



Web design and development 1 (CW1)

Class 7

HTML 5

Without even you noticing, we've been teaching you XHTML which is a strict form of HTML coding. Now that you know the basics of HTML and CSS, Let's see how HTML5 can simplify things.

HTML5 isn't only succeeding to HTML4 and XHTML offering new tags. It doesn't only structure content, but it also specifies the type of content used and prepare contents to many types of interactions.

The declaration

So far, we never used declaration, knowing we would soon learn HTML5. HTML5 needs for us to indicate what type of HTML we are using in a document :

```
<!DOCTYPE html>.
```

Language declaration

It is important to declare the language used in the document, adding the attribute **lang=""** in the `<html>` tag and the appropriate ISO code as a value (fr=French, en=English, etc.):

```
<html lang="en">
```

Type of characters encoding

HTML5 also needs you to specify the type of characters encodings (characters set) used within the document. Using the `<meta>` tag within the `<head>` section (before the `<title>` tag), we will use the attribute `charset=""` and UTF-8 as a value :

```
<meta charset="UTF-8" />
```

New tags

HTML5 also offers new very useful tags to structure the content: `<header>`, `<section>`, `<footer>`, `<aside>`, `<nav>`, `<main>`, `<article>`, `<figure>`, etc.

Avoiding compatibility issues

Some browsers display the new tags as **inline** instead of **block**. To avoid problems, you can style their display as block right at the beginning.

```
<!DOCTYPE html>
<html lang="fr">
<head>
<meta charset="UTF-8">
<title>Title of the page</title>
</head>
<body>
```

Page's content

```
</body>
</html>
```

```
header, section, footer, aside, nav, main, article {
    display: block;
}
```

<meta> tag

Placed in the <head> section of the HTML document, these tags are used for different purposes. Their contents aren't displayed on screen, but will describe specificities of the document. They are dedicated to browsers and search engines such as Google.

Different attributes are used according to the type of informations we want to specify such as **name=""** or **content=""** :

```
<meta name="" content="" ">
```

Name=""

This attribute is used to define the nature of the variable specified in the **content=""** attribute.

Description

Variable used to define a short description of the page's content.

Keywords

Variable containing a keywords list separated by a comma. These keywords correspond to the words user may be using in search engines. It is a good idea to include common spelling errors.

Author

Variable used to specify the author's name.

Viewport

In HTML5, **viewport** is mandatory (especially for mobile versions of pages) because of the multiple appliances used to view web pages (desktop computers, mobile, tablets, etc.).

It indicates to the browsers that the document should be shown at first using the same width as the appliance used.

It may also indicate the scale factor to be used upon charging the document (we will always use 1, meaning 100%).

```
<head>
<meta charset="UTF-8">
<title>My great web page</title>
<meta name="description" content="My page">
<meta name="keywords" content="web,design">
<meta name="author" content="John Doe">
<meta name="viewport" content="width=device-width,
initial-scale=1.0, maximum-scale=1.5">
</head>
```

HTML5 page structure

One of the many advantages of the new tags offered by HTML5 is that you won't need to create as many classes as you were used to since they are made to contain specific types of content.

Also, these tags help with referencing your documents as the search engines are prioritizing some content based on these tags.

<header>

Used to define the header portion and elements of the document. When used within a container, it defines this very container's header.

<footer>

Used to define the footer portion and elements of the document. When used within a container, it defines this very container's footer.

<nav>

Used to define the navigation portion and elements of the document.

<main>

Used to define the main portion and elements of the document. This section usually contains the important informations.

<section>

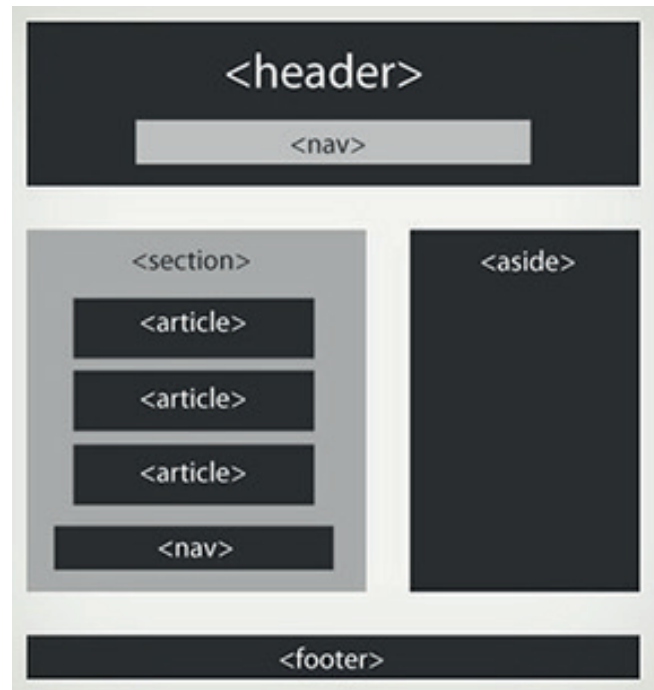
Used to divide content of similar nature or theme into generic sections.

<article>

More specific than the preceding, this tag defines an independent element of content. For instance, its content could be used out of the document (e.g. RSS feed) and still be understandable.

<aside>

This tag offers content not directly linked to the topics of the articles. It offers complementary informations of various nature (e.g. author's biography).



Warning

Internet Explorer prior to version 9 do not recognize the new HTML5 tags. To avoid problems, use the following script within the **<head>** section of your HTML documents :

```
<!--[if lt IE 9]>
<script src="//html5shim.googlecode.com/svn/trunk/html5.js"></script>
<![endif]-->
```

Text style using html5

Many tags seem like having the same effect. It doesn't mean they are the same. HTML5 tags are semantical (they mean something) et . Each tag has its specific purpose.

Bold

Creates bold text. It is a physical tag with no other meaning.

Creates bold text, but indicates that this text is more important than the surrounding one. It is a logical tag.

Italic

<i>

Creates italic text. It is a physical tag with no other meaning.

Creates italic, but it emphasizes text, it brings special attention to the text. It is a logical tag.

<cite>

Creates italic, but it signifies that the text is a citation. It can be used for a book's title, a song, a theater play, etc.

```
<!DOCTYPE html>
<html lang="fr">
<head>
<meta charset="UTF-8">
<tit
```