# **Web Engineering**

CSS

## **CSS**

- CSS stands for Cascading Style Sheets
- CSS describes how HTML elements are to be displayed on screen.
- CSS is the language we use to style an HTML document.

### **HTML CSS**

• Cascading Style Sheets (CSS) is used to format the layout of a webpage.

CSS can be added to HTML documents in 3 ways:

- Inline by using the style attribute inside HTML elements
- Internal by using a <style> element in the <head> section
- External by using a element to link to an external CSS file

### **Inline CSS**

```
<h1 style="color:blue;">A Blue Heading</h1>
A red paragraph.
```

```
<h1 style="background-color:powderblue;">This is a heading</h1>
This is a paragraph.
```

## **Internal CSS**

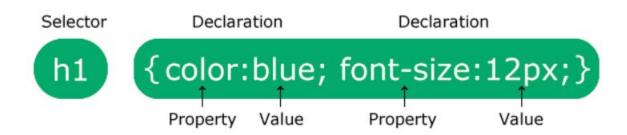
```
<!DOCTYPE html>
<html>
<head>
<style>
body {background-color: powderblue;}
h1 {color: blue;}
p {color: red;}
</style>
</head>
<body>
<h1>This is a heading</h1>
This is a paragraph.
</body>
</html>
```

### **External CSS**

```
<!DOCTYPE html>
<html>
<head>
  <link rel="stylesheet" href="styles.css">
</head>
                                    "styles.css":
<body>
                                      body {
<h1>This is a heading</h1>
                                       background-color: powderblue;
                                      }
This is a paragraph.
                                      h1 {
                                       color: blue;
                                      }
</body>
                                      p {
</html>
                                       color: red;
```

## **CSS Syntax**

#### **CSS Syntax**



## **Example**

```
body {
  background-color: lightblue;
}

h1 {
  color: white;
  text-align: center;
}

p {
  font-family: verdana;
  font-size: 20px;
}
```

### **CSS Selectors: Element Selector**

The element selector selects HTML elements based on the element name.

#### Example

Here, all elements on the page will be center-aligned, with a red text color:

```
p {
  text-align: center;
  color: red;
}
```

### **Id Selector**

The id selector uses the id attribute of an HTML element to select a specific element.

The id of an element is unique within a page, so the id selector is used to select one unique element!

To select an element with a specific id, write a hash (#) character, followed by the id of the element.

#### Example

The CSS rule below will be applied to the HTML element with id="para1":

```
#para1 {
  text-align: center;
  color: red;
}
```

## **Class Selector**

The class selector selects HTML elements with a specific class attribute.

To select elements with a specific class, write a period (.) character, followed by the class name.

#### Example

In this example all HTML elements with class="center" will be red and center-aligned:

```
.center {
  text-align: center;
  color: red;
}
```

## **Class Selector**

You can also specify that only specific HTML elements should be affected by a class.

#### Example

In this example only elements with class="center" will be red and center-aligned:

```
p.center {
  text-align: center;
  color: red;
}
```

## More than one class

HTML elements can also refer to more than one class.

#### Example

In this example the element will be styled according to class="center" and to class="large":

This paragraph refers to two classes.

## **Universal Selector**

.

The universal selector (\*) selects all HTML elements on the page.

#### Example

The CSS rule below will affect every HTML element on the page:

```
* {
  text-align: center;
  color: blue;
}
```

## **Grouping Selector**

The grouping selector selects all the HTML elements with the same style definitions.

Look at the following CSS code (the h1, h2, and p elements have the same style definitions):

```
h1 {
   text-align: center;
   color: red;
}

h2 {
   text-align: center;
   color: red;
}

p {
   text-align: center;
   color: red;
}
```

## **Grouping Selector**

It will be better to group the selectors, to minimize the code.

To group selectors, separate each selector with a comma.

#### Example

In this example we have grouped the selectors from the code above:

```
h1, h2, p {
  text-align: center;
  color: red;
}
```

## **All CSS Simple Selectors**

Selector	Example	Example description
<u>#id</u>	#firstname	Selects the element with id="firstname"
<u>.class</u>	.intro	Selects all elements with class="intro"
element.class	p.intro	Selects only  elements with class="intro"
*	*	Selects all elements
<u>element</u>	p	Selects all  elements
element,element,	div, p	Selects all <div> elements and all  elements</div>

## References

https://www.w3schools.com/css/css\_selectors.asp

