CSS 101

HTML defines the structure of your site.
CSS defines the style.

You can write a website without any CSS, but it won't look pretty!
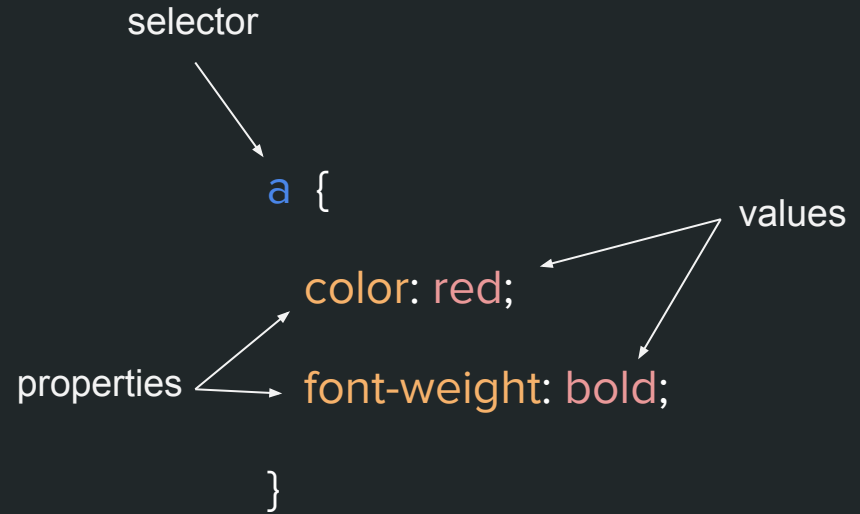
CSS can control:

- How elements are positioned on the page (margins and padding)

- How elements are sized (height and width)

- How elements flow (top->bottom or left->right)

- The color of text, backgrounds, and borders

- Animations and transitions

- What type of cursor to display

- Fonts and text rendering

- And soooooo much more!

Anatomy of a CSS style

1) Selector
2) Properties
3) Values

selector

a {

    color: red;   values

properties   font-weight: bold;

}

Selectors

- Define what html tags get the styles you define

- Can apply to multiple elements on the page

```
a {
    // This applies to all <a> tags
    // on the page
}


div > li {
    // This applies to all <li> tags
    // on the page that are direct
    // children of a <div> tag
}


* {
    // * is a wild card - The styles here
    // affect every element on the page
}
```

Let's play with some selectors

1) Open up your resume website
2) We'll start adding some color

Selector Review

https://www.w3schools.com/cssref/css_selectors.asp

- All of the tags you learned can be selected (li, a, div, etc.)

- *parent > child* will select the direct children of a parent (ol > li, div > a, etc.)

- *parent descendent* will select descendents that are contained in the parent (children, grandchildren, etc)

Selector Review

https://www.w3schools.com/cssref/css_selectors.asp

- *#id* will select a single element with the given id (#myElement)

- *.class* will select all elements with the given class name (.myClass)

- *selector, selector* will apply the same styles to multiple selectors (*a, ol > li*)

Selector Review

https://www.w3schools.com/cssref/css_selectors.asp

- *sibling1 + sibling2* will select all sibling2s that appear immediately after sibling1s (h1 + p)

- *:not(selector)* will select all elements that don't match the selector (*div:not(.exclude)*)

- *:nth-child(n)* will select every nth instance of the selector (*li:nth-child(2)*)

Let's play a game!

Schoology -> Week 3 -> Thursday -> CSS Selector Game

Styles

- Styles get applied to the elements you select

- There are 259 different style properties you can use!

- Again, you'll only really use the most common ones –->

```
.myClass {
    color: red; // Sets the foreground color
    background-color: #0044aa; // Background color
    text-align: left; // Sets the text justification
    font-size: 24px; // Sets the font size
    font-family: Arial, Helvetica, sans-serif; // Sets the font
    width: 200px; // Sets the width
    height: 80px; // Sets the height
    margin: 0px 10px 0px 10px; // Sets a margin
    padding: 10px 10px 20px 20px; // Sets a padding
    border: 1px solid #991199; // Draws a border
}
```

color and background-color

- Color sets the foreground color (i.e. the text color)

- Background-color sets the background-color

```
.myClass {
    color: red; // You can type out the color name
    background-color: #FFFFFF; // You can also use a hex code
}

.otherClass {
    color: rgba( 255, 255, 255, 0.5 ); // rgba can also be used
}
```

font-family

- font-family decides what font should be used

- You should provide multiple fallback fonts, comma separated

- https://www.w3schools.com/cssref/css_websafe_fonts.asp

Most specific

Least specific

```
.myClass {
    font-family: Arial, Helvetica, sans-serif;
}


p {
    font-family: "Times new roman", Times, serif ;
}
```

Fonts with more than one word should be in quotes

font-size, font-weight, line-height

- font-size is the size of the text

- font-weight defines how thick the text stroke is

- line-height defines the distance between two lines of text

```
.myClass {
    font-size: 20px;
    font-weight: 400;
    line-height: 12px;
}


p {
    font-size: 12em;
    font-weight: bold;
    line-height: 12px;
}
```
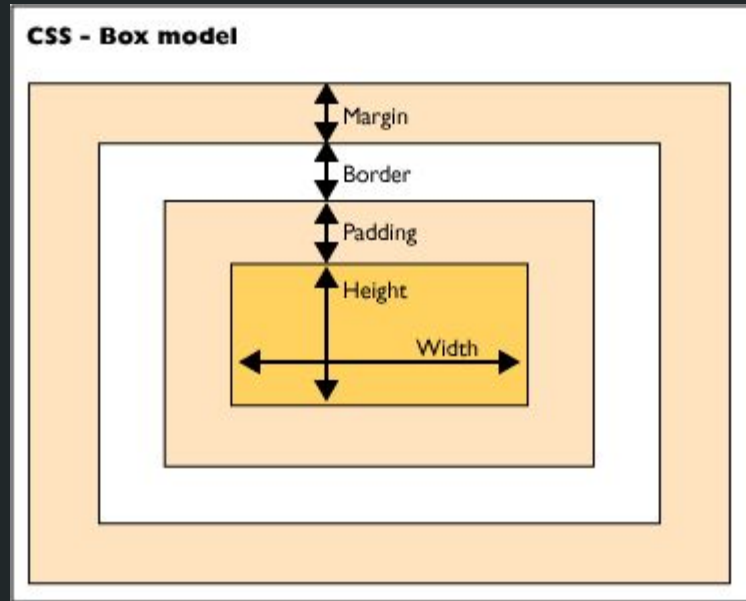
text-align

- The text-align property changes the justification of your text (left, center, right)

- It can also affect child elements (except divs)

- margin: 0 auto; will center child divs

```css
.myClass {
    text-align: left;
}


p {
    text-align: justify;
}
```

Introducing: The Box Model

- Width, height, padding, border, and margin determine how much space an element takes on the screen

Introducing: The Box Model

- Width, height, padding, border, and margin determine how much space an element takes on the screen

```css
.myClass {
    width: 400px;
    height: 200px;
    border: 1px solid blue;
    padding: 10px 10px 0px 10px;
    margin: 20px 0px 0px 10px;
}

div {
    width: 90%;
    height: 90%;
    border-width: 1px;
    border-style: dotted;
    border-color: #0000FF;
    padding-top: 10px;
    padding-right: 10px;
    padding-bottom: 0px;
    padding-left: 10px;
    margin-top: 20px;
    margin-right: 0px;
    margin-bottom: 0px;
    margin-left: 10px;
}
```

Let's make our portfolio look good

Add some CSS to it!