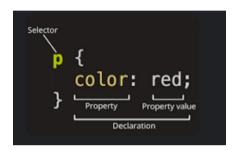# Class Selectors

Class selectors

This document describes *class* selectors which are an important and powerful tool to use with our CSS. We will be using them extensively later in the course, so you are advised to read through this document in order to gain some familiarity with them.

Type Selectors

- i.e. the *selector* is the name of the HTML element the rule is applied to.

```
/* This rule applies to "p" tags */
p {
    color: blue;
}
```

We have also seen how we can *group* our selectors so that the rule is applied to more than one *type* of element

```
/* This rule applies to "h1" and "h2" tags */
h1, h2 {
    color: red;
}
```

However, in both cases, the rules apply to *every* instance of the element that appears in the page.

- i.e. ALL paragraphs will be blue

Commonly, we want more control over the styling of elements than this gives us. Perhaps we want some of our "p" tags to be blue and some to be green. **Class selectors** are one way of achieving this.

Classes - The HTML

A **class** is an *attribute* which we can add to our HTML tags (just like *lang*, *title*, etc.). Class attributes can be used with all types of element (p, h1, h2, strong, etc.) Example:

```
<p class="highlight">Example</p>
```

The *value* we use with the *class* attribute (*highlight* in the above example) is user-defined

- i.e. we choose it

The *value* should not contain spaces

- Generally, we use letters from a-z, dashes and underscores
- Best practice: the *value* is meaningful (describes its usage)

After adding a *class* attribute to an element, we have an additional way to target that element with CSS rules.

- The value of the *class* attribute acts as an identifier for the tag or tags we use it on.

Classes - The CSS

Once we have added *classes* to our HTML elements, we can use them as *selectors* in our CSS file.

- The class name is always preceded by a dot (full-stop) when used in CSS selectors

Assuming we have added the *highlight* class to one or more of the tags in our page, we can write a CSS rule that targets those elements like this:

```
.highlight { color:
    green;
}
```

Try it

- Open the *index.html* file from your *balloons* website in your code editor
- In the body of the page, make sure there is at least:
  - 2 *h1* elements
  - 4 or more *p* elements
- Add a *class* attribute to one of the *p* tags. The value of the attribute should be **highlight** (see example above for the syntax)
- Open the CSS file for your *test* website in your code editor.
- Add a new *rule* to the stylesheet
  - the selector will be: **.highlight**
- Add a *declaration* to the rule which sets the **color** to **#ff6600**

  ```
  .highlight { color:
      #ff6600;
  }
  ```

- Save your files and preview *index.html* in your browser. The paragraph you added the class to should be orange.

Class usage

We can use the same *class* value with multiple elements on our page. Both *highlight* paragraphs will be effected by the *.highlight* CSS rule:

```
<p class="highlight">Example</p>
<p>Example</p>
<p class="highlight">Example</p>
```

We can also use the same *class* with different types of element on our page. The *h1* and the second paragraph will be effected by the *.highlight* CSS rule:

```
<h1 class="highlight">Example</h1>
<p>Example</p>
<p class="highlight">Example</p>
```

Try it

- In the *index.html* file from your *balloons* website, add a *class* attribute to one of the *h1* tags.
    - The value will be **highlight** (same value we used on the *p* tag)
    - You can also add the same class to another of the paragraphs if you like.

- Save your file and preview it in the browser. In addition to the paragraphs which have the *highlight* class, the heading you just added the class to will also be orange.

Many classes

There is no limit to the number of classes we use in our page:

```
<p class="first">Example</p>
<p class="second">Example</p>
<p class="third">Example</p>
```

In our CSS file, we just have to create a new *rule* for each of them (*.first*, *.second*, etc.)

- Note, if there is no corresponding *rule* in the CSS file, the *class* attribute has no effect on the element.

Try it

- In the *index.html* file from your *test* website, add a *class* attribute to one of the *p* tags that doesn't have one already.

- The value should be **special**

- In your site's CSS file, add a new *rule* with **.special** as the *selector*.

- Add some *declarations* to the *rule* setting the following properties:
    - **font-size** with the value **2em**
    - **color** with the value **#00AA00**
    - **font-style** with the value **italic**

```
.special { font-size:
    2em; color:
    #00aa00; font-
    style: italic;
}
```

- Save your files and preview *index.html* in your browser. The paragraph you added the class to should be green, italic and twice as big as the other paragraphs.

More specific use of classes

When we use the simple class selector, it applies to ALL elements that possess that *class*:

```css
.highlight { color: #ff6600; }
```

However, in our *selector*, we can also combine the *class* with the *type* of element it has been applied to, which gives us even more control.

For example, the following rule will only be applied to *p* elements that have the *highlight* class:

```css
p.highlight { font-weight: bold;
}
```

Assuming we want to make ALL elements with the *highlight* class orange, but we want to make *p* elements with the *highlight* class bold:

```css
.highlight {
    color: orange;
}
p.highlight { font-weight: bold;
}
```

The *p* with *highlight* class will be bold and orange. Other elements with the *highlight* class will be orange.

Try it

- In your *hello* website's *index.html* file, make sure you have a *h1* and a *p* that have the class *highlight*
- In your site's CSS file, add 2 new rules (leave the existing **.highlight** rule as it is)
    - The selector for the first rule will be **h1.highlight**
    - The selector for the second rule will be **p.highlight**
- In the *h1.highlight* rule, add a *declaration* that sets the **text-transform** to **uppercase** • In the *p.highlight* rule, add a *declaration* that sets the **font-style** to **italic**
- E.g.:
```css
h1.highlight { text-transform: uppercase;
}
p.highlight { font-style: italic;
}
```
- Save your files and preview *index.html* in your browser.
  -All of the elements with the *highlight* class should be orange.
    - The *h1* with the highlight class should be all uppercase, but will NOT be italicised.
    - The *p* with the same class should be italicised, but will NOT be uppercase.

Common error with classes

In the HTML attribute, there is NO dot: `class="highlight"`

In the CSS selector, there IS a dot:

```
.highlight {

}
```

Exercise

Experiment with *class* attributes with either your *my_first_website* website or your *journal* website.

- Add some *class* attributes to the HTML tags
- Define corresponding *rules* in your CSS file
- Experiment with assigning the same class to different *types* of element – p, h1-h6, strong, em, abbr, etc.
- Experiment with tag-specific selectors (e.g. p.nameofclass, strong.nameofclass, etc.)