



Web design and development 1 (CW1)

Class 1

HTML language

Web design minimal requirement is to know how to code HTML. But HTML only isn't sufficient. To be able to create a web site, you will soon find out that other languages are very useful if not mandatory : CSS and JavaScript, at least.

HTML (*hypertext markup language*), consist in an UTF-8 text file (MAC : TextEdit / PC : Notepad) containing tags and content saved with HTML extension. Tags are used to structure contents and the HTML file can be viewed using a web browser.

Eventually, we will introduce you different HTML editors that will speed up the process of coding and that will offer you different useful functions.

Open a text file and save it using HTML extension. The first page of a web site is always named *index.html*.

The tags

Tags generally come in pairs (opening and ending tags) written between brackets. The ending tag is the same as the opening tag, but the term between brackets must start with a forward slash. Any content placed in between the opening and the ending tags will be affected. The opening tag tells the browser where the changes start and the ending tag tells where it ends.

Some tags are used alone (e.g. to change line). In those rare cases, the term used between brackets is followed by a space and a forward slash.

HTML page structure

Some basic tags must be used before starting any work on a web page; that's the HTML file structure.

<html> : Tells the browser that everything in between the opening and the ending tags is writtent in HTML.

<head> : Contains different informations for the browsers showing the file. For now, we will only use the title tags.

<body> : Contains everything that will be shown to users in the browser's window.

<title> : Give a title to the page which is shown in the window's tab of the browser.

```
<tag> </tag>
```

```
<tag />
```

```
<html>
```

```
<head>
```

```
<title> Title of page showing in the tab </title>
```

```
Instructions given to the browsers
```

```
</head>
```

```
<body>
```

```
Content showing in the browser's window
```

```
</body>
```

```
</html>
```

Headings (Content's titles)

Heading allows to create a priority order within content. Headings tags, from the biggest to the smallest, are used to do prioritize titles : `<h1>` to `<h6>`.

Changing line (break-line)

To break a line and start writing from the left margin, hitting the RETURN key on the keyboard doesn't work. You need to indicate it to the browser using `
`.

In order to jump many lines, you can add as many `
` as needed (this isn't how we will eventually do it).

Paragraphs

All written content (except headings) should be placed between paragraph tags `<p></p>`.

Text between these tags are considered as being one paragraph entity (a text-block) and a line is jumped between every paragraphs.

Horizontal ruler

This produces a line that can be customized and is used as a separator with the horizontal ruler tag `<hr />`.

Character styles

Some tags allow you to give different style to your written content. : bold, italic, underline, subscript and superscript...

Warning : You should avoid using underline for web page's texts as people will believe the underlined text is a hyperlink and will try to click it.

```
<h1>My biggest title</h1>
```

```
<h6>My smallest title</h6>
```

```
Content showing on a line<br />
Content showing on a second line
```

```
<p>
First paragraph
</p>
<p>
Second paragraph
</p>
```

```
<hr />
```

Bold :

```
<b></b> <strong></strong>
```

Italic :

```
<i></i> <em></em>
```

Underline :

```
<u></u> <in></in>
```

Superscript / subscript :

```
<sup></sup> / <sub> </sub>
```

The attributes

Attributes are properties that can be added to opening tags in order to customize the presentation of the content.

Attribute must be followed by an equal sign and a value between quote marks.

If the tag contains many attributes, use spaces between them.

Page's general attributes

Some general properties of a page can be set using attributes in the **<body>** tag.

Background color:

To set the background color of a page, use the attribute **bgcolor** (background color) and, as a value, a colorname or hex code.

Hex codes are 6 digits alphanumeric codes representing the RGB colors.

Text color:

To set the default color of a page's texts, use the attribute **text=" "** with the same types of values for colors.

So, to set different properties, you will need to set different attributes using a space to separate them.

Links default color:

Default colors are already set to standard colors for links in all browsers. Links are blue, visited links are purple and active links (while the mouse's button is down) are red.

Although, you can customize this easily using the following attributes :

- **link** (hyperlinks)
- **vlink** (visited links)
- **alink** (active links)

```
<tag attribute="value"> </tag>
```

```
<tag attribute="value" attribute="value"> </tag>
```

```
<body bgcolor="red">
```

```
<body bgcolor="#cc0000">
```

```
<body text="black">
```

```
<body bgcolor="red" text="#000000">
```

```
<body link="red" vlink="green" alink="pink">
```

Paragraph attributes

Paragraphs contents can be aligned left, right, center or justify using the **align**="" attributes with the following values :

- **left** (left aligned)
- **right** (right aligned)
- **center** (centered)
- **justify** (left and right aligned)

Horizontal ruler attributes

You can customize the horizontal ruler using different attributes and values in its tag :

- **align** (left, right, center)
- **size** (weight in pixels)
- **width** (width en pixels)
- **noshade** (solid / no internal shadow effect)

Text property (font)

Although this tag is obsolete (depricated), we will use **** until we cover CSS. The following attributes can be used to customize text :

- **face** (font name)
- **size** (Size of the text, scale 1 to 7)
- **color** (text color)

To specify more than one font to be used, in preference order, simply use a comma between them. If the first font isn't found on the user's computer, the second one will be searched for and so on. Default browser's font is very generally *Times New Roman*.

L'hyperlien

Hyperlinks are produced using **<a>** and different attributes (minimally **href=""** which value will be a file name and it's extension (for internal links) or a URL (for external links).

Warning : file names should use letters and/or numbers and never use spaces. You can replace spaces with underscores (_).

External links must be produced using the prefix **http://** (hypertext transfer protocole).

```
<p align="center">
Content centered horizontally
</p>
```

```
<hr align="center" />
```

```
<hr size="5" />
```

```
<hr width="300" />
```

```
<hr noshade="noshade" />
```

```
<font face="arial"> </font>
```

```
<font size="3"> </font>
```

```
<font color="green"> </font>
```

```
<font face="arial" color="green" size="3"> </font>
```

```
<font face="arial,Helvetica,sans-serif"> </font>
```

```
<a href="my_file.html">Text linked</a>
```

```
<a href="http://www.google.com">Text linked</a>
```

Images

We will use **** to integrate images in a web page using different attributes :

- **src** (Source, file's name and extension)
jpg, jpeg, gif, png, etc
- **width** (Pixel or %)
- **height** (Pixel or %)
- **border** (Border's width in pixels)
- **alt** (Descriptive text for blind browsers and for referencing)
- **align** (left or right)

If you don't specify the dimensions of the image, its original height and width will be used. Si vous modifier la largeur ou la hauteur, l'autre valeur sera automatiquement ajustée afin de ne pas déformée l'image.

If you modify the width or the height, the other dimension will automatically be adjusted avoiding deformation. If you specify both dimensions, deformations are to be expected unless you precisely calculate them.

The **align=""** attribute will position the image on the left or right margin and will let text flow from the top nest to the image, then underneath it.

Background images

An image can be used instead or along with a background color by adding the **background=""** attribute within **<body>**.

If the image is smaller than the browser's window's size, the image will then be repeated left to right, top to bottom, creating some sort of mosaic.

```

```

HyperText Markup Language (HTML) is the most basic array of codes used in designing, formatting and organizing web pages to be published on the World Wide Web. Text wrapping refers to how an object is wrapped within the text or text around an object. In simple terms, it refers to the specific location or alignment where the image or object is placed within a paragraph. Objects can be aligned horizontally to the left or to the right with specific codes. These codes are referred to as HTML tags. In this article you will be learning how to wrap text with the object using HTML tags.



```
<body background="my_image.jpg">
```