

Front End Development Session 3

Coloring Outside the Lines with CSS



Learning Goals

In today's session, we will:

01

Demonstrate how to structure our HTML with `div` tags

02

Survey the foundational grammar of CSS

03

Style sample HTML classes and ids with CSS

04

Define the CSS box model



Let's review



Q. What kind of code are we learning in this course?

Q. Can you name a role, job, or industry that uses this kind of code?

Q. What three "languages" do we use to create websites?

Q. What does "HTML" stand for?

Q. How can we examine website code on our computers?

Q. In HTML, what's the difference between the <head> and the <body>?

What is the difference between Git and Github?

What does the CLI stand for? What would we use it for?

How do you format a link in HTML?

Questions?







The <div> tag



https://www.website.com/home/

This is a heading for our div element

This is some text within our div element.

```
<div class="Div">
  <h2>This is a heading for our div element</h2>
  This is some text within our div element.
  </div>
```

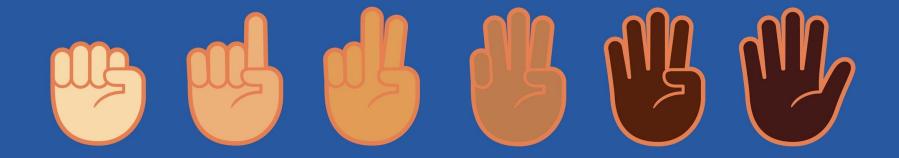
Div vs. Section

<div>

The <div> tag creates neutral segments that require CSS to style

<section>

<section> creates a
specific type of
content that HTML5
web browsers can
interpret and style.



Fist to five





Activity instructions:

- 1. Review instructions on Canvas
- 2. Make sure to have your HTML portfolio file open from yesterday!





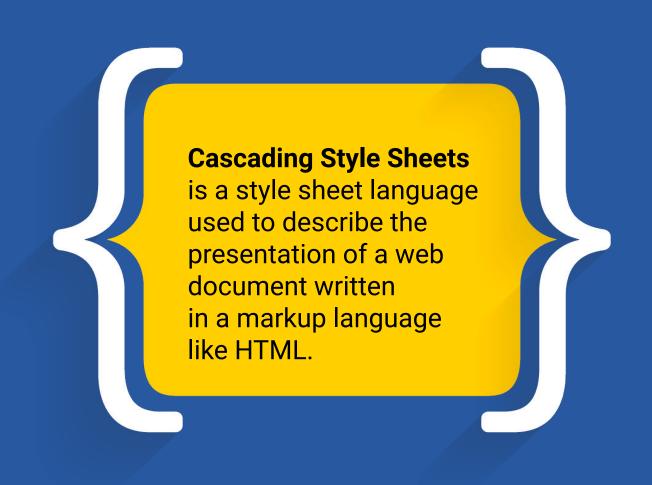
Let's review



Questions?







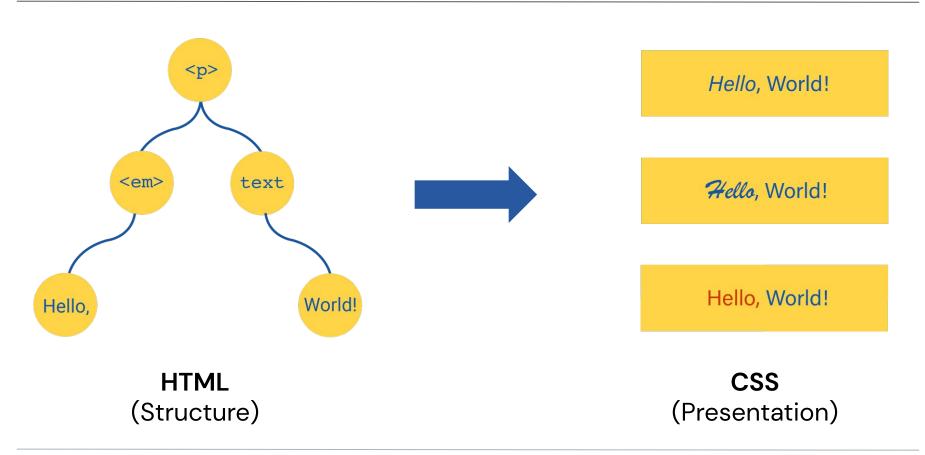
HTML/CSS Analogy

Plain HTML	HTML + CSS!
Like writing papers in Notepad	Like writing papers in Microsoft Word
Can only write <i>unformatted</i> text	Can format text, page layout, alignment, and more!



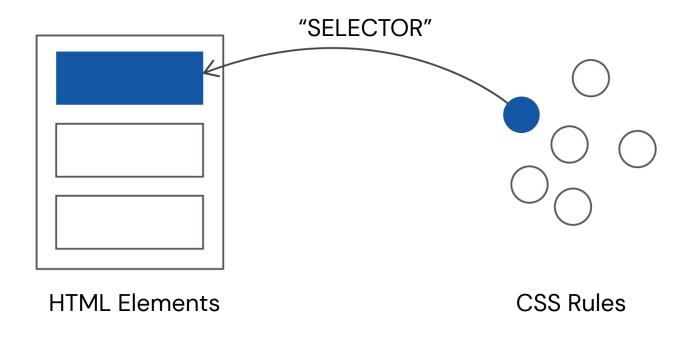


CSS



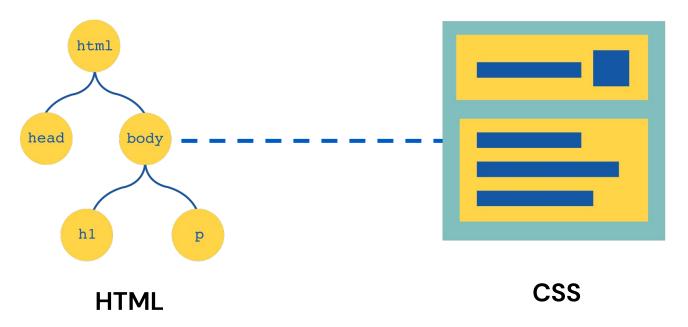
CSS

CSS is technically a selector language, which means it is used to select HTML elements in order to style them.

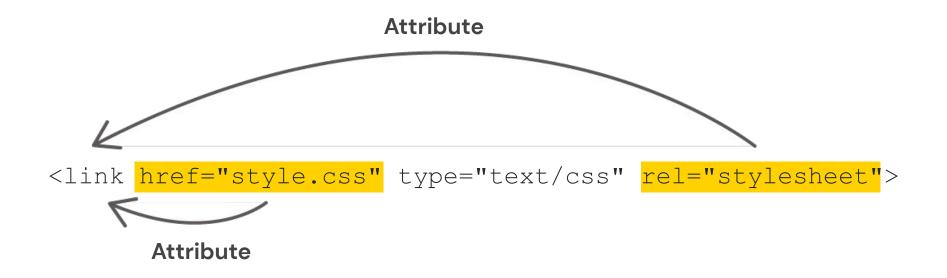


How to use CSS

There are two ways to link CSS and HTML: **inline** through the use of the style attribute or **externally** through the use of a **link** element that connects a stylesheet to the HTML.



How to use CSS

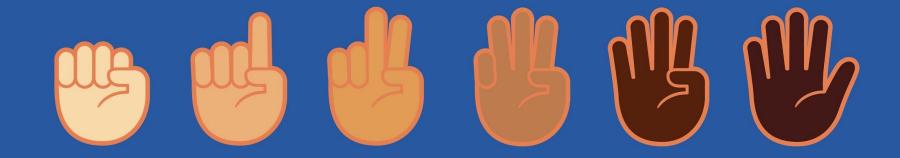


With an external stylesheet file, you can change the look of an entire website by changing just one file!



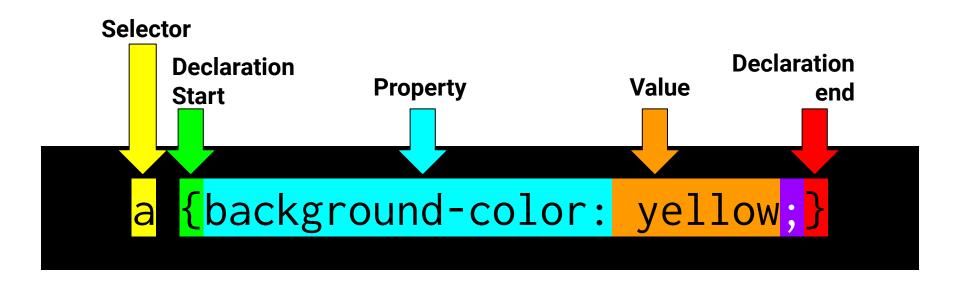
Instructor Demo: How To Link CSS





Fist to five





Selector: A selector is used to target the HTML elements we want to style. This target defines which HTML elements receive the CSS properties we specify.

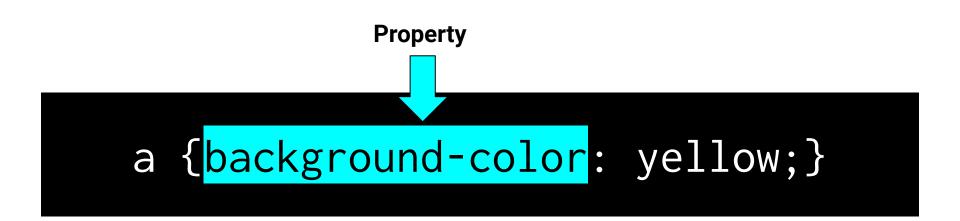


Declaration Block Start: CSS properties are typed out between 2 curly braces. Style declarations are made within this declaration block, separated by a semi-colon.

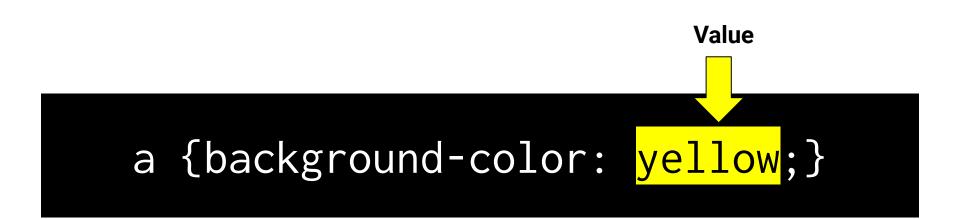
Declaration Block Start

a {background-color: yellow;}

Property: This is where we define the style we are going to change. We start by writing out the property that we wish to specify. We'll learn a few different example properties that are easily edited.



Value: Next, we define the value of the property we want to apply. Property and values are the core components of our CSS declaration, and are always written with a colon between them.



CSS Syntax

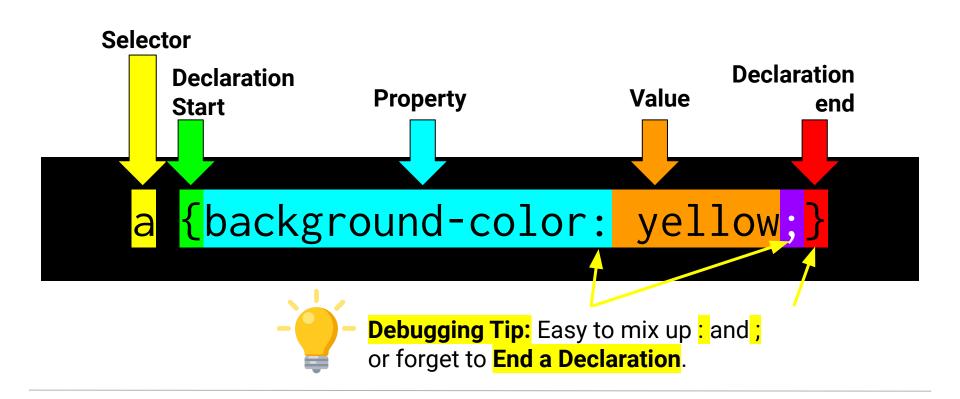
Statement End: Use a semicolon to end a CSS statement. You can include multiple statements in a single declaration!

Declaration Block End: End our CSS declaration with a second curly brace.

Declaration Block End a {background-color: yellow; Statement End

CSS Syntax

Selector, Declaration Start, Property, Value, and Declaration end.



CSS styling



https://www.website.com/home/

CSS Heading

This is a paragraph.

```
<style>
body {
 background-color: yellow;
h1 {
  color: darkblue;
  text-align: center;
p {
  font-family: roboto
  font-size: 20px;
</style>
</head>
<body>
<h1>CSS Heading</h1>
This is a paragraph.
```

CSS styling



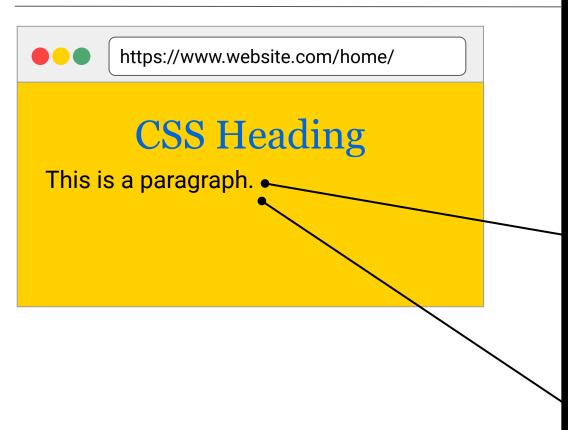
https://www.website.com/home/

CSS Heading •

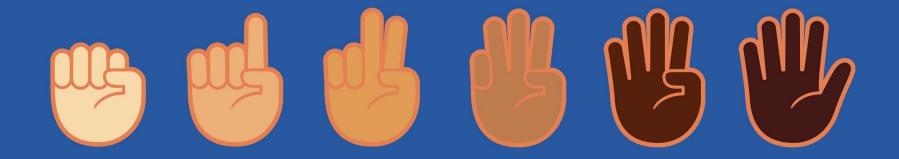
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CSS styling



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Fist to five

Color

There are *multiple* ways to define colors in CSS, including **name**, **RGB value**, and **hexadecimal value**.



Default colors can be applied by using simple color names.



Color

There are *multiple* ways to define colors in CSS, including **name**, **RGB value**, and **hexadecimal value**.

By **Name**

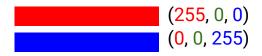
Default colors can be applied by using simple color names.



By **RGB value**

An RGB color value is specified with: rgb(RED , GREEN , BLUE).

Each parameter can take a value between 0-255 (with 255 being highest).



Color

There are *multiple* ways to define colors in CSS, including **name**, **RGB value**, and **hexadecimal value**.

By Name

Default colors can be applied by using simple color names.



By **RGB value**

An RGB color value is specified with: rgb(RED , GREEN , BLUE).

Each parameter can take a value between 0-255 (with 255 being highest).



By **Hexadecimal values**

These are six digit numbers, with each pair representing the intensity of red, green, and blue color, respectively.

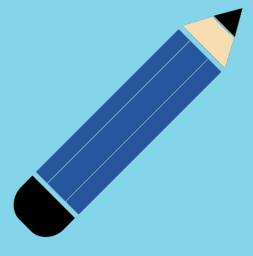


Let's



Add Some Color

Suggested Time: 10 Minutes



Activity instructions are in Canvas:

In this activity, you will use CSS to add some color to a musician's webpage!

- Style the background yellow
- Style the header purple
- Style the list items blue

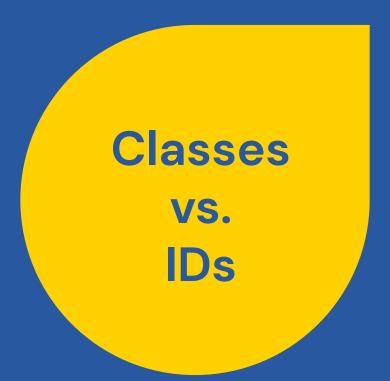






Questions?





Classes vs. IDs

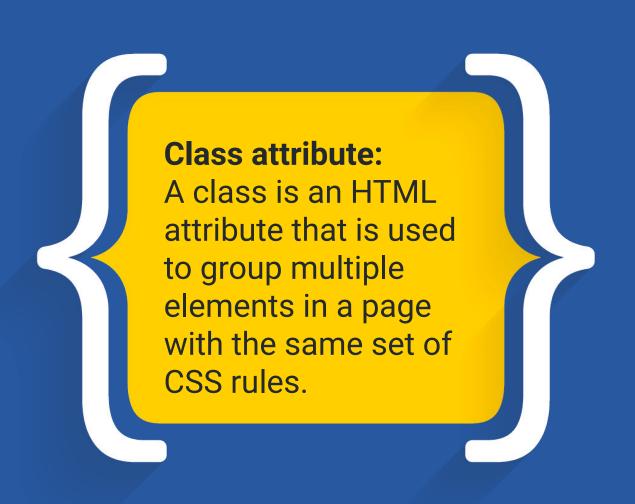
Classes

Classes (.classname) are used if the same style will be used on multiple HTML elements.

IDs

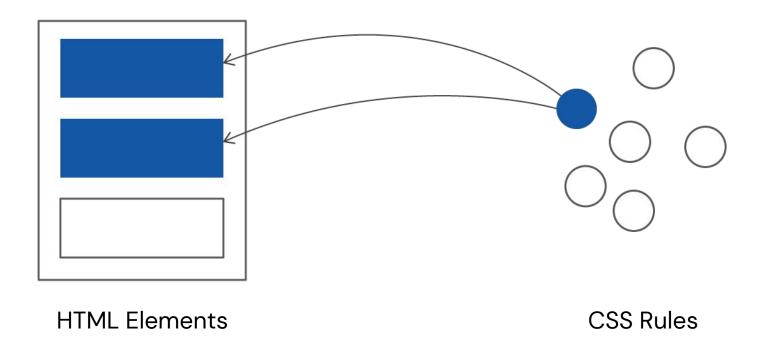
IDs (#idname) are used if a style is unique to a certain HTML element.





CSS: Class Attribute

By grouping HTML elements into a "class", we can apply the same set of rules to all of them at once!



Classes allow us to ensure similar items look the same, no matter what!

Class attribute:

First, define a class within your HTML tags. Second, declare rules for your class in your CSS stylesheet by using a dot (.) and the name of your class.

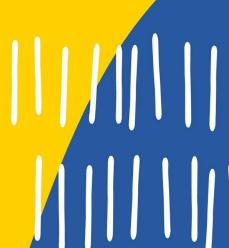
```
Hello!
.hello
 color: red;
 font-weight: bold;
```

HTML elements can have multiple classes. You can add two classes to an HTML element by simply adding another name for your class after your first.



When you create a named ID, make sure you give it a *unique* name!

Use descriptive attribute titles to make your code more readable!



ID attribute:

First define your ID within your HTML tags. Second, declare rules for your ID in CSS by using a hash (#) and the name of your ID.

```
Hi there!
#special
 color: red;
 font-weight: bold;
```

Questions?

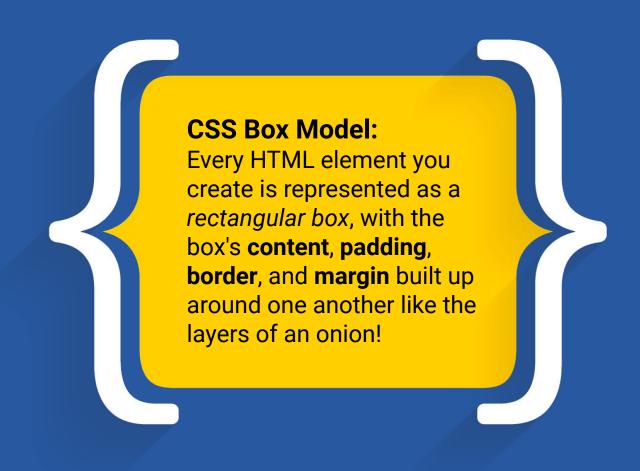




Instructor Demo: The Power of CSS!







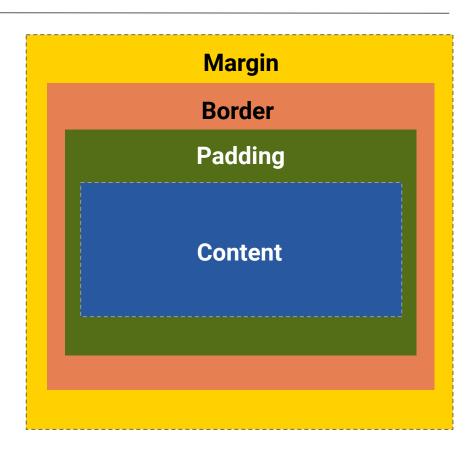
The CSS Box Model

Content: This is what's inside a container, such as text and images.

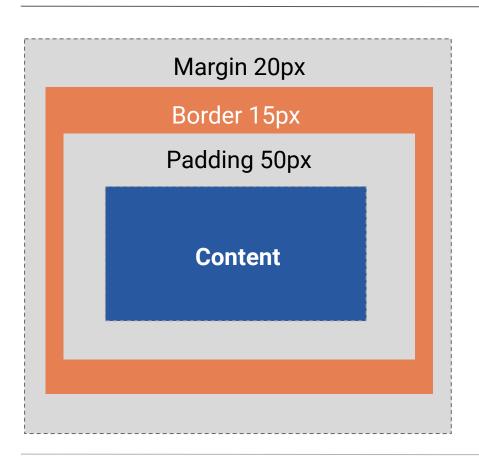
Padding: Padding is used to expand the space *inside* a box, between our content and our border.

Border: A border surrounds your content and distinguishes it from other elements around it.

Margin: Margin is used to create additional space *outside* of your border. Margin spacing increases the distance between your box and other elements on the page.



The CSS Box Model

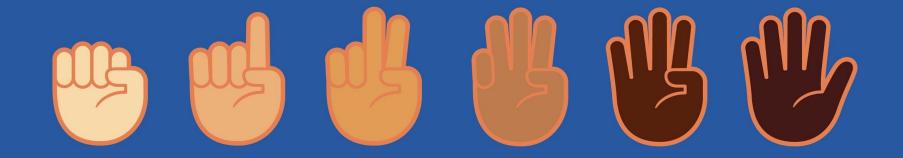


```
div {
    background-color: navy blue;
    padding: 50px;
    border: 15px orange;
    margin: 20px;
```



Instructor Demo: The Box Model





Fist to five

Let's



USPS Box Model

Suggested Time: 10 Mins



Activity instructions are in Canvas:

The USPS needs our help! Let's use the box model to create a style guide for them.





Let's review



Questions?





Let's



Time to Apply Some Style!





Activity instructions are in Canvas for: Styling a Sample Bio







Questions?





Learning Goals

Our objectives for today's session were to:

- 01 > 0
 - Demonstrate how to structure our HTML with `div` tags

- 02
- Survey the foundational grammar of CSS

- 03
- Style sample HTML classes and ids with CSS

04

Define the CSS box model

Reflection

What was your favorite part of today's session?

What was the most interesting thing we covered today?

What do you still have questions about?





Sneak Preview

Tomorrow, we'll be looking at CSS layout examples and then using workshop time to style our personal portfolio sites!

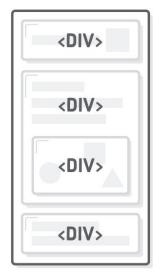
Questions?



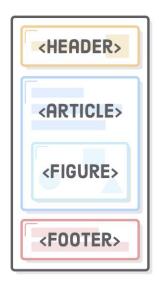


HTML5: DIV vs SECTION

Structure vs Semantics



AMBIGUOUS STRUCTURE



IDENTIFIABLE SECTIONS (AKA "<DIV> SOUP") (AKA "SEMANTIC MARKUP")

HTML5: SECTION LAYOUT

Organizing Our Thoughts

