



_nology

TALENT IN **TECH**NICOLOUR

CSS Basics

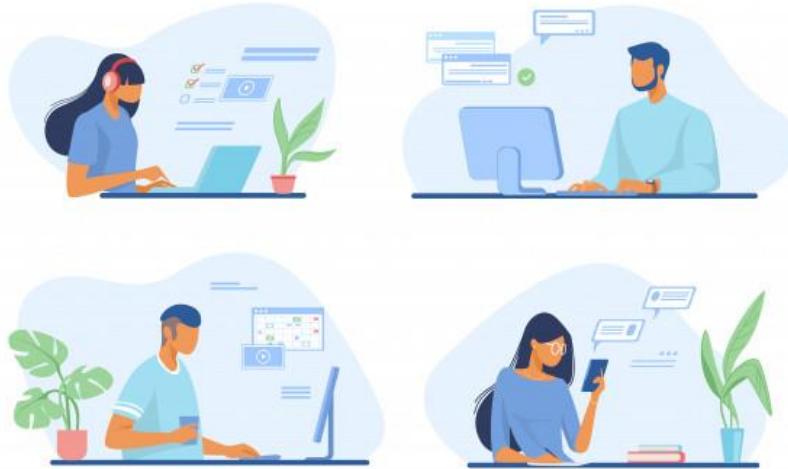
Learning objectives

CSS = Cascading Style Sheets

- Linking CSS to your HTML
- CSS Selectors
- Pseudo elements and classes
- Positioning
- Specificity

Why?

- Without CSS our plain HTML doesn't look very nice at all and certainly doesn't make for an enjoyable user experience.
- CSS handles the look and feel of the webpage
- It also allows us to adapt the styling for different screen sizes, making sure the webpage is presentable on all devices.



Linking styles to our HTML

There are three different ways of inserting a style sheet.

- Inline
- Internal
- External



Inline CSS

An inline style may be used to apply a unique style for a single element.

To use inline styles, add the style attribute to the relevant element. The style attribute can contain any CSS property.

```
<h1 style="text-align:center">My Heading</h1>  
<p style="color: red">This is a paragraph</p>
```

Internal CSS

The internal styling is defined inside the `<style>` element, inside the head section.

```
<!DOCTYPE html>
<html>
<head>
  <style>
    body {
      background-color: linen;
    }

    h1 {
      color: maroon;
      margin-left: 40px;
    }
  </style>
</head>
<body>
  <h1>This is a heading</h1>
  <p>This is a paragraph.</p>
</body>
</html>
```

External CSS

```
<!DOCTYPE html>
<html>
<head>
  <link rel="stylesheet" href="mystyle.css">
</head>
<body>
  <h1>This is a heading.</h1>
  <p>This is paragraph.</p>
</body>
</html>
```

Classes and Id's

- Allow us to differentiate between HTML elements with the same tag
- Classes are "recyclable" i.e. can be used numerous times to apply styles/functionality
- Id's are specific to an individual element
- Naming convention - lowercase & hyphenated

For example...

```
<h2 class="heading">This is my subheading</h2>  
<p id="generic-content">This is my generic content</p>  
<h3 class="heading">This is another subheading</h3>
```


CSS selectors

CSS selector	Description
<code>* {margin: 0; padding: 0;}</code>	Universal Selector
<code>#id {color:red;}</code>	ID Selector
<code>.class {color:red;}</code>	Class Selector
<code>h1, h2 ,h3 {color:red;}</code>	Element Selector

CSS Pseudo Elements

A CSS pseudo-element lets you style a specific part of the selected element.

- Added using two colons (::)

CSS pseudo element	Description
::after {}	After a selected element
::before {}	Before a selected element
::first-line {}	The first line of a selected element
::selection {}	The highlighted area by the user

CSS Pseudo Classes

A CSS pseudo-class specifies a special state of the selected element(s).

- Added using a single colon (:)

CSS pseudo selector	Description
:hover {}	Mouse Over Selector
:active {}	Active Link Selector
:focus {}	Focus Selector
:visited {}	Visited Links Selector
:link {}	Link Selector
:checked {}	Checked elements selector

Fonts

Browsers have built-in fonts but unfortunately these depend on local operating system fonts e.g Helvetica and Helvetica Neue appear on Macs, but not Windows. The common fix is to specify font families to use, e.g.

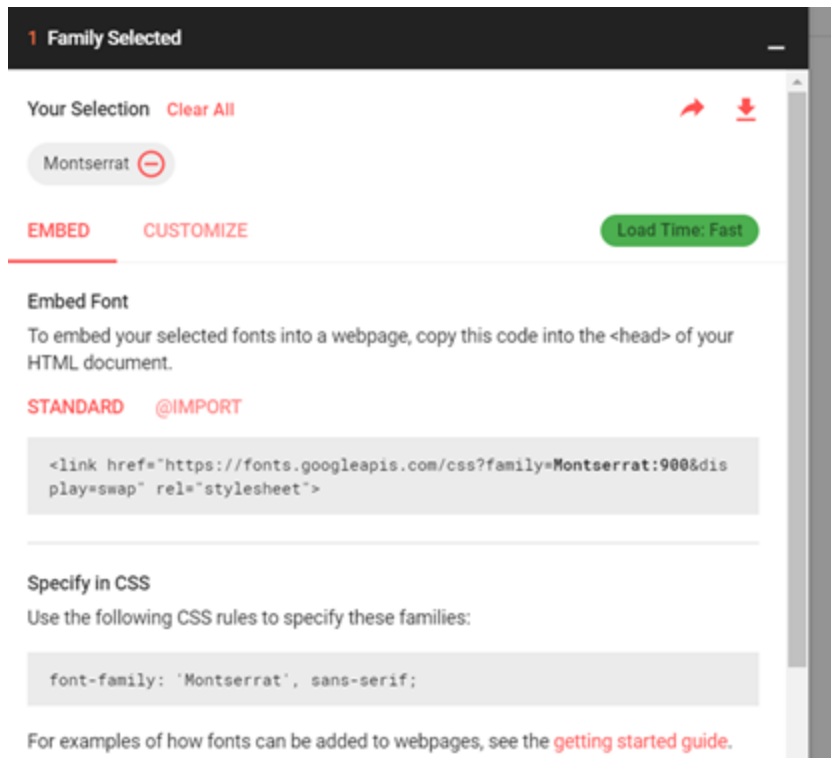
```
body {  
  font-family: "Helvetica Neue", Helvetica, "Segoe UI", Arial, sans-serif;  
}
```

CSS font property	Value options
font-style	normal italic oblique
font-weight	normal bold bolder lighter 100 - 900
text-transform	capitalise lowercase uppercase
font-size	12px 0.8em 80%

Google fonts

Let's have a browse.. Go to:

<https://fonts.google.com>



The screenshot shows the Google Fonts interface after selecting the Montserrat font family. At the top, a dark header says "1 Family Selected". Below it, "Your Selection" shows "Montserrat" with a minus icon and a "Clear All" link. There are share and download icons. A green badge indicates "Load Time: Fast". Two tabs, "EMBED" and "CUSTOMIZE", are visible, with "EMBED" being the active one. The "Embed Font" section explains that the code should be placed in the <head> of an HTML document. It provides two options: "STANDARD" and "@IMPORT". The "STANDARD" option shows a code block with the following HTML: `<link href="https://fonts.googleapis.com/css?family=Montserrat:900&display=swap" rel="stylesheet">`. The "Specify in CSS" section provides a CSS rule: `font-family: 'Montserrat', sans-serif;`. At the bottom, it links to a "getting started guide".

1 Family Selected

Your Selection [Clear All](#)

Montserrat

EMBED CUSTOMIZE Load Time: Fast

Embed Font

To embed your selected fonts into a webpage, copy this code into the <head> of your HTML document.

STANDARD @IMPORT

```
<link href="https://fonts.googleapis.com/css?family=Montserrat:900&display=swap" rel="stylesheet">
```

Specify in CSS

Use the following CSS rules to specify these families:

```
font-family: 'Montserrat', sans-serif;
```

For examples of how fonts can be added to webpages, see the [getting started guide](#).

CSS Position

- Static
- Relative
- Absolute
- Fixed
- Sticky

What are these and what does it mean to the layout of our page?



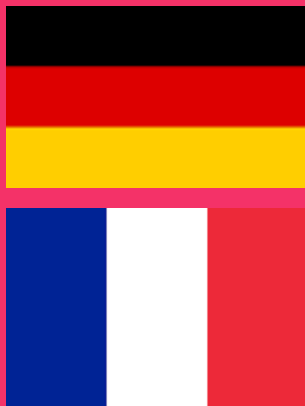
Specificity and Inheritance

- As a rule of thumb the more specific the selector is, the higher specificity it'll have.
- An id is more specific than a class is more specific than an element.

```
p { font-size: 12px }  
  
// more specific  
p.intro { font-size: 16px }
```

Challenge 1

- Create the German flag at the top of the page and the French flag underneath, using html and css. Remember to link your html to your css!



- Extension - when you hover over the German flag, it changes to the Hungarian flag.
- Extension - when you hover on the French flag, it changes to the Irish flag.
- Extension - add, commit and push back up to Github

Additional resources

https://www.w3schools.com/html/html_css.asp

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

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

https://www.w3schools.com/css/css_positioning.asp

<https://fonts.google.com/>

<http://vanseodesign.com/css/css-specificity-inheritance-cascade/>