# WELCOME TO CFG YOUR INTRODUCTION TO WEB DEVELOPMENT



TECH SHOULDN'T JUST BE A BOYS CLUB.

# **COURSE JOURNEY**

HTML

**40DULE 01** 



Recap Project design

Javascript

- + Overview, data types
- + Loops, Functions, scope
- + Objects and the DOM

Github pages Frameworks Project presentations Careers in web development

Ш MODUL

What is CSS and what it is used for?

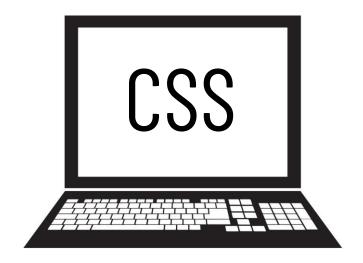
How to link HTML and CSS together

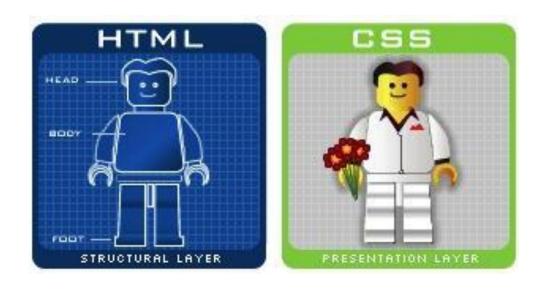
Learn to style a webpage with CSS

**Complete interesting practical exercises** 

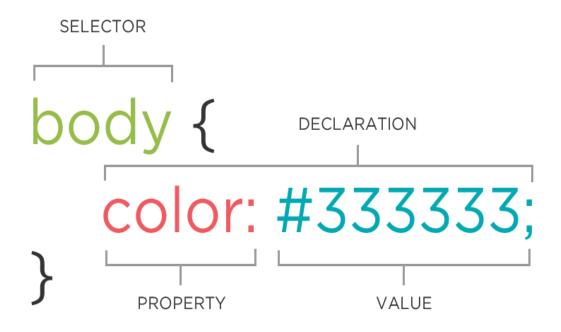
# WHAT IS CSS?

CASCADING STYLE SHEET





# **HOW DO I WRITE CSS?**



# **NOW LET'S PRACTICE TOGETHER**

TYPOGRAPHY, COLORS & FONTS

MINS

7 MINS

### Exercise 2.0 - set up

\*Create HTML file and CSS file, then link them together

### Exercise 2.1

\* Target an element and change its color.

### Exercise 2.2

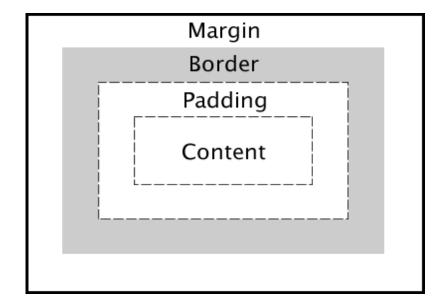
\* Pick a heading tag and change its font size, make it bold and underlined.

### Exercise 2.3

\* Import a font from <u>Google fonts</u>, link it to your HTML page and try to use it for one of your lists (ordered/unordered)



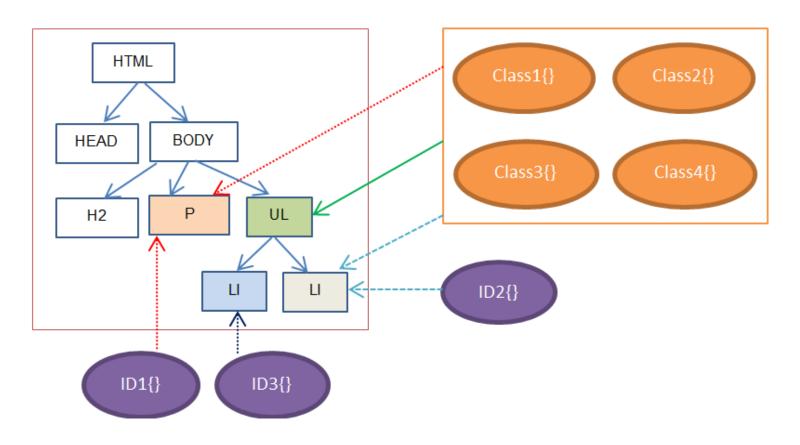
# **BOX-MODEL**



- •Content The content of the box, where text and images appear
- •Padding Clears an area around the content. The padding is transparent
- •Border A border that goes around the padding and content
- •Margin Clears an area outside the border. The margin is transparent



# CSS CLASS & ID STYLING SPECIFIC ELEMENTS IN A UNIQUE WAY



# CSS CLASS & ID STYLING SPECIFIC ELEMENTS IN A UNIQUE WAY

|   | CLASS SELECTOR  |   | ID SELECTOR   |
|---|---|---|---|
| • | Preceded by a dot (.)   | • | Preceded by a hash symbol (#)   |
| • | Targets any element that contain<br>the given class name in its class<br>attribute              | • | Any element can have an ID attribute, but that attribute's value can only be used once within a single document |
| • | Class can be assigned to any element in HTML and any number of elements can belong to one class |   |   |

# LET'S PRACTICE TOGETHER

POSITIONING, SPACING & DISPLAY

### O MINS

### Exercise 2.4

\* Enclose two sections of the page into two separate <div> tags.

Style each of the two divs with different background colors/fonts/different border styles. Try experimenting with the padding and margins to see how you can position content within each div.

(Hint: Use different class names for each div)



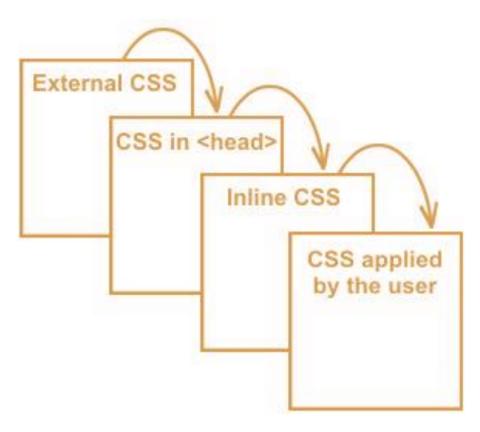
**GROUP EXERCISE** 

# **PRACTICE**

### Exercise 2.7

- \* Find the exercise-starter code in your student folder/on slack
  - 1. Download the code and unzip it
  - 2. Open the folder 'exercise-starter-code' in VScode (Take care to open the folder and not individual files)
  - Go through the code and style the elements according to the instructions in the HTML page

# WHY ARE THEY CALLED CASCADING STYLE SHEETS?



### **QUIZ TIME!**

### What colour would the word 'Style' be?

### Welcome to the wonderful world of Cascading Style Sheets

```
<h4>Welcome to the wonderful world of

<span class="color color1">Cascading </span>

<span class="color color2" id="specificColor">Style </span>

<span class="color color3">Sheets</span>
</h4>
```

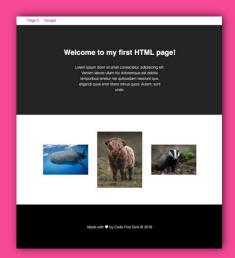
```
#specificColor {
  color: ■brown:
.color {
 font-size: 30px;
.color1 {
  color: □aqua;
.color2 {
  color: ■#ac2399;
.color3 {
  color: ■rgb(27, 125, 48);
```

# HOMEWORK

### + Homework Task

Style an index.html page according to the layout specified or choose a simple website you like and try to recreate it.

Option 1 (Solution code available)





Option 2 (No solution code available)

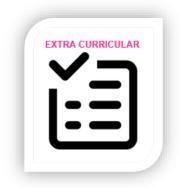


# THANK YOU HAVE A GREAT WEEK!



# **SELF STUDY TOPICS**

THESE CONCEPTS ARE USEFUL TO KNOW – WE ENCOURAGE YOU TO SELF STUDY



# **FLEXBOX**

Flex boxes can <u>adjust in size according to content</u> inside them. Individual items within a flex container may also be automatically reordered and rearranged to suit the available layout space

- **01** Download and unzip the 'flex-exercise-starter-code' from the slack channel.
- **02** Save and remove all the files you have open in VScode currently
- **03** Open the extracted folder (not individual files) called 'flex-exercise-starter-code' folder.
- **04** Check that your flex-exercise folder contains:

index.html

CSS

→ main.css

### Exercise 2.5

\* Follow directions in the flex-exercise-starter-code > main.css file (sent to you/available on slack)

(Refer to <a href="https://css-tricks.com/snippets/css/a-guide-to-flexbox/">https://css-tricks.com/snippets/css/a-guide-to-flexbox/</a> for extra tips and tricks)



10 mins

# REFERENCE MATERIALS



# **HOW TO IMPLEMENT CSS**

### Inline CSS

### BAD PRACTICE

```
This is a paragraph.
```

Styles are specific to that element and next to impossible to overwrite. Also very impractical if you want the same styles on multiple elements

### Internal CSS

### **BAD PRACTICE**

```
<head>
  <style type = text/css>
   body {background-color: blue;}
   p { color: yellow;}
  </style>
</head>
```

While better than inline, internal CSS is specific to the page it's written on so can't be reused across a whole site with multiple pages

### External CSS

BEST PRACTICE

Code is kept separate so can be used across multiple pages

```
<head>
  link rel="stylesheet" type="text/css" href="style.css">
</head>
```

# **WILDCARD**

```
/* WILDCARD */

* {
    /* overlays every item on the page with an outline.*/
    /* VERY useful for development */
    outline: 1px solid □orange;
}
```

# **DEFAULT STYLES**

```
/* ELEMENTS */
body {
   /* Its common to remove default styles */
   margin: 0;
   padding: 0;
}
```

# **TYPOGRAPHY, COLORS & FONTS**

### Colors and Decoration

- Names red, blue, yellow etc
- o RGB rgb(255,255,255)
- Hexadecimal #abc123
- Hex = most popular, hsl = least popular

### + Size

- Pixels eg 2px
- Percentage eg 20%
- Em and rem eg 2em
- o Pixels most used, em and rem close behind
- Em and rem used a lot when scaling to larger screens

### + Font family and weight

- o Font-family defaults vs custom
- Custom fonts out of scope for the lesson
- Using ctrl + space at 'font-family: ' shows you all the available fonts

```
h1 {
  color: blue:
  text-decoration: underline;
h1 {
  color: ■blue:
  text-decoration: underline:
  font-size: 20px;
h1 {
  color: blue;
  text-decoration: underline;
  font-size: 20px:
  font-family: Arial, Helvetica, sans-serif;
  font-weight: bold;
```

# **SPACING**

### Spacing

- Content
- Padding
- Border
- Margin

# Welcome to the wonderful world of Cascading Style Sheets Box

### <div class="box">Box</div>

```
.box {
   /* content */
   width: 150px;
   height: 80px;
   /* padding - top-right-bottom-left */
   padding: 20px 40px 20px 40px; /* or 20px 40px; */
   /* border - width-style-color */
   border: 5px solid ■black;
   /* margin */
   margin: 40px;
}
```

## **DISPLAY**

### Display

- Block
- Inline
- Flexbox

```
/* Flexbox is a powerful way to position your elements */
.hero {
  width: 100%;
  height: 200px;
  /* Use the below 3 for perfect centering */
  display: flex;
  align-items: center;
  justify-content: center;
}
.text {
  width: 300px;
  text-align: justify;
```

```
<div class="hero">

    Lorem ipsum dolor sit amet consectetur adipisicing elit.
    Quam, soluta quas consequatur facere numquam
    voluptatum
    labore, eum ratione dolor placeat assumenda fugit iusto
    accusamus atque, porro eveniet tenetur
    perferendis quis!

</div>
```

Lorem ipsum dolor sit amet consectetur adipisicing elit. Quam, soluta quas consequatur facere numquam voluptatum labore, eum ratione dolor placeat assumenda fugit iusto accusamus atque, porro eveniet tenetur perferendis quis!

# **CLASSES AND IDS**

- Classes are a way to target as many different elements as you want. They don't have to be the same type.
  - They are declared on the element with a class attribute
  - They are referenced in CSS with a dot before the class name

- + IDs are unique to a page. If you use an ID, you can only use it once in the document as it is unique
  - They are declared on the element with an ID attribute
  - They are generally used for targeting specific elements with JavaScript logic and not for styling.

# WHEN DO I USE CLASSES VS IDS

Use classes wherever possible

It is generally regarded as bad practice to use IDs to apply styling for several reasons:

- Class specificity is lower than ID specificity, meaning its harder to overwrite when using IDs
- Classes can be reused, IDs cannot
- A consistent convention Using only the class attribute to define styles is easier for others to understand instead of a combination of the class and id attributes
- An element can have several classes, but only one ID

# THINGS TO REMEMBER

### !important

- Eg`color: red !important;`
- Almost impossible to overwrite
- There's nearly always a better way
- Some CSS frameworks use it

### Using IDs as selectors

- IDs are unique
- Better used for targeting with logic (eg Javascript which we'll cover)
- Using IDs to style is not efficient, they are better used to target specific elements with logic (JavaScript)
- If you want to be taken seriously as a developer, it's good to follow best practices. This also makes your code easy to read for others you work with.