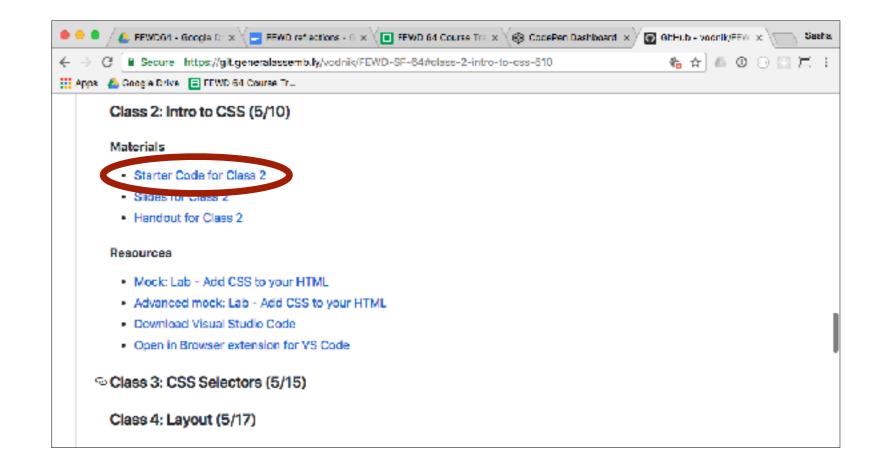
ADVANCED CSS 1

# **HELLO!**

- Go to the <u>class repo on</u> <u>GitHub Enterprise</u>
- Click the Starter Code for Class 3 link to download the files
- Move the downloaded file to your FEWD folder
- Unzip the files



### **WEEKLY OVERVIEW**

WEEK 2 CSS Selectors / Layout WEEK 3 Layout Lab / Grid Systems & Wireframing WEEK 4 Responsive Design / CSS Positioning

# **ADVANCED CSS**

# **LEARNING OBJECTIVES**

- Add classes and IDs to HTML elements and apply CSS styles to elements based on class and ID.
- Explain when you would use a class and when you would use an ID.
- Apply CSS to elements based on their relationships.
- Describe inheritance in CSS.

# **AGENDA**

Review

**Box Model** 

**CSS Selectors** 

Inheritance

Lab Time

# **EXIT TICKET QUESTIONS**

- 1. Still a little confused about the HTML 5 elements and how they are "different" from things like  $\langle p \rangle$ ,  $\langle h1 \rangle$ , etc.
- 2. I want a little more clarification on when we would use main, section and article.
- 3. suggestion: breaking down cool websites, such as medium, facebook...

#### **EXAMPLE: WHAT DOES SUCCESS LOOK LIKE?**

- "I'll need to Google for the exact syntax, but I know there's an attribute to add an external stylesheet to an HTML web page."
- "I can add an image to my website. Sometimes I look in the wrong folder, but I figure it out later."
- "I know there are HTML elements like header and footer to mark out website structure. I know there are some other ones, but I'll have to look that up."
- "I know there are CSS properties like border and padding that I can use to add more space around content. I haven't used them much, but I know they exist."
- "When the colors in my text editor are weird, I know something's up."

#### WHAT DO I DO WHEN I GET STUCK?

- Indent your code.
- Review the Cheat Sheets.
- ▶ Make educated guesses based on course material + cheat sheets.
- ▶ If your guess doesn't work, DELETE IT and try a different guess.
- ▶ Take a break and work on something else.
- ▶ If you're stuck for more than 30 minutes, ASK US (exit tickets + office hours).

# HOMEWORK REVIEW

#### **ACTIVITY**



#### **KEY OBJECTIVE**

Review portfolio project and show off your work

#### TYPE OF EXERCISE

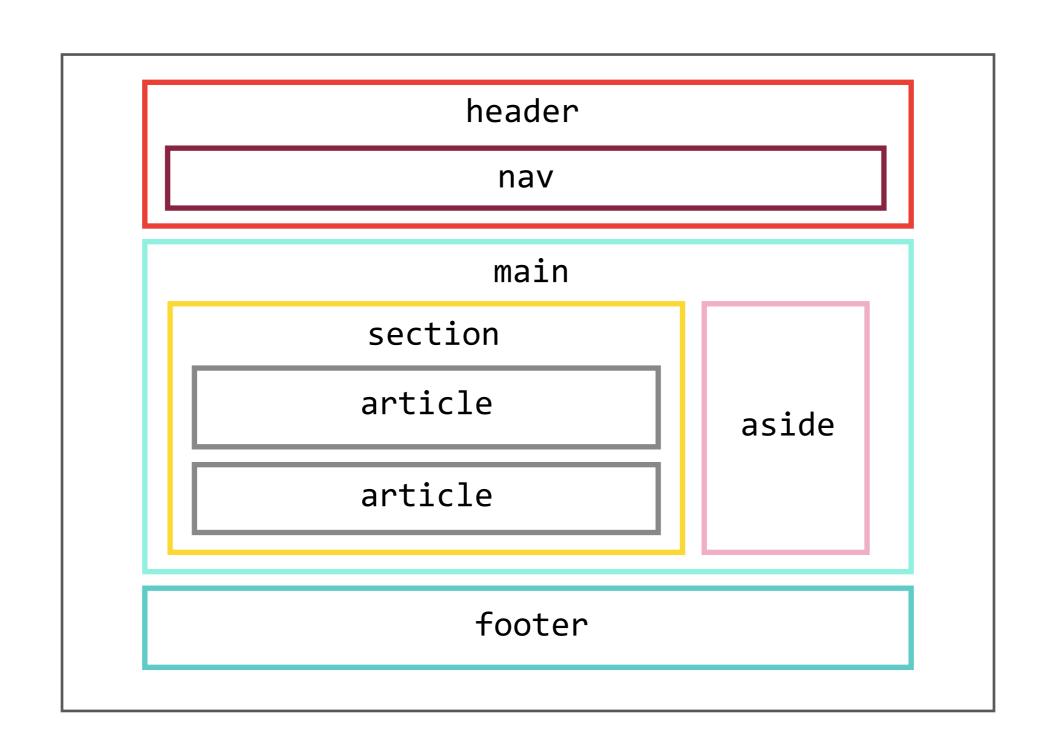
• Groups of 3-4

#### **TIMING**

6 min

- 1. Open portfolio sites on laptops and display them proudly!
- 2. Give feedback to your peers: "I like" and "I wish/wonder"
- 3. Share a challenge you ran into in your project and discuss how other group members may have worked with it.

# HTML CONTINUED: STRUCTURAL ELEMENTS



	DESCRIPTION
HEADER	Does it contain introductory content, such as the site title and navigation?
NAV	Does it contain a major navigational block?
FOOTER	Does it contain footer content?
MAIN	Does it contain content that is unique to that particular page?
ARTICLE	Is it self-contained, standalone content? Would it make sense on its own?
ASIDE	Is the content <b>not</b> required to understand the rest of the page?
SECTION	Is it a general section of the page that could have a heading?
DIV	Do you need a wrapper for styling and none of the above apply?

#### LAZY DAYS

ARTICLES AROUT CONTACT

#### NEVER EAT AT HOME AGAIN

By Swan Smith



As my New Year's resolution in 2016, I would to never again make a meal at home. I found that cooling, sends as become noth time and offers, and the food sever sensed or senature up to the greaty food that is readily available at any old times.

Aspernatur a neusandae asperiones fugit quibusdan, repudianiae praesentium dolore use mollitianisi viite, aut lacers. Culpa saepe ture luc latitis deseruni, doloremque, quidem tobis ducimus, necessitatitus amet dolorem uniam vulupatibus.

#### THE ART OF DOING ABSOLUTELY NOTHING

By José Peréx



Is your job taking too muchtime away hun your rest and relaxation? Does your alegabra homework keep young at night? I used to be in the same boat until! quit work and school and devoted speelf to doing absolutely nothing. Many people think that lazinessis a vice, but I am here o tell you that it is an ast.

Angenatur a neuvandae asteriones fugit quibusdam, repudiantae praesentum delore ose mollitianisi vitar, sust facers. Culpa saeps inre hic fatils deserum, doloremque, quidem tobis ducimus, necessitatibus anne dolorem veniam vuluquatibus.

# **LAB: LAZY DAYS BLOG PART 1**



#### **KEY OBJECTIVE**

▶ Practice structuring a page with HTML5 elements.

#### **TIMING**

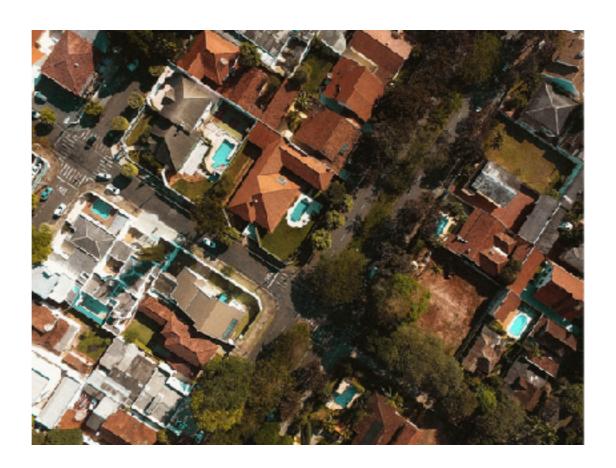
5 min

- 1. In Visual Studio Code, open the lazy\_days folder in your starter code
- 2. Add HTML (including tags such as header, main, article) to the page using part\_1.png as a guide
- 3. Style the page using part\_2.png as a guide

#### **FEWD**

# CSS CONTINUED: BOX MODEL

# **READING: CSS BOX MODEL**



Read more about the suburban neighborhood example

# **ACTIVITY: DISCUSS THE CSS BOX MODEL**



#### TYPE OF EXERCISE

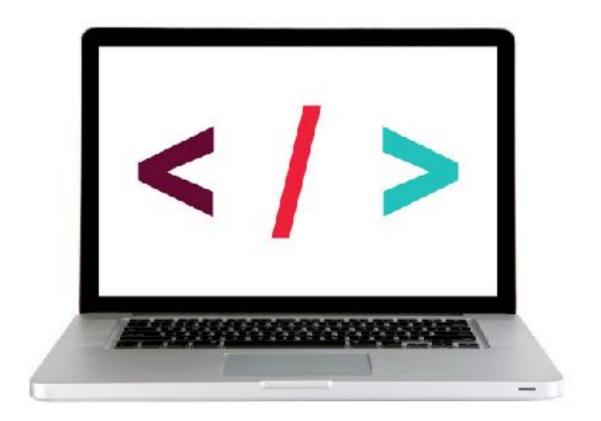
Pairs

#### **TIMING**

5 min

- 1. Create a diagram that explains the CSS Box Model
- 2. Make sure to include margin, padding, border, content, height, and width
- 3. Prepare to share with the class!

### **DEMO: BOX MODEL BUTTON**



https://codepen.io/svodnik/pen/pVLOMg

### **FEWD**

# CONTENT

Content → My Site Title

```
h1 {
  width: 300px;
  height: 40px;
}
```

#### **FEWD**

# BORDERS

# **BORDERS**

Border ──My Site Title

#### **BORDER SHORTHAND**

#### For a border on all sides:

border: width style color; border: 1px solid red;

#### For a border on one side:

border-top: width style color; border-top: 1px solid red;

border-right: width style color; border-right: 1px solid red;

border-bottom: width style color; border-bottom: 1px solid red;

border-left: width style color; border-left: 1px solid red;

#### **BORDER SHORTHAND**

Why isn't my border showing up?

```
border-color: red;
```

border-size: 1px;

The default border-style is none! So why not always specify all three properties?

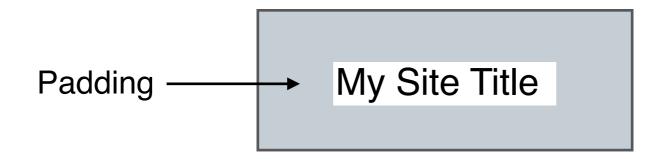
border: 1px solid red;

### **FEWD**

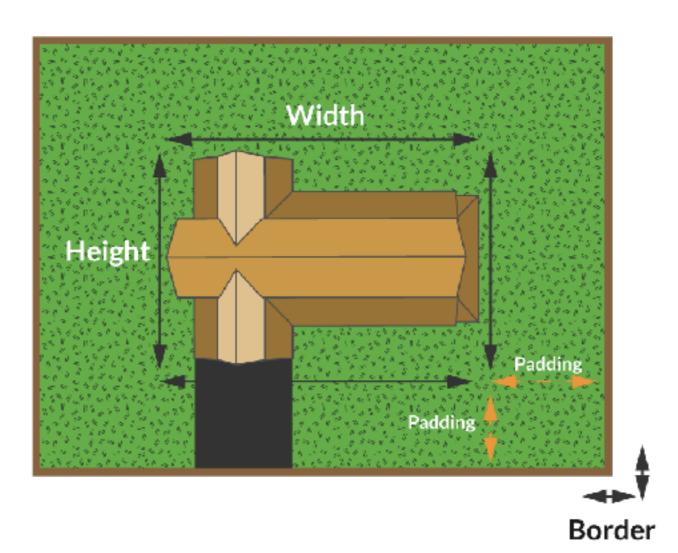
# PADDING

#### **PADDING**

We can add padding to get space between our content and the border



# **PADDING**



#### **BOX MODEL** — **PADDING SYNTAX**

#### For even padding on all sides:

```
padding: ##px; padding: 20px;
```

#### For padding on one specific side:

```
padding-top: ##px; padding-top: 20px;
```

#### For different size padding for each side:

```
padding: top right bottom left; padding: 20px 10px 5px 10px; Memory device: Trouble!
```

#### Shorthand if top/bottom are the same and left/right are the same:

```
padding: top/bottom right/left; padding: 20px 10px;
```

### **FEWD**

# MARGIN

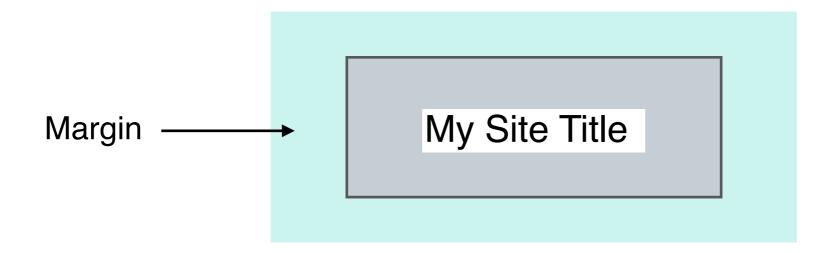
#### **MARGIN**

We can add margin to add space between elements on our pages.

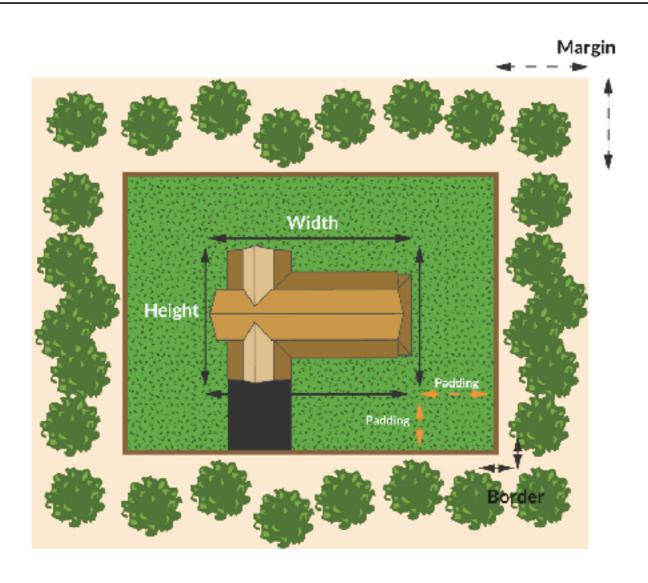
Needs more space! — My Site Title

My Site Subtitle

# **MARGIN**



# **MARGIN**



#### **BOX MODEL** — **PADDING SYNTAX**

#### For even margin on all sides:

```
margin: ##px; margin: 20px;
```

#### For margin on one specific side:

```
margin-top: ##px; margin-top: 20px;
```

#### For different size margin for each side:

```
margin: top right bottom left; margin: 20px 10px 5px 10px; Memory device: Trouble!
```

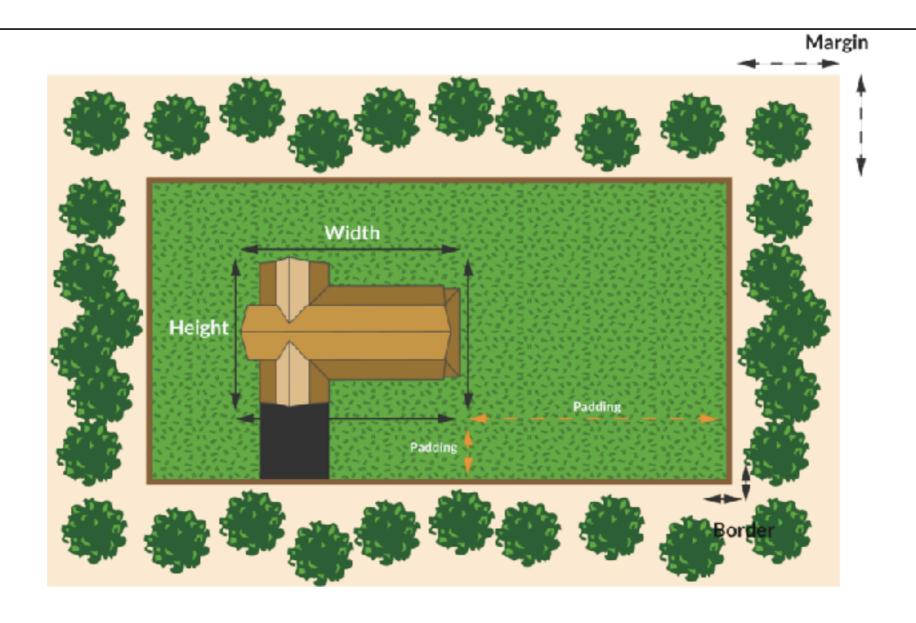
#### Shorthand if top/bottom are the same and left/right are the same:

```
margin: top/bottom right/left; margin: 20px 10px;
```

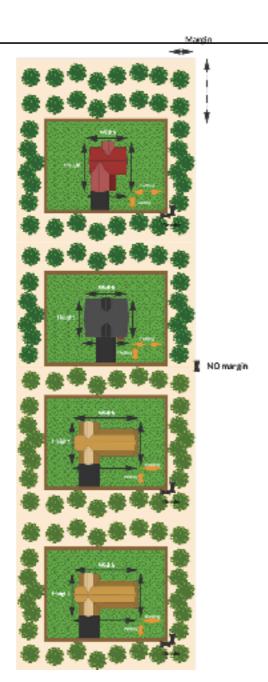
#### **FEWD**

## PADDING VS. MARGIN

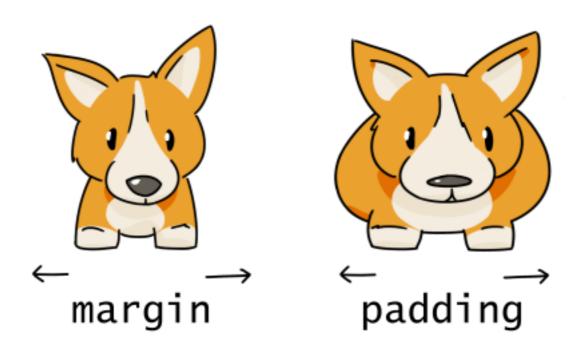
#### **PADDING**



#### **MARGIN**



#### **CSS CORGIS!**



#### **LAB: LAZY DAYS BLOG PART 2**



#### **KEY OBJECTIVE**

Manipulate the border, padding, and margin around content using CSS.

#### **TIMING**

5 min

- 1. Open the "lazy\_days" folder in your starter code
- 2. Practice adding padding, margin, and borders using part\_3.png as a reference.
- 3. Bonus: Style the page as shown in the advanced image
- 4. Bonus #2: Make links change color on hover

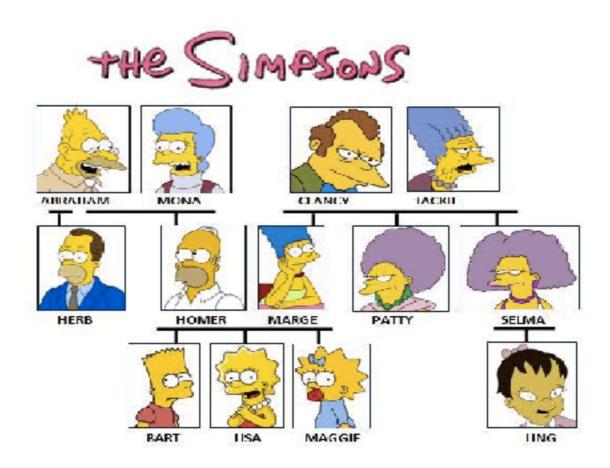
## CSS SELECTORS

#### **MORE HTML BASICS**

# HTML STRUCTURE

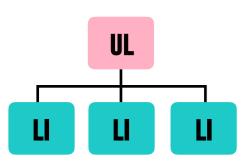
#### PAGE STRUCTURE — RELATIONSHIPS

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



#### PAGE STRUCTURE — NESTING

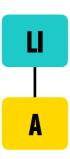
- ▶ Here we can say that our is the **parent** of our s
- ▶ We can also say that our s are children of the



```
<!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>
```

#### PAGE STRUCTURE — NESTING

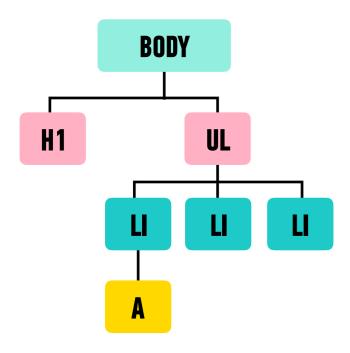
ightharpoonup Similarly, we can have an <a> tag that is nested inside, or wrapped by, our <li> element.



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

#### PAGE STRUCTURE — NESTING

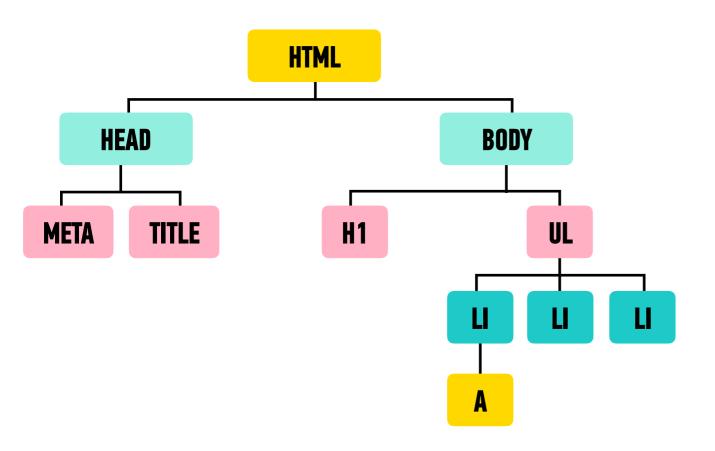
• Similarly, we can say that all of our HTML content, our h1, our ul, our li elements, are "wrapped" by the body, or "nested" inside the body since they are within the opening and closing body tags



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>
   <u1>
       \lambda li>Dark Wash <a href="linkgoeshere">Jeans</a>
       Stone Wash
       Chambray
   </body>
                                                 HTML content
</html>
```

#### DOM ("DOCUMENT OBJECT MODEL") TREE



#### **ACTIVITY: DOM TREE**



#### **KEY OBJECTIVE**

▶ Be able to describe relationships between elements.

#### **LOCATION**

- Starter code > dom\_tree
- Whiteboard

#### **TIMING**

3 min

- 1. Look at the starter code in the "dom\_tree" folder
- 2. Pair up with a partner and diagram out the DOM tree
- 3. Keep in mind: 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.

```
<!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>
```

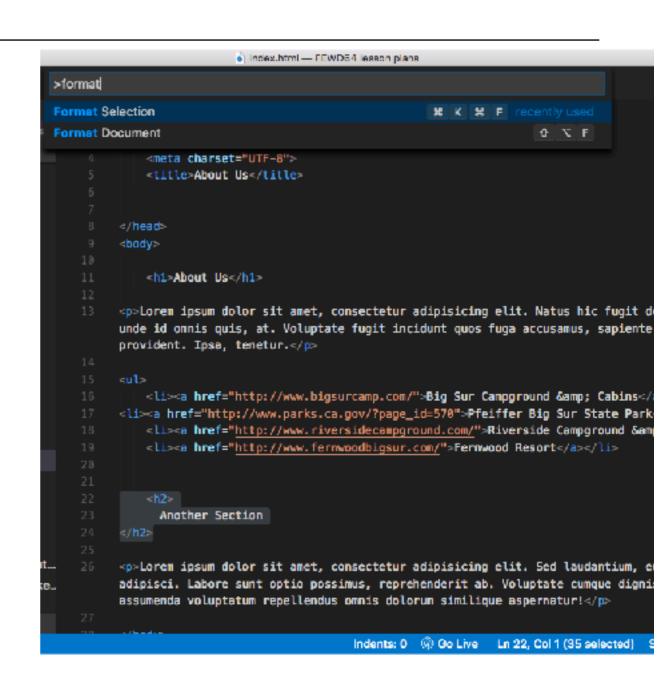
#### PAGE STRUCTURE — VISUAL STUDIO CODE HELPER!

#### Using the menu

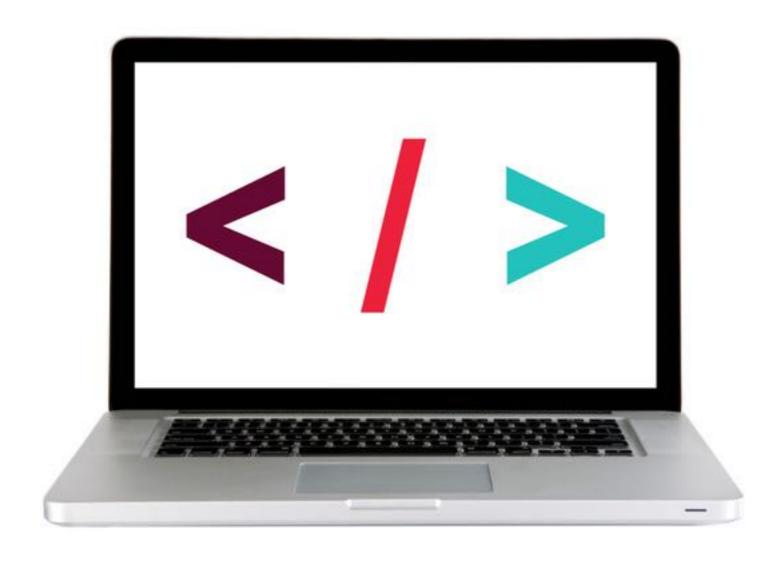
- ▶ Press command-shift-P
- ▶ Type format
- Select from options
  - ▶ Format Selection
  - ▶ Format Document

#### **Keyboard shortcuts to format entire document:**

- ▶ shift-option-F (Mac)
- ▶ shift-alt-F (Windows)



#### **DEMO: UGLY INDENTING & VISUAL STUDIO CODE HELP!**



## MORE CSS SELECTORS

#### WHAT IS A SELECTOR?

#### SELECTORS — MOST COMMON

▶ We've been using type selectors... but there are other kinds of selectors too:

		MEANING:	EXAMPLE:
SELECTOR:	ТҮРЕ	Selects an element	a {}
	DESCENDANT	Selects an element that is a <b>descendent</b> of another element	p a {}
	UNIVERSAL	Selects all elements in a document	* {}
	MULTIPLE	Selects multiple elements	h1, h2 {}

## DESCENDANT SELECTORS

Which element here will be italic?

```
p a {
    font-style: italic;
}
```

- ▶ The **last** element in the selector string is *always* the one that we are styling.
- ▶ Try reading right-to-left!

```
p a {
    font-style: italic;
}
```

```
Want to get in touch? Send us an <a href="#">email!</a>
```

**ANCHORS THAT ARE DESCENDANTS OF A PARAGRAPH** 

```
<header>
    <h1><a href="">Nested Selectors</a></h1>
    <nav>
        <a href="">Home</a>
        <a href="">About</a>
        <a href="">Contact</a>
        <a href="">Blog</a>
    </nav>
</header>
```

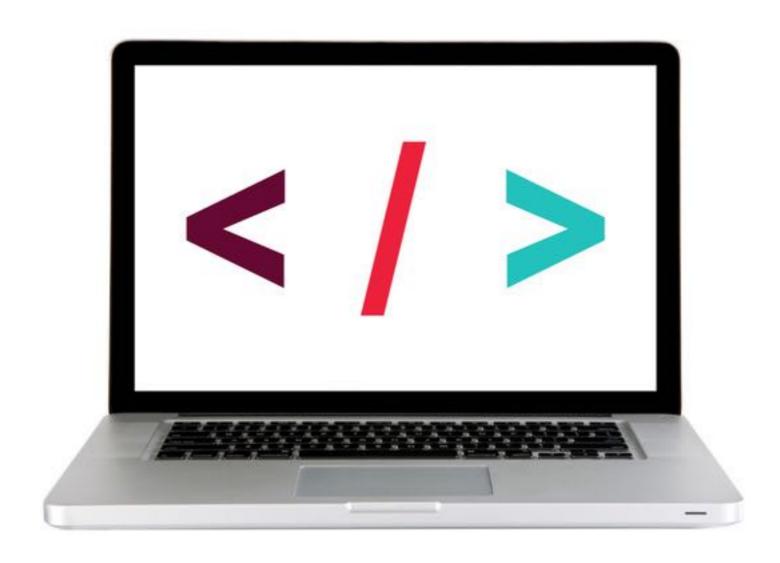
**ANCHORS THAT ARE DESCENDANTS OF A NAV.** 

**NOTE: THEY'RE ALSO DESCENDANTS OF A HEADER** T00!

### ANCHORS THAT ARE DESCENDANTS OF A H1

## WHAT ARE THESE ANCHORS DESCENDANTS OF?

#### **CODEALONG: CASCADING EXAMPLE PART 1**



#### **ACTIVITY: DESCENDANT SELECTORS**



#### **LOCATION**

starter\_code folder > descendant\_selectors folder

#### **KEY OBJECTIVE**

Practice using descendant selectors

#### **TIMING**

5 min

- 1. Follow the instructions in the style.css file.
- 2. It should look like mocks.png if you did it correctly

#### **ADVANCED CSS**

# TARGETING SPECIFIC ELEMENTS: CLASSES AND IDS

#### **TARGETING SPECIFIC ELEMENTS**



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

#### WHY DO WE USE BAR CODES OR SERIAL NUMBERS?



DCS-942L

S/N: ABCD123456789

H/W Ver.:A1 F/W Ver.:1.01

#### **CLASSES AND IDS**

#### **CLASSES**

- Classes are used to group elements together
- Like bar codes or UPCs (universal product codes)

```
<div class="alert">Content</div>
```

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



#### **CLASSES AND IDS**

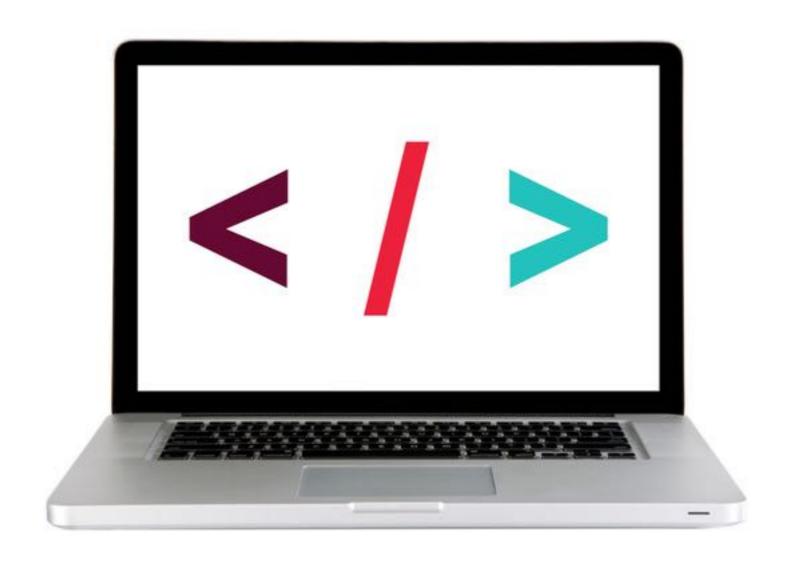
#### IDS

- ▶ 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;
}
```

#### **DEMO: CLASSES AND IDS EXAMPLE**



#### **ACTIVITY: CLASSES AND IDS ICE CREAM**



#### **LOCATION**

starter\_code > classes\_and\_ids

#### **KEY OBJECTIVE**

Use classes and IDs to target elements

#### **TIMING**

- 1. Look at the image provided. Which ice cream items would you use a class to style? How about an ID?
- 2. Follow steps 1 3 in your CSS file (towards the end)

#### **ADVANCED CSS**

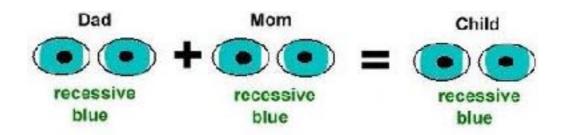
## WHY IS CSS "CASCADING"?

#### **FEWD**

## INHERITANCE

#### **INHERITANCE** — **SETTING BASE STYLES**

- 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 be inherited, or applied, to most child elements unless there is a more specific rule that applies.

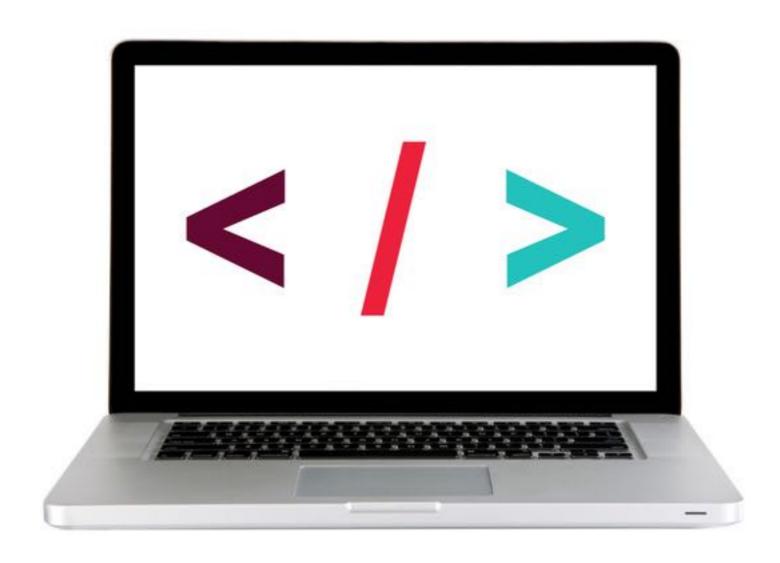


#### Inherited properties you'll use in this course:

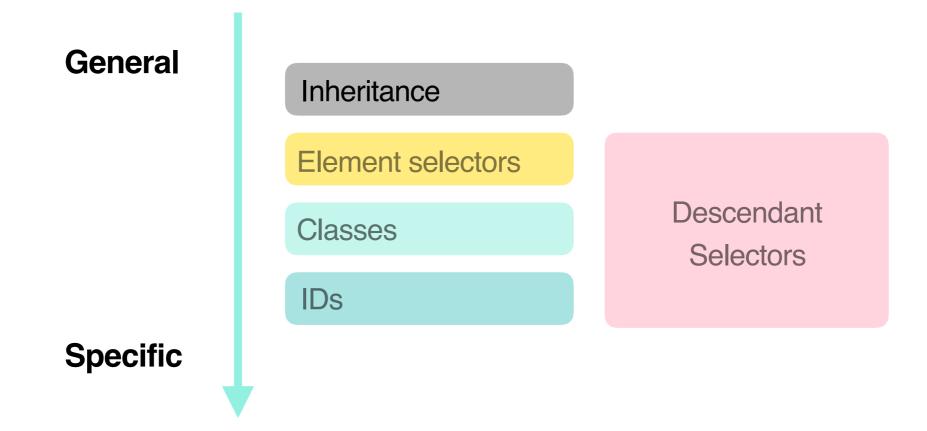
- ▶ color
- ▶ font-size
- font-style
- font-weight
- - ▶ line-height
  - list-style

- ▶ text-align
- ▶ text-indent
- ▶ text-transform
- word-spacing

# **CODEALONG: CASCADING EXAMPLE PART 2**



## MORE ABOUT CASCADING — GENERAL TO MORE SPECIFIC



# **ACTIVITY: DISCUSS INHERITANCE**



#### **KEY OBJECTIVE**

▶ Explain inheritance in CSS. How can you use inheritance in your stylesheets to write less code in the long run?

#### TYPE OF ACTIVITY

Turn and Talk

#### **TASKS**

1 min

1. Discuss the question with your groups

2 min

2. Pick one person to jot down your thoughts and share them via Slack.

# **ACTIVITY: SPECIFICITY CACTUS SITE**



#### **KEY OBJECTIVE**

Practice using inheritance to set up default styles for a webpage

#### **LOCATION**

Starter Code > Specificity

#### **TASKS**

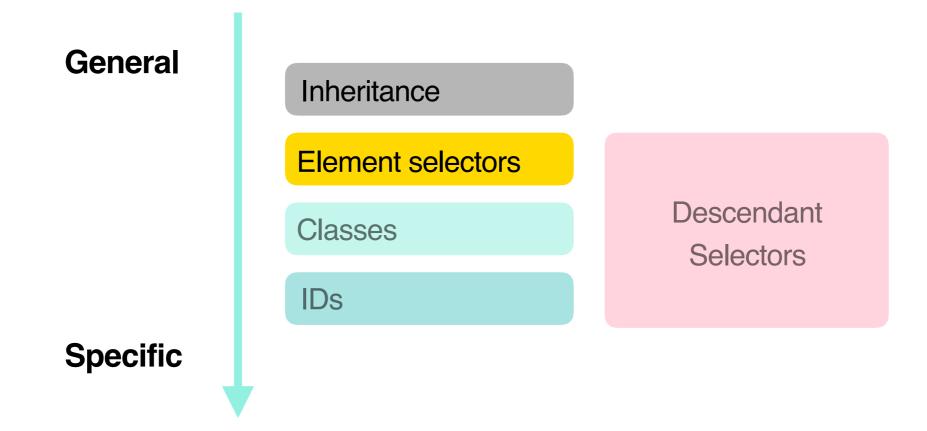
1 min

1. Follow instructions under STEP 1

### **FEWD**

# ELEMENT SELECTORS

## MORE ABOUT CASCADING — GENERAL TO MORE SPECIFIC



# **ACTIVITY: SPECIFICITY CACTUS SITE**



#### **KEY OBJECTIVE**

Practice using element selectors to style groups of elements

#### TYPE OF ACTIVITY

Starter Code > Specificity

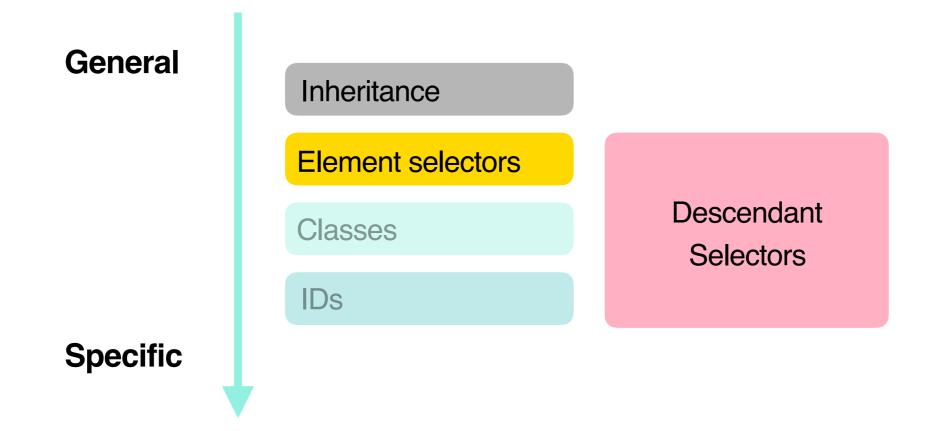
#### **TASKS**

1 min

1. Follow the instructions under STEP 2.

# DESCENDANT SELECTORS

## MORE ABOUT CASCADING — GENERAL TO MORE SPECIFIC



# **ACTIVITY: SPECIFICITY CACTUS SITE**



#### **KEY OBJECTIVE**

Practice using nested selectors to style elements based on their relationships.

#### TYPE OF ACTIVITY

Starter Code > Specificity

#### **TASKS**

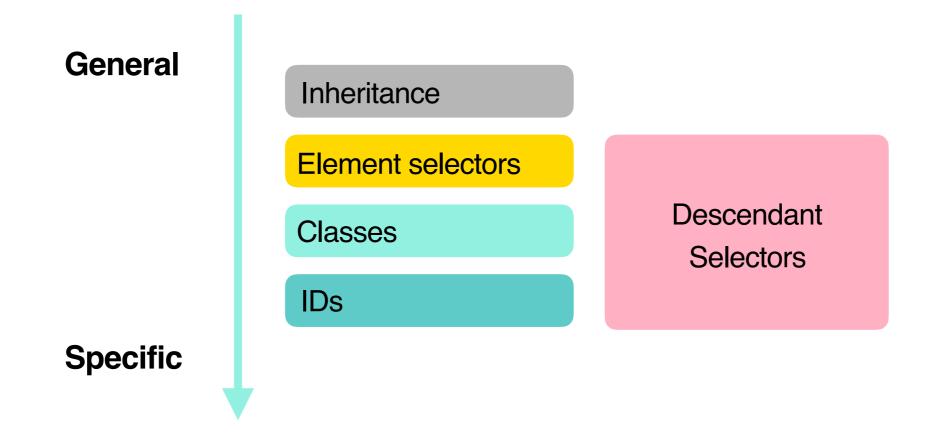
1 min

1. Follow the instructions under STEP 3.

### **ADVANCED CSS**

# CLASSES AND IDS

## MORE ABOUT CASCADING — GENERAL TO MORE SPECIFIC



# **ACTIVITY: SPECIFICITY CACTUS SITE**



#### **KEY OBJECTIVE**

Practice using classes and IDs to style unique elements or groups of elements

#### TYPE OF ACTIVITY

Starter Code > Specificity

#### **TASKS**

1 min

1. Follow the instructions under STEP 4.

### **ADVANCED CSS**

# SPECIFICITY GAME!!!

## MORE ABOUT CASCADING — GENERAL TO MORE SPECIFIC

#### General

## **SPECIFICITY:**

The *more specific rule* will take precedence over the more general rule

Inheritance

Element selectors

Classes

IDs

Descendant Selectors

**Specific** 

- If multiple style rules are targeted at the same element, which style will be applied?
- ▶ We can calculate the specificity of the selectors to find out!
- ▶ The styles for the more specific selector are the styles that will be applied.

```
p a {
    font-size: 50px;
}

a {
    font-size: 30px;
}
```

# TO CALCULATE SPECIFICITY, TAKE A LOOK AT THE ENTIRE "SELECTOR CHAIN"

```
p a {
    font-size: 50px;
}
```

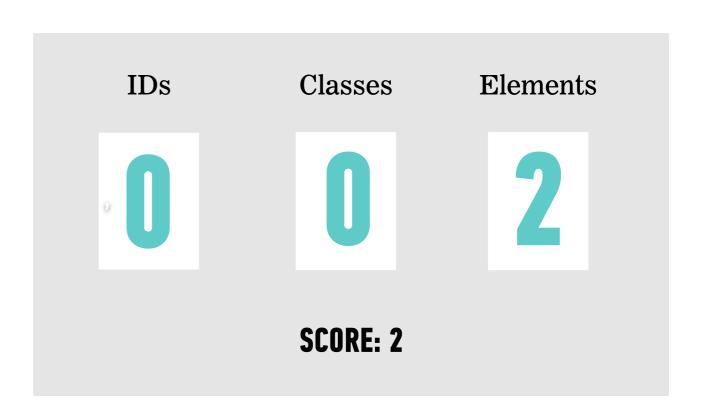
If you have conflicting styles under the "p a" selector and the "a" selector... who will win?

p a a

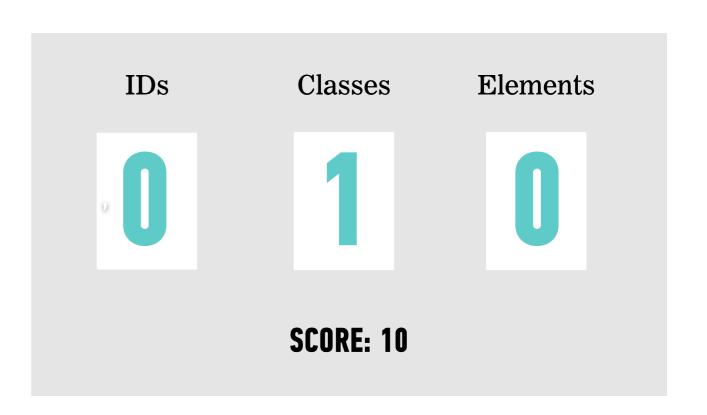


Use a chart like this to calculate the specificity to find out!

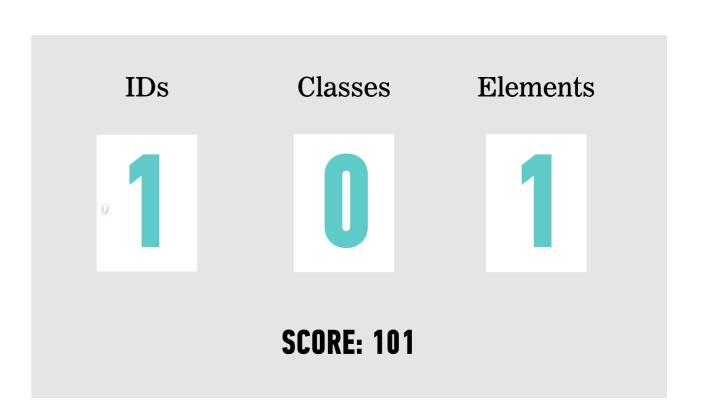




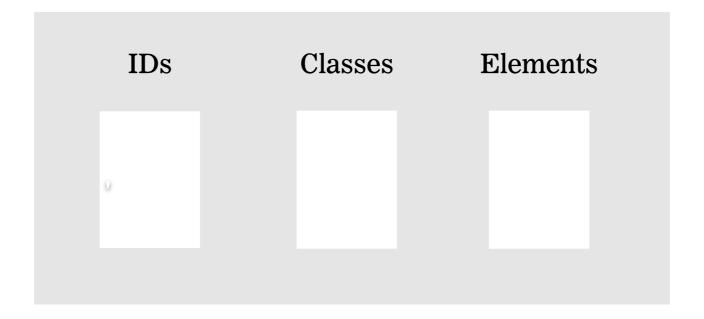
```
1 CLASS
.about {
   font-size: 50px;
}
```



```
#about a {
font-size: 50px;
}
```



Write this down!



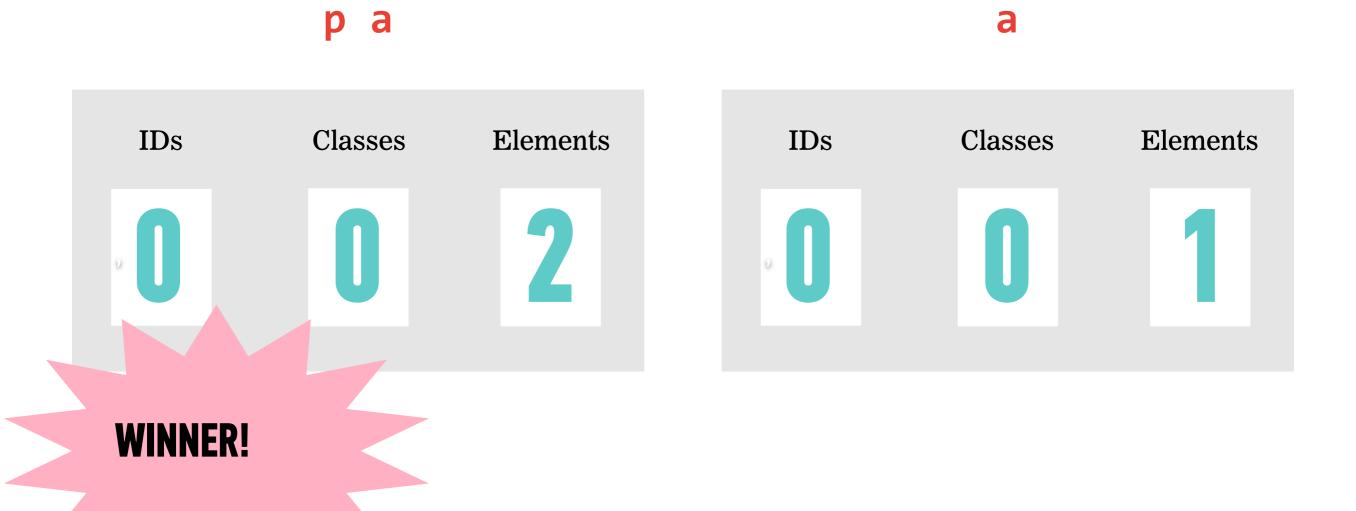
# SLACK POLL: Will the font-size for the anchor be 50px or 30px?

```
HTML: Visit my <a href="#">Website</a>
```

```
CSS:
```

```
p a {
    font-size: 50px;
}

a {
    font-size: 30px;
}
```



# SLACK POLL: Will the font-size for the anchor be 50px or 30px?

```
HTML: Visit my <a href="#">Website</a>
```

```
CSS:
```

```
p a { /* Score: 2 */
    font-size: 50px;
}

a { /* Score: 1 */
    font-size: 30px;
}
```

# SLACK POLL: Will the anchor with the class home be pink or blue?

HTML:

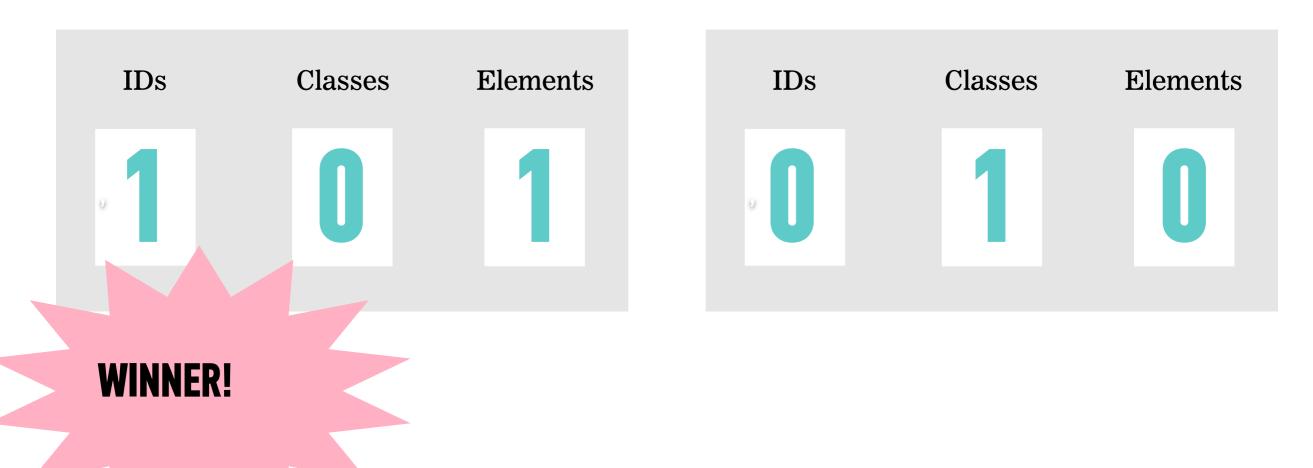
CSS:

```
#main-nav a {
    color: pink;
}
.home {
    color: blue;
}
```

# **CSS CASCADING**

# #main-nav a

# .home



# SLACK POLL: Will the anchor with the class home be pink or blue?

HTML:

CSS:

```
#main-nav a { /* Score: 101 */
    color: pink;
}

.home { /* Score: 10 */
    color: blue;
}
```

## MORE ABOUT CASCADING — GENERAL TO MORE SPECIFIC

#### General

## **SPECIFICITY:**

The *more specific rule* will take precedence over the more general rule

Inheritance

Element selectors

Classes

IDs

Descendant Selectors

**Specific** 

## **ADVANCED CSS**

# LAST RULE

# SLACK POLL: Will the anchor have an underline or no underline?

```
HTML: Visit this <a href="#">cool</a> site.
```

```
li a { /* Score: 2 */
          text-decoration: underline;
}

CSS:

p a { /* Score: 2 */
          text-decoration: none;
}
```

# **LAST RULE**

li a p a Classes **Elements** Classes Elements IDs IDs TIE?!?

# SLACK POLL: Will the anchor have an underline or no underline?

```
HTML: Visit this <a href="#">cool</a> site.
```

```
li a { /* Score: 2 */
    text-decoration: underline;
}

p a { /* Score: 2 */
    text-decoration: none;
```

CSS:

TIEBREAKER? LAST RULE WINS!

# Let's say we switched it...

TIEBREAKER? LAST RULE WINS!

### **ACTIVITY**



### **KEY OBJECTIVE**

- When multiple style rules apply to the same element, how can we figure out which one will be applied?
- ▶ How can we apply this principle to allow us to write less CSS in the long run?

### TYPE OF ACTIVITY

Turn and Talk

### **TASKS**

5 min

1. Talk with your groups. Have one person write out your responses in Slack.

### **ADVANCED CSS**

# THINGS YOU SHOULD USE IF YOU WANT TO BE

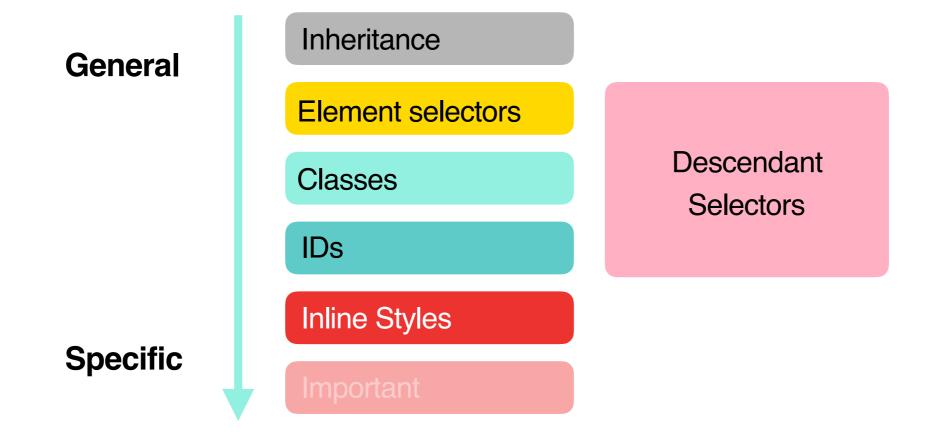


# **INLINE STYLES**

```
style="color: red;">Content
```



### **MORE ABOUT CASCADING**



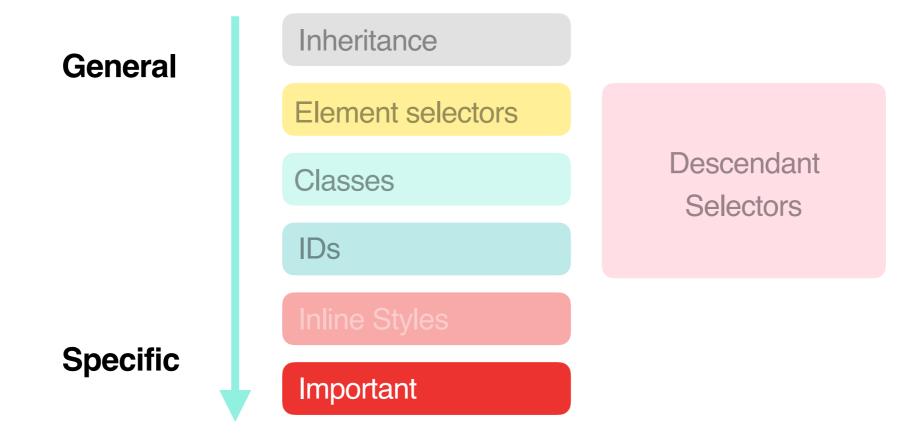
### **CSS IMPORTANCE**

Adding !important after any property value indicates that it should be considered *more important than other rules that apply to the same element*.

```
li {
   font-size: 100px !important;
}
```

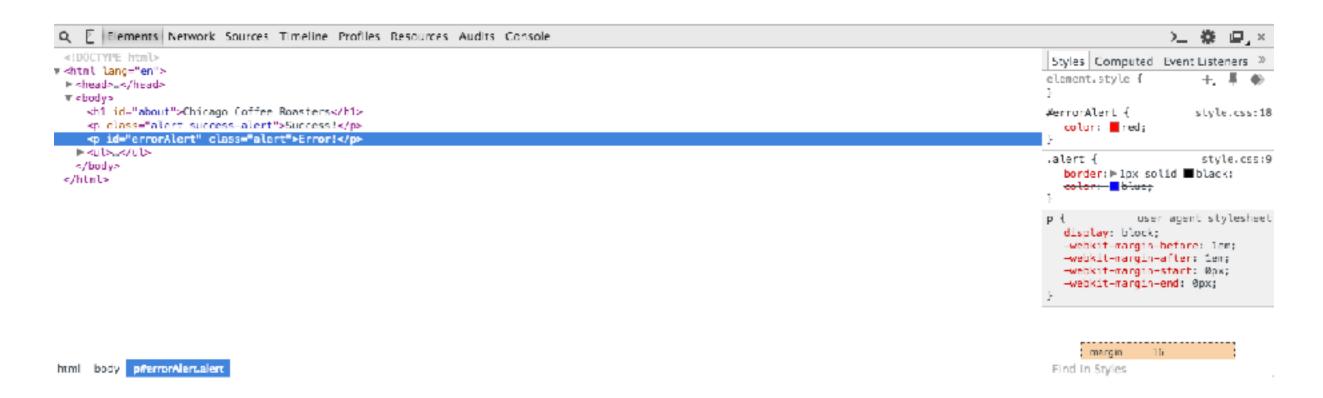
# ONLY WHEN NECESSARY!!! (Which is almost never)

# **MORE ABOUT CASCADING**



# TOOLS: BROWSER DEVELOPER TOOLS

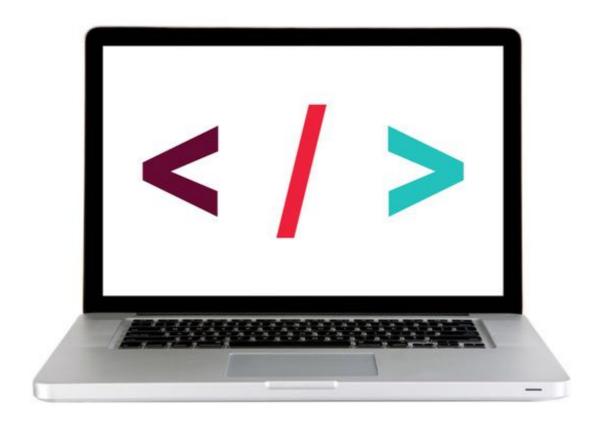
### **CHROME DEV TOOLS**



### Right click > Inspect

• WARNING: You can fiddle around with the styles here, but MAKE SURE TO UPDATE (and save) YOUR CSS FILE IN YOUR EDITOR!

### **DEMO: WORKING WITH CHROME DEV TOOLS**



Use Dev Tools to inspect solutions!

### **FEWD**

# LAB: MONUMENT BLOG

### **OVERVIEW**

Congratulations! You have been hired as the developer for Monument Lifestyle Magazine. You are working closely with a designer and have been provided design mockups for the website. Your goal is to replicate these mockups as closely as possible.

You will be adding components to the blog page in the labs/ homework this week and will be working on building the landing page for the site during the lab sessions next week.

# **ACTIVITY: MONUMENT BLOG PLANNING**



#### **KEY OBJECTIVE**

▶ Plan out the Monument Magazine site.

### LOCATION

Starter code > Monument Blog > mocks\_basic.png

### **TASKS**

Consider the following questions with your groups:

- 1. What is the most common font-family?
- 2. Is there a common color for the text?
- 3. Is most of the text uppercase? Lowercase?
- 4. How about the anchors? Are they underlined?
- 5. Is there a common color for the anchors?

### **ACTIVITY: MONUMENT BLOG**



### **KEY OBJECTIVE**

Recreate the Monument Magazine site

#### **TASKS**

- 1. Look through the provided HTML.
- 2. Start by adding styles that are the most common to the body, using mocks\_body.png and mocks\_basic.png as a guide
- 3. Bonus 1: Work from mocks\_medium.png
- 4. **Bonus 2:** Work from mocks\_advanced.png (You'll need to do some research to implement a background-image in the header and FontAwesome icons in the footer)
- 5. **Bonus 3:** Add a hover effect to links

# **ADVANCED CSS**

# **LEARNING OBJECTIVES**

- Describe inheritance in CSS.
- Add classes and IDs to HTML elements and apply CSS styles to elements based on class and ID.
- Explain when you would use a class and when you would use an ID.
- Apply CSS to elements based on their relationships.

# **WEEKLY OVERVIEW**

WEEK 2 CSS Selectors / Layout WEEK 3 Layout Lab / Grid Systems & Wireframing WEEK 4 Responsive Design / CSS Positioning

### **HTML BASICS**

# EXIT TICKETS