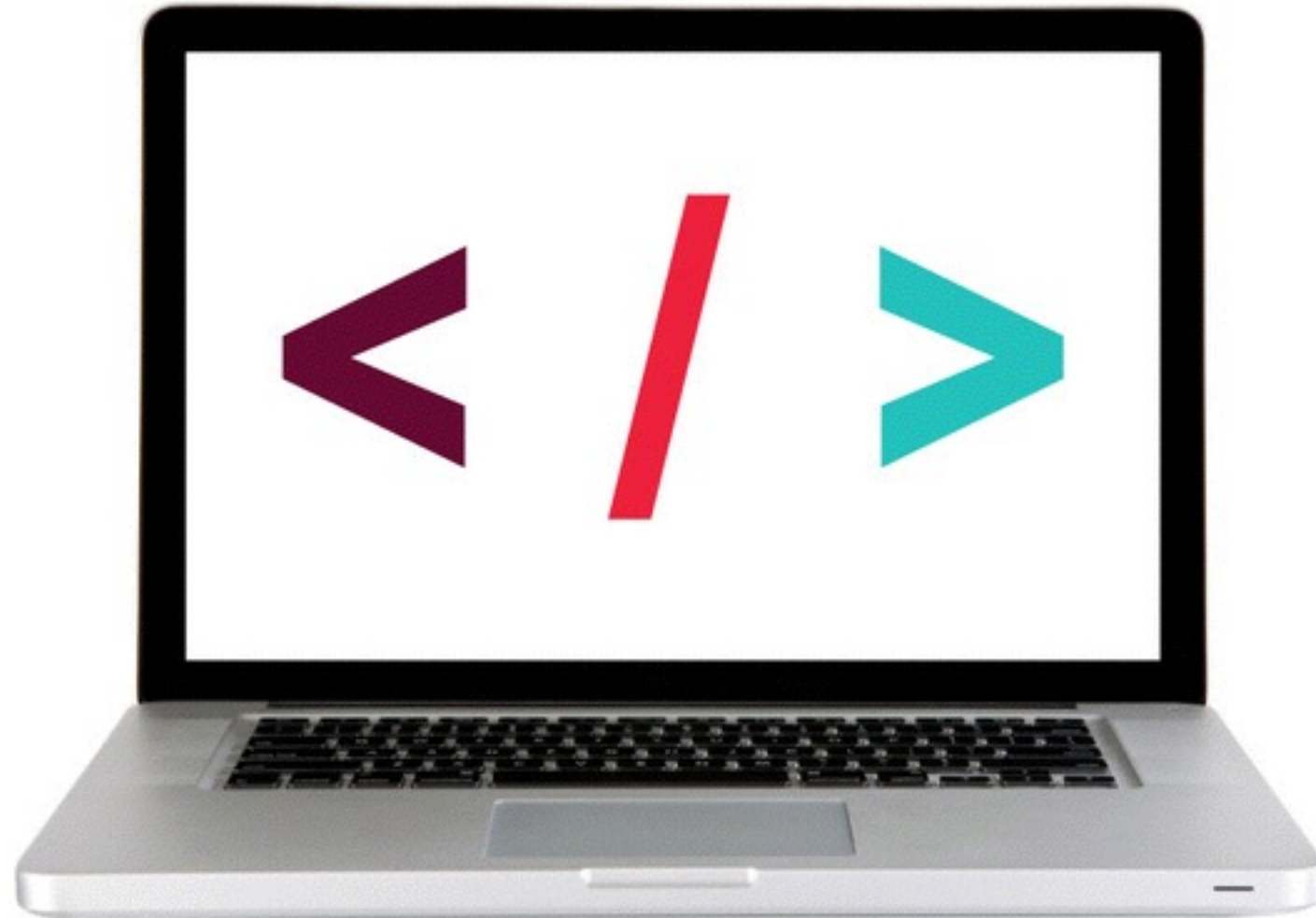
- Relationships between folders can be described using similar language to that of a family tree



---

## LET'S TAKE A CLOSER LOOK

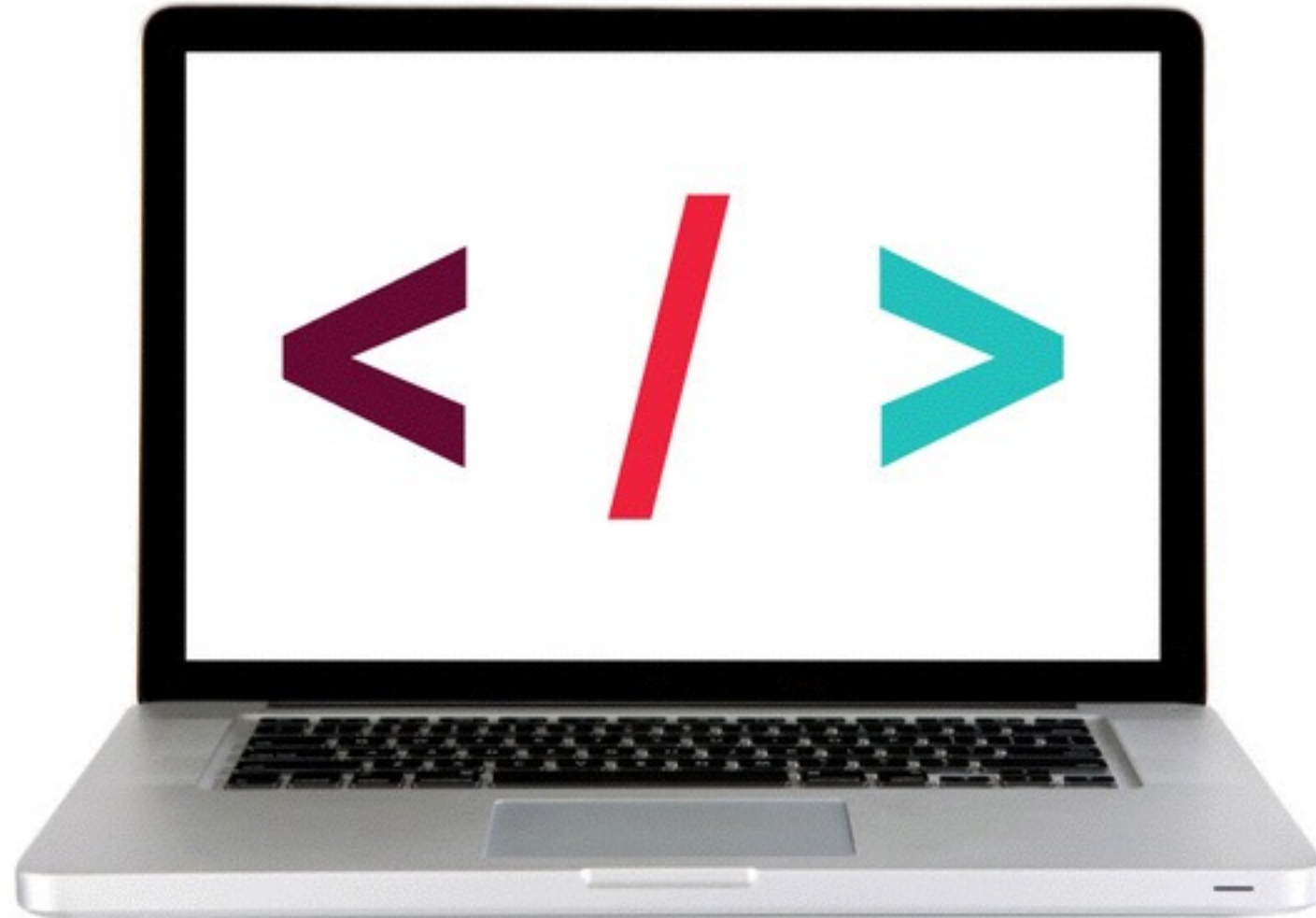
---



---

## LET'S TAKE A CLOSER LOOK

---



# ACTIVITY

---



## EXERCISE

### **KEY OBJECTIVE**

---

- Practice adding relative URLs to a project

### **KEY OBJECTIVE**

---

- Starter code > Portfolio Folder

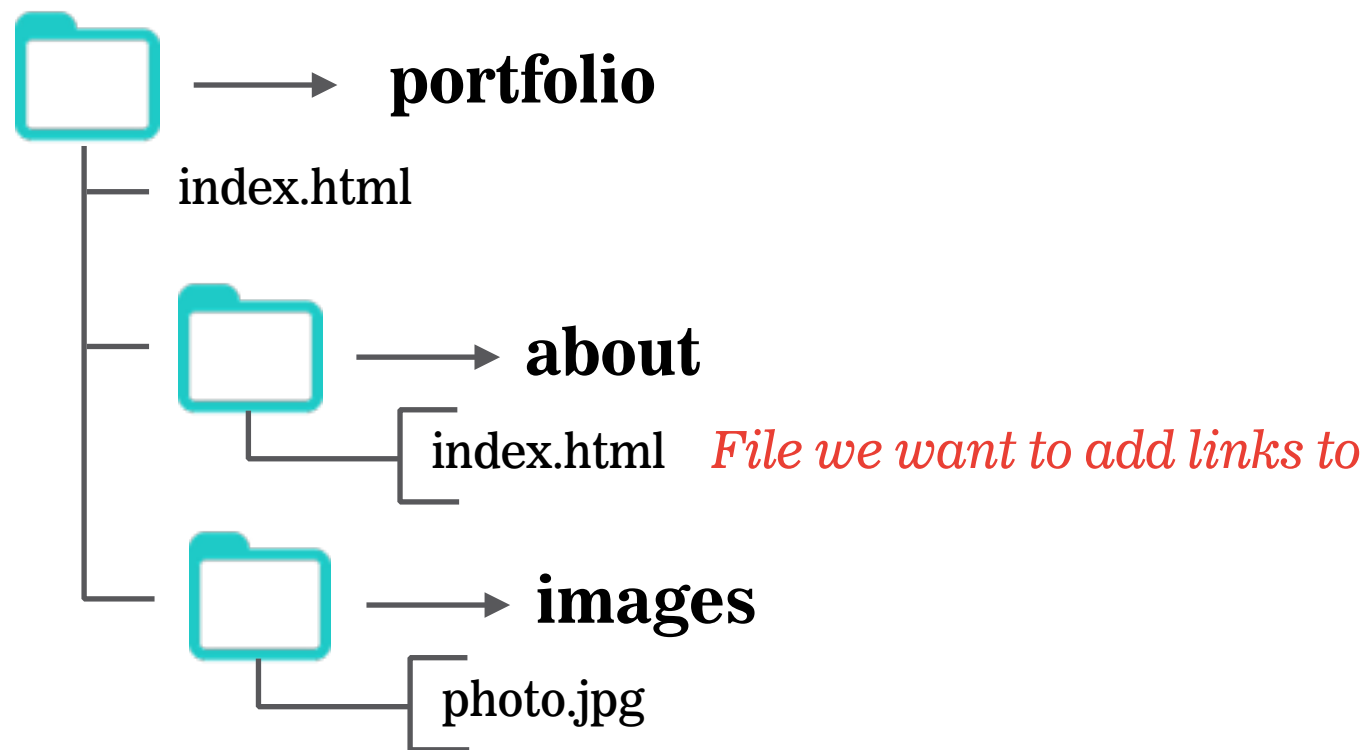
### **TIMING**

---

*4 min*

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

# RELATIVE URLS — CHILD FOLDER

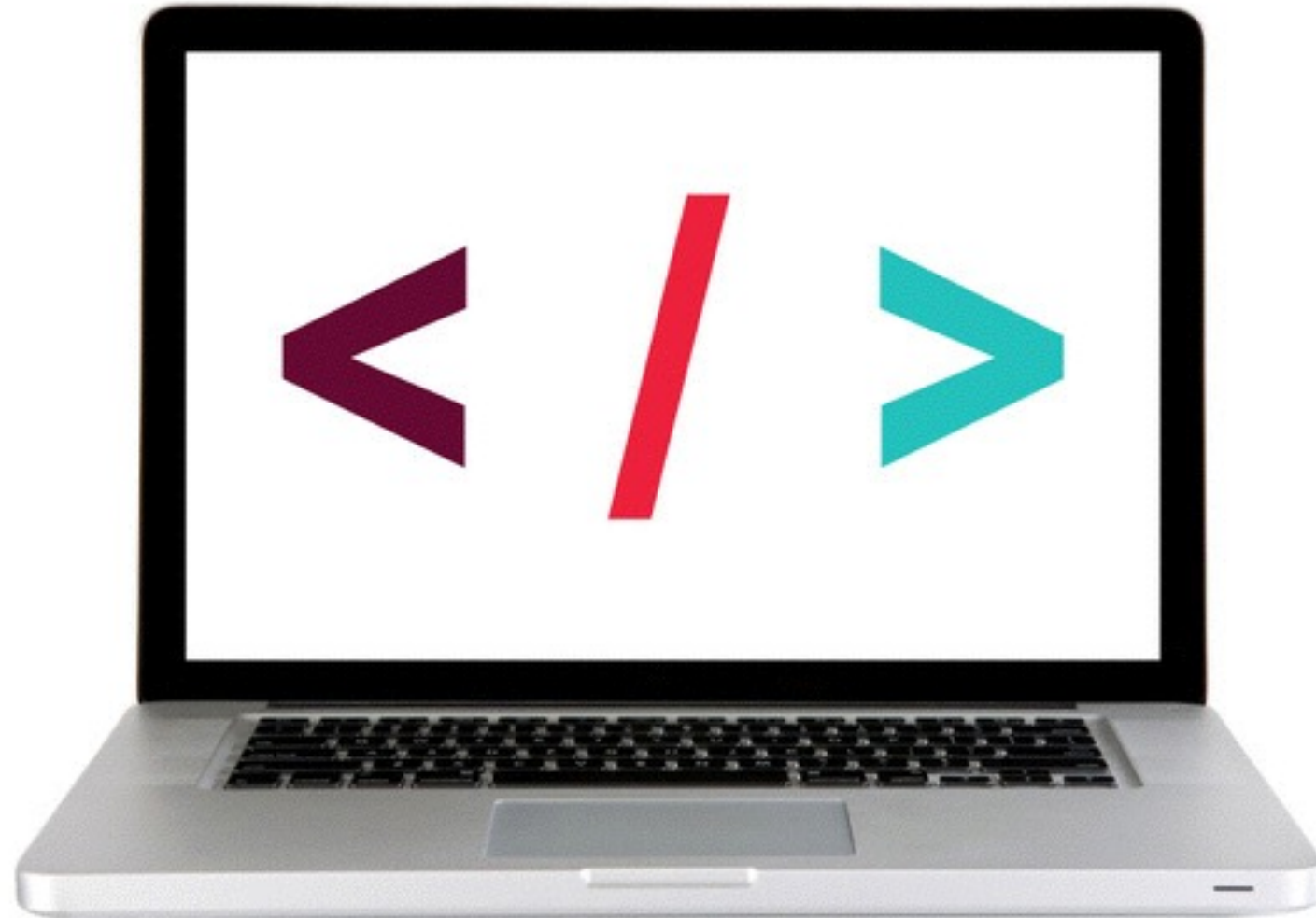


	DESCRIPTION	EXAMPLE
PARENT	../ + path	<a href="../index.html">Home</a>

---

## LET'S TAKE A CLOSER LOOK

---





# ACTIVITY

---



## EXERCISE

### **KEY OBJECTIVE**

---

- Practice adding relative URLs to a project

### **KEY OBJECTIVE**

---

- Starter code > Portfolio Folder

### **TIMING**

---

*4 min*

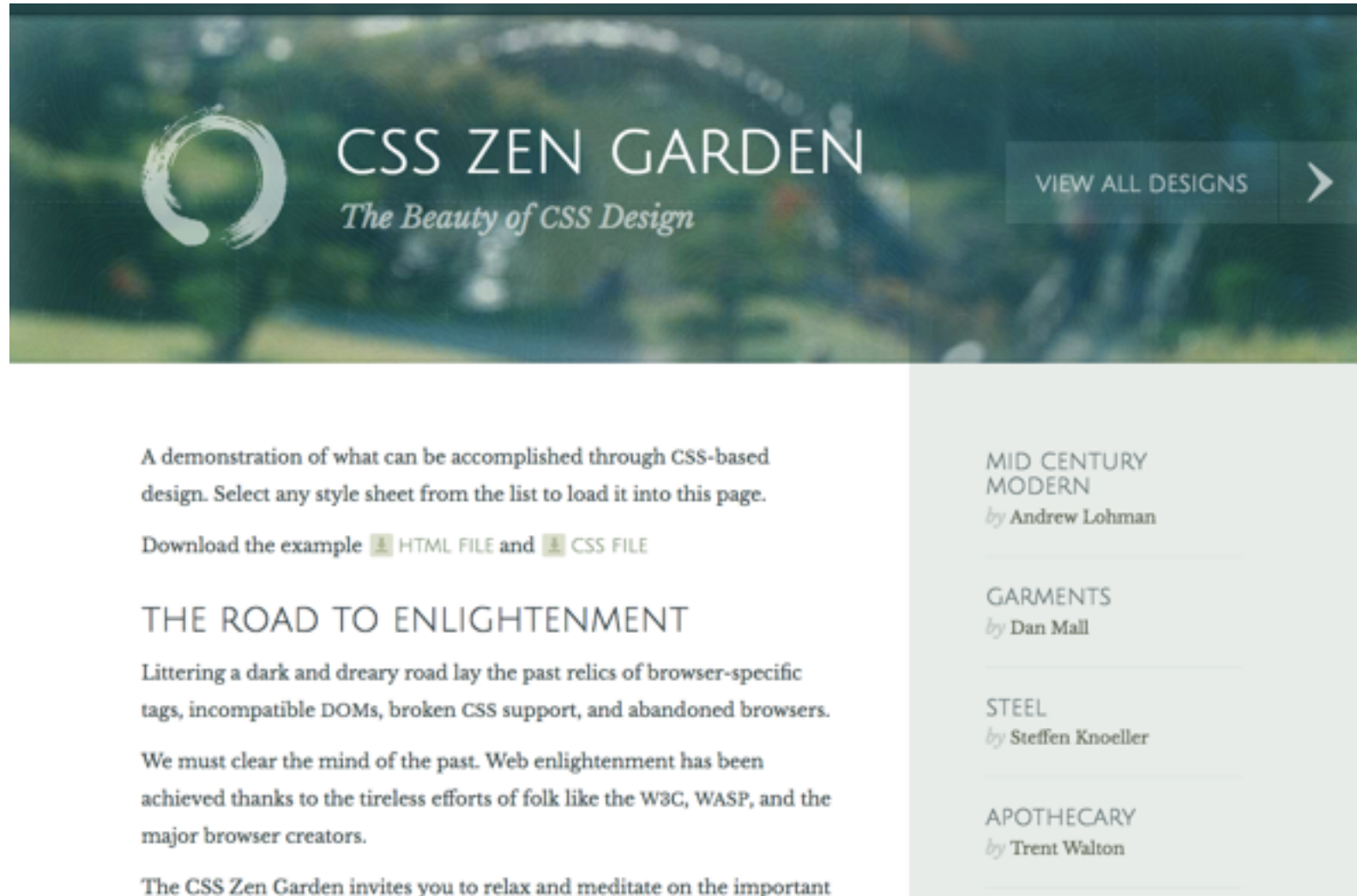
1. With a partner — Follow steps 1 - 3 in resume.html
2. Test in browser!

# RELATIVE URLS

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

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

# WHAT IS CSS?



---

**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* 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.

## 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>
```

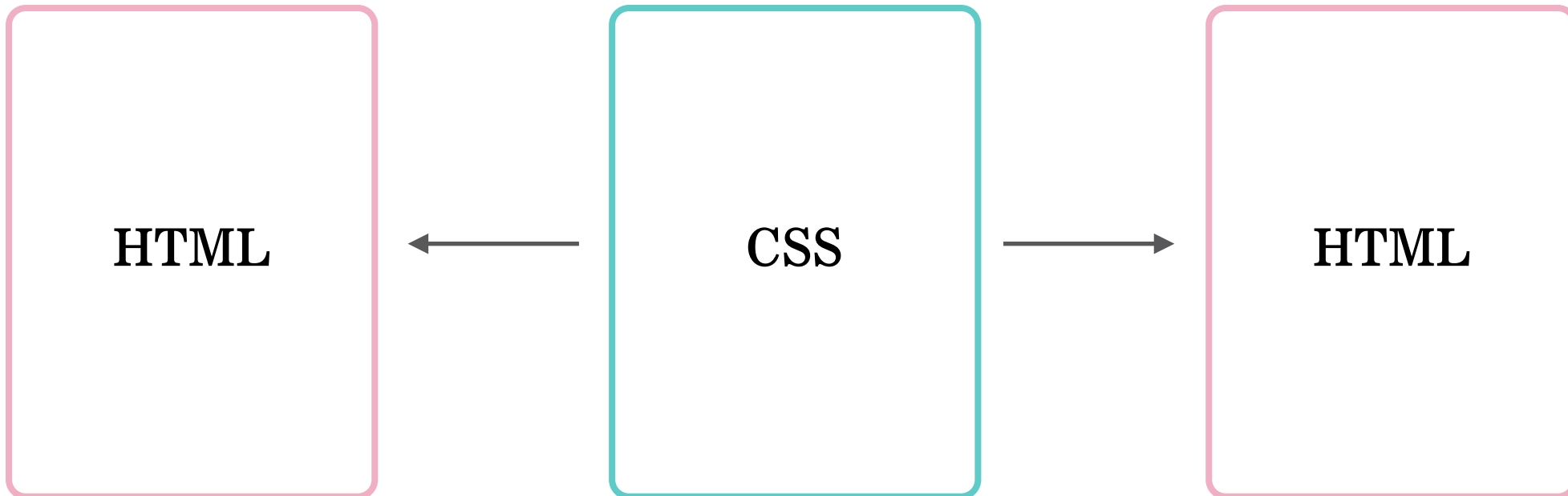
---

## 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

---



## EXERCISE

### **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.

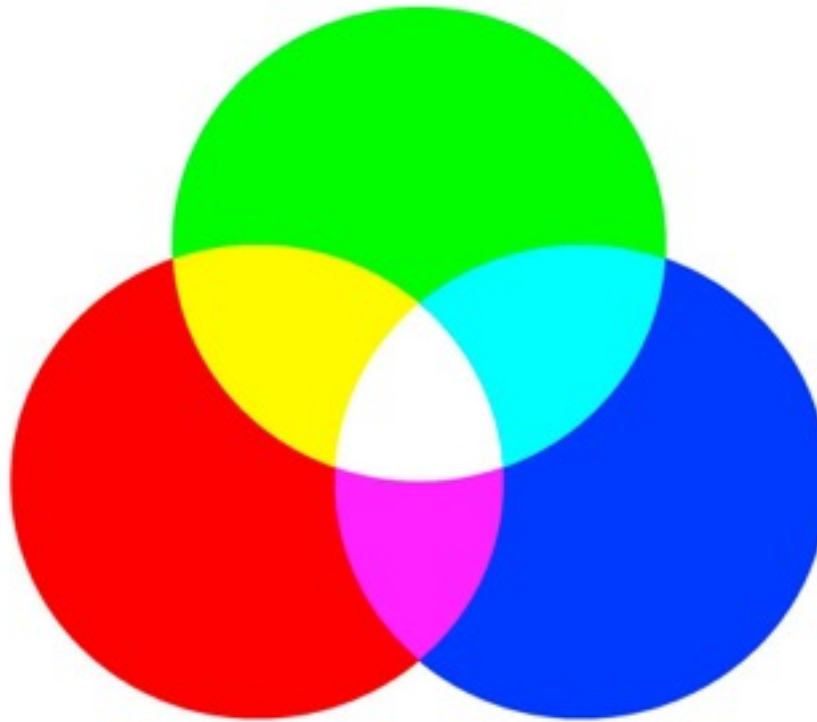
```
h1, p {  
  color: #98D2BF;  
}
```

---

## 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

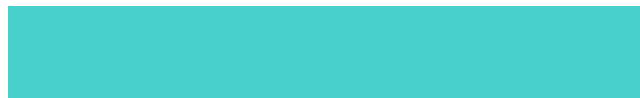
- Represent values for red, green and blue in hexadecimal (base 16) code



**#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](#)

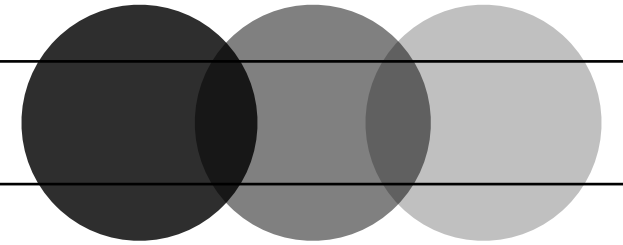


**MediumTurquoise**

---

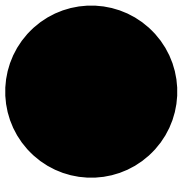
## OPACITY

---

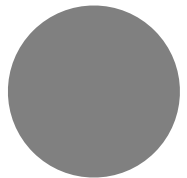


## RGBA

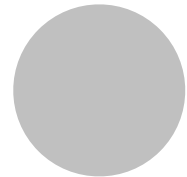
- ▶ RGBA works the same as RGB, except that it takes a 4th value called 'alpha'.
- ▶ This is a value between 0 and 1 which can be used to determine a color's opacity on the page.



`rgba(0, 0, 0, 1)`



`rgba(0, 0, 0, 0.5)`

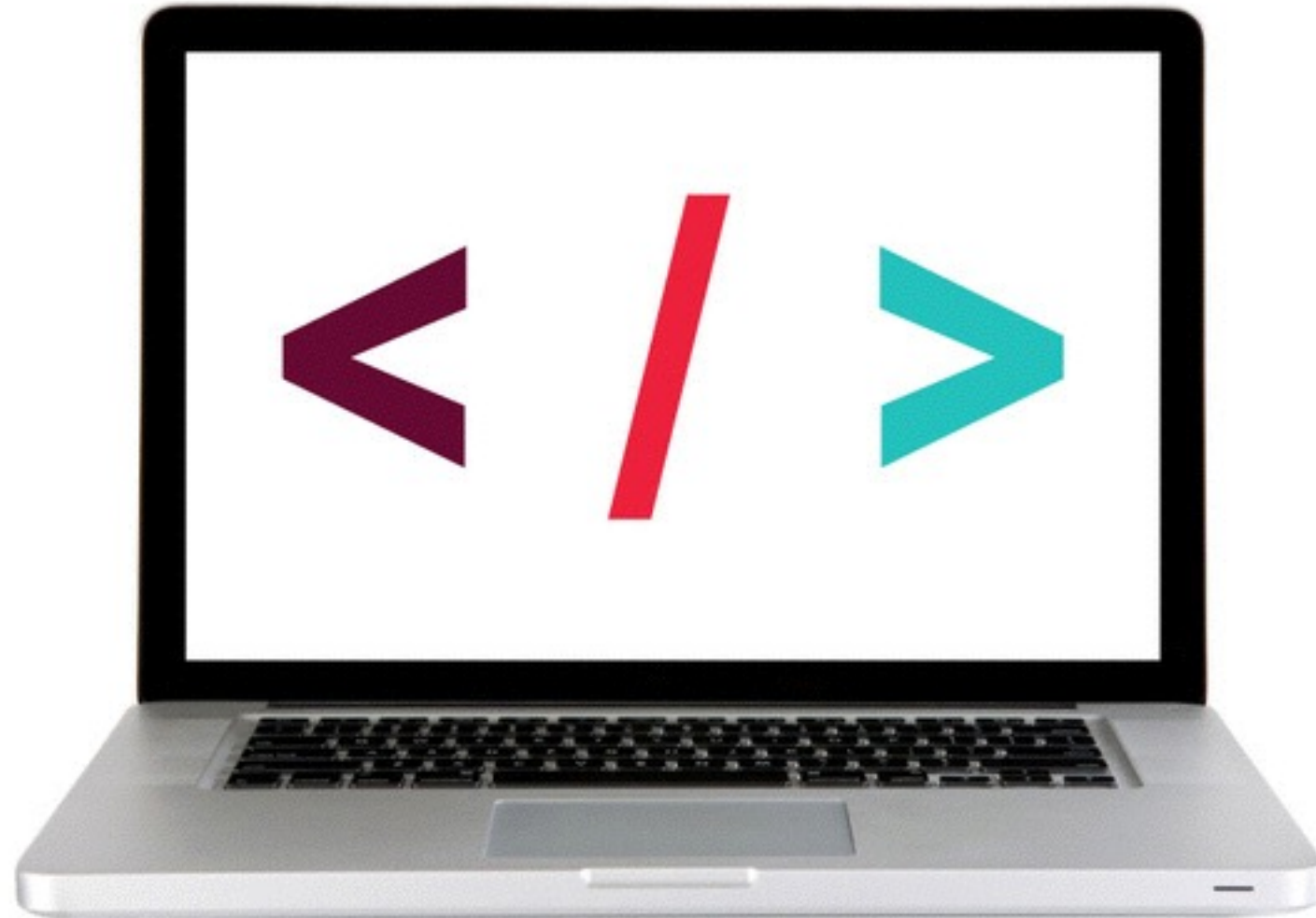


`rgba(0, 0, 0, 0.25)`

---

## LET'S TAKE A CLOSER LOOK

---



# ACTIVITY

---



## EXERCISE

### 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 [need to have it installed on their 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         | ‣ 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

---



## EXERCISE

### 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

---



## EXERCISE

### KEY OBJECTIVE

---

- ▶ Practice using CSS by styling Wendy Bite's Resume page

### TIMING

---

- Until 9:00*
1. Review supplied .pngs starting with Lab...
  2. (together) project set up
  3. Style Wendy's About Me and Resume pages

---

**ADVANCED CSS**

---

# CLASSES AND IDS

---

## TARGETING SPECIFIC ELEMENTS

---



- Classes & IDs allow us to add 'labels' to elements so we can target them in our CSS.

## TARGETING SPECIFIC ELEMENTS



---

## CLASSES AND IDS

---

### CLASSES

- Classes are used to group elements together
- Elements can have multiple classes

```
<li class="emphasis">Content</li>
```

```
.emphasis {  
  color: red;  
  font-size: 20px;  
}
```



---

## CLASSES AND IDS

---

### IDS

- Ids are used to target *one specific element*
- Each element can only have one id
- **Important:** two elements on the same page cannot have the same id

```
<nav id="main-nav">Content</nav>
```

```
#main-nav {  
  text-align: center;  
}
```

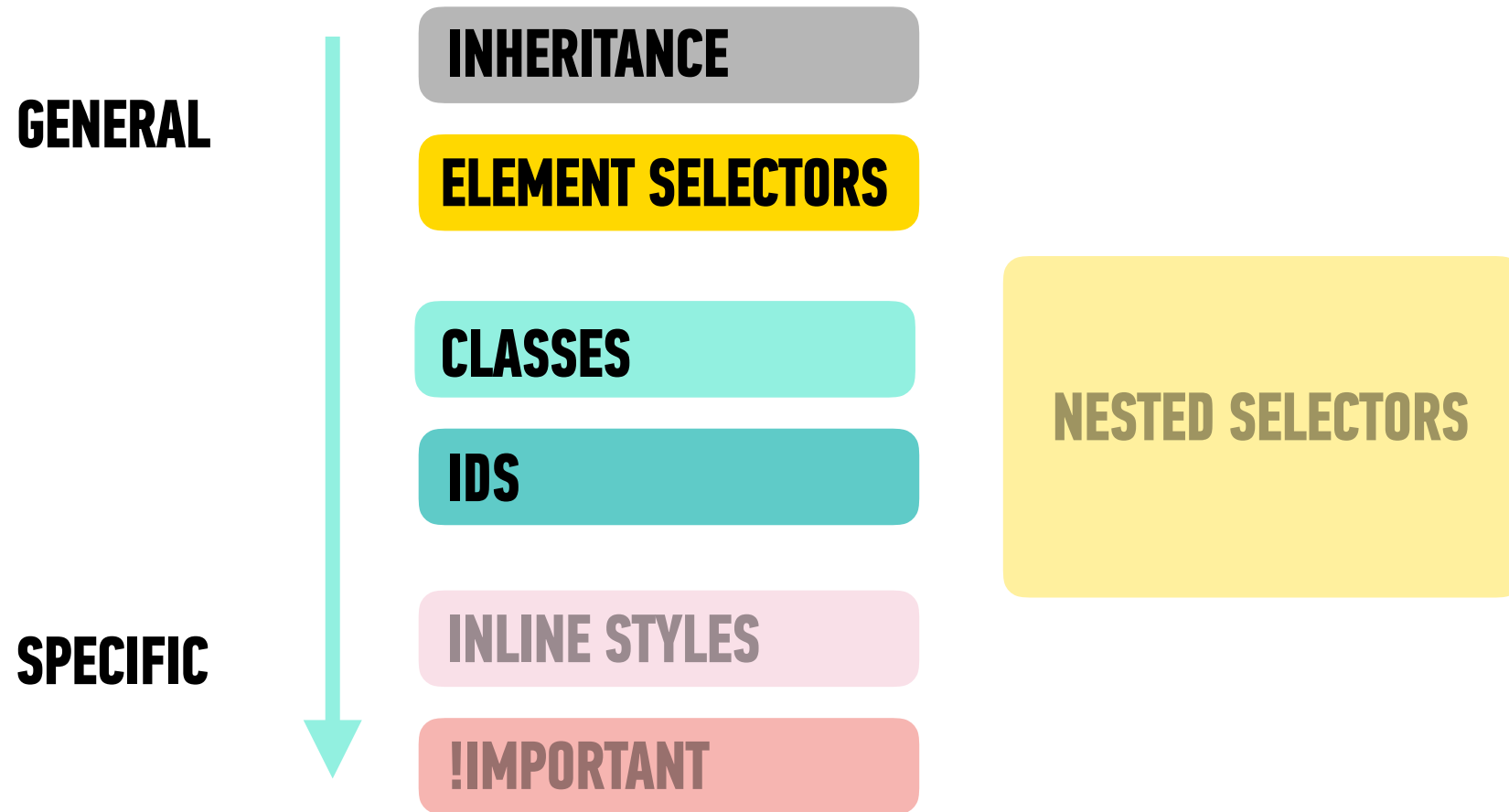


---

## MORE ABOUT CASCADING — GENERAL TO MORE SPECIFIC

---

- › CSS rules cascade downward until they are canceled out by another rule.



- › CSS rules are able to override one another and cancel each other out, depending on their order.

# ACTIVITY

---



## EXERCISE

### LOCATION

---

- ▶ starter\_code folder > wendy\_bite

### KEY OBJECTIVE

---

- ▶ Use classes and IDs to target elements

### TIMING

---

*5 min*

1. Select add an ID to one element
2. Add a class to two or more elements that make sense to style the same way
3. add CSS to style those elements by ID and class