



# **Web design and development 1 (CW1)**

**Class 2**

# CSS

CSS (*cascading stylesheets*), allows you to stylize, to customize the appearance and positioning of html pages contents. It also offers quite a number of possibilities in matters of user interactions and animations

CSS can be integrated within tags, html files or gathered in an external file linked to HTML documents. Using the last method (external CSS file linked to HTML documents), it becomes fast and easy to modify the appearance of HTML elements throughout an entire web site by modifying only the CSS document. It also simplifies and shortens the HTML document and it gives more flexibility and possibilities than HTML can offer.

So, as much as possible, the structure and contents will be in the HTML document, the general styling in an external CSS file, specific styling can be coded into a particular HTML document, and exceptions can finally be placed within HTML tags.

## CSS in HTML tags

CSS properties and values can be coded into HTML tags using the attribute **style=" "**.

Properties and values simply have to be coded within the quote marks of the attribute. For more than one attribute, use semi-comma between them.

### Example :

To specify the size of the font within a paragraph's opening and ending tags, **font-size=" "** will be used. A value will then be specified using various possible units of measure (px, pt, mm, cm, in, etc.). To specify the color of the text in the same paragraph, **color=" "** will be used and a color value (color name or hex code).

## CSS within <head> </head>

Any CSS placed in the HEAD section of the HTML document will override those located in an external CSS file linked to the document. Those placed within the tags will override the CSS placed in the HEAD section or in an external file.

The CSS declaration starts with a selector followed by the properties and values placed between brace brackets. On s'assurera d'utiliser les deux points après la propriété et le point-virgule après la valeur.

The selector can be a tag, a class, an ID, etc. The properties will be applied accordingly with the chosen selector.

```
<tag style="property: value;" >/tag>
```

```
<tag style="property: value; property: value;" >/tag>
```

```
<p style="font-size: 14pt; color: red;">
```

Text content of the paragraph

```
</p>
```

```
<style>
```

```
p {
```

```
    font-size: 14px;
```

```
    color: red;
```

```
}
```

```
</style>
```

*Nota : in the preceding example, all text placed between paragraph tags would be red and 14px throughout the page.*

## External linked CSS file

### The CSS file :

To create a CSS file, all is needed is to create a blank text file saved with the CSS extension (.css).

### Linking the CSS file to a html document :

So the style coded in the CSS document can be applied to your html file, it is needed have the two of them linked.

To do so, the `<link>` tag is used along with some values in the `<head>` of the HTML page.

**N.B. :** A HTML document can be linked to multiple CSS files.

## Styling text

As foreseen, styles can be applied to tags using selectors. Here are the main text styling properties needed :

### Using a specific font :

font-family: arial,helvetica,sans-serif;

### Font-size :

font-size: 10px;

(px, pt, em, %, mm, cm, in, etc.)

### Text color :

color: red;

(color name, hex code, etc.)

### Font style :

font-style: normal;

(normal, italic, etc.)

### Font weight :

font-weight: normal;

(normal, bold, bolder, lighter, etc.)

### Leading :

line-height: 13px;

### Alignment :

text-align: center;

(left, right, center, justify, etc.)

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

```
p {  
  font-family: helvetica;  
  font-size: 16px;  
  color: black;  
  font-style: normal;  
  font-weight: normal;  
  line-height: 20px;  
  text-align: left;  
}
```

***Nota :** in the preceding example, all text placed between paragraph tags would be helvetica regular, black, 16px, with a 20px spacing between lines and aligned left throughout the web site.*

## The containers

CSS considers all tags as containers in which contents are placed.

So, if a word is written within paragraph tags `<p></p>`, the paragraph is considered as a box surrounding the word. .

We can then set a background color, dimensions as well as internal and external margins.



Some container's properties :

**Background color :**

background-color: red;  
(or background)

**Dimensions:**

width: 80px;  
height: 30px;

**padding (internal margin) :**

padding: 10px;

or

padding-top: 10px;  
padding-bottom: 20px;  
padding-left: 15px;  
padding-right: 5px;

or

padding: 10px 20px 15px 5px;

**margin (external margin):**

margin: 20px;

or

margin-top: 10px;  
margin-bottom: 20px;  
margin-left: 15px;  
margin-right: 5px;

or

margin: 10px 20px 15px 5px;

**N.B. :** **padding** and **margin** can use auto as a value. If auto is used with margin, it centers the container horizontally.

```
p {  
    background: white;  
    width: 140px;  
    height: 60px;  
    padding: 10px;  
    margin: auto;  
    font-weight: bold;  
    color: black;  
    text-align: center;  
}
```

# Class and id

So far, we have seen that it is possible to choose a tag as a selector so we can style its content. Although, it is very possible that we don't want for the contents of all of these selectors occurrence to be styled the same way. For instance, if we chose a *font-color: black* for contents placed between `<p>` `</p>`, it is possible that we would like to have some of these paragraphs to use a different color. This is where classes and ID become useful.

## class

A class is created choosing a word preceded by a period. It then becomes possible to use it as a value to the attribute `class=""` in any HTML tags. The properties contained in the CSS class is then applied to the content of the tag.

To apply more than one class to a tag, just separate the terms with a space.

## id

id is just like class although it can only be used once in each HTML page.

To create an id, simply use the hashtag instead of a period and use the attribute `id=""` in the HTML tag.

You will soon find out that using id becomes very useful when using JavaScript.

**N.B.:** You can use both class and id to apply different properties within the same HTML tag.

```
.look {  
    font-family: arial;  
    line-height: 20px;  
    color: purple;  
}  
  
.big {  
    font-size: 30px;  
}  
  
<p class="look big">  
    Paragraph's content  
</p>
```

```
#definition {  
    font-family: arial;  
    font-size: 16px;  
    line-height: 20px;  
    color: purple;  
}  
  
.question {  
    font-style: italic;  
}  
  
<p id="definition" class="question">  
    Paragraph's content  
</p>
```