

L'HTML5 est...

L'HTML5 est une évolution de l'HTML 4.01 (et de l'XHTML 1.0), c'est à dire que tout ce que vous savez faire en HTML reste valide.

Cette évolution consiste en une multitude de nouvelles fonctionnalités qui ont été apportées au langage HTML ainsi qu'au Javascript.

Un allègement du code

Avant en HTML:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="fr" >
<head>
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
  <link rel="stylesheet" type="text/css" href="design.css" />
  <script type="text/javascript" src="script.js"></script>
</head>
<body>
</body>
</html>
```

Désormais en HTML 5:

```
<!DOCTYPE html>
<html lang="fr">
<head>
  <meta charset="utf-8" />
  <link rel="stylesheet" href="design.css" />
  <script src="script.js"></script>
<!--[if lt IE 9]>
  <script src="http://html5shiv.googlecode.com/svn/trunk/html5.js"></script>
<![endif]-->
</head>
```

Utilisation des éléments HTML5 dans les navigateurs Non-HTML5

```
<!--[if lt IE 9]>
<script>
  document.createElement("header");
  document.createElement("footer");
  document.createElement("section");
  document.createElement("aside");
  document.createElement("nav");
  document.createElement("article");
  document.createElement("hgroup");
  document.createElement("time");
</script>
<noscript>
  <strong>Attention !</strong>
  Comme votre navigateur ne prend pas en charge HTML5, certains éléments sont simulés à l'aide de JScript.
  Malheureusement votre navigateur a désactivé les scripts. Veuillez l'activer pour afficher cette page.
</noscript>
<![endif]-->
```

Balise <canvas>

La balise canvas sert à afficher des graphiques. Il faut par contre un script pour pouvoir l'animer :

```
<canvas id="un-canvas" width="200" height="100"></canvas>
```

Balise <audio>

```
<audio src="music.mp3" preload="none" controls loop autoplay></audio>
```

Attribute	Value	Description
<u>autoplay</u>	autoplay	Specifies that the audio will start playing as soon as it is ready
<u>controls</u>	controls	Specifies that audio controls should be displayed (such as a play/pause button etc)
<u>loop</u>	loop	Specifies that the audio will start over again, every time it is finished
<u>muted</u>	muted	Specifies that the audio output should be muted
<u>preload</u>	auto metadata none	Specifies if and how the author thinks the audio should be loaded when the page loads
<u>src</u>	URL	Specifies the URL of the audio file

Bien entendu cette balise audio serait trop belle comme ceci. Donc un peu de complications :

→ Tout d'abord le format MP3 n'est pas pris en compte par Firefox mais les fichiers Ogg Vorbis oui et inversement pour Safari.

→ Internet Explorer ne reconnaît pas du tout la balise audio (sans blague?!!!), il faudra donc utiliser une solution ultime pour lire les fichiers audio sur tous les navigateurs :

```
<audio controls>
  <source src="music.mp3" type="audio/mpeg">
  <source src="music.ogg" type="audio/ogg">
  <object type="application/x-shockwave-flash"
data="player.swf?soundFile=music.mp3">
    <param name="movie"
value="player.swf?soundFile=music.mp3">
    <a href="music.mp3">Download the song</a>
</object>
</audio>
```

Balise <video>

```
<video src="movie.mp4" controls width="720" height="340" poster="img.jpg"></video>
```

Attribute	Value	Description
<u>autoplay</u>	autoplay	Specifies that the video will start playing as soon as it is ready
<u>controls</u>	controls	Specifies that video controls should be displayed (such as a play/pause button etc).
<u>height</u>	<i>pixels</i>	Sets the height of the video player
<u>loop</u>	loop	Specifies that the video will start over again, every time it is finished
<u>muted</u>	muted	Specifies that the audio output of the video should be muted
<u>poster</u>	<i>URL</i>	Specifies an image to be shown while the video is downloading, or until the user hits the play button
<u>preload</u>	auto metadata none	Specifies if and how the author thinks the video should be loaded when the page loads
<u>src</u>	<i>URL</i>	Specifies the URL of the video file
<u>width</u>	<i>pixels</i>	Sets the width of the video player

```
<video controls width="720" height="340" poster="image.jpg">  
  <source src="movie.mp4" type="video/mp4">  
  <source src="movie.ogv" type="video/ogg">  
  <object type="application/x-shockwave-flash" width="720" height="340"  
    data="player.swf?file=movie.mp4">  
    <param name="movie"  
      value="player.swf?file=movie.mp4">  
    <a href="movie.mp4">Download the movie</a>  
  </object>  
</video>
```

New Semantic/Structural Elements

Tag	Description
<article>	Defines an article in the document
<aside>	Defines content aside from the page content
<bdi>	Defines a part of text that might be formatted in a different direction from other text
<details>	Defines additional details that the user can view or hide
<dialog>	Defines a dialog box or window
<figcaption>	Defines a caption for a <figure> element
<figure>	Defines self-contained content, like illustrations, diagrams, photos, code listings, etc.
<footer>	Defines a footer for the document or a section
<header>	Defines a header for the document or a section
<main>	Defines the main content of a document
<mark>	Defines marked or highlighted text
<menuitem>	Defines a command/menu item that the user can invoke from a popup menu
<meter>	Defines a scalar measurement within a known range (a gauge)
<nav>	Defines navigation links in the document
<progress>	Defines the progress of a task
<rp>	Defines what to show in browsers that do not support ruby annotations
<rt>	Defines an explanation/pronunciation of characters (for East Asian typography)
<ruby>	Defines a ruby annotation (for East Asian typography)
<section>	Defines a section in the document
<summary>	Defines a visible heading for a <details> element
<time>	Defines a date/time
<wbr>	Defines a possible line-break

New Form Elements

Tag	Description
<datalist>	Defines pre-defined options for input controls
<keygen>	Defines a key-pair generator field (for forms)
<output>	Defines the result of a calculation

New Input Types

New Input Types	New Input Attributes
color date datetime datetime-local email month number range search tel time url week	autocomplete autofocus form formaction formenctype formmethod formnovalidate formtarget height and width list min and max multiple pattern (regex) placeholder required step

HTML5 - New Attribute Syntax

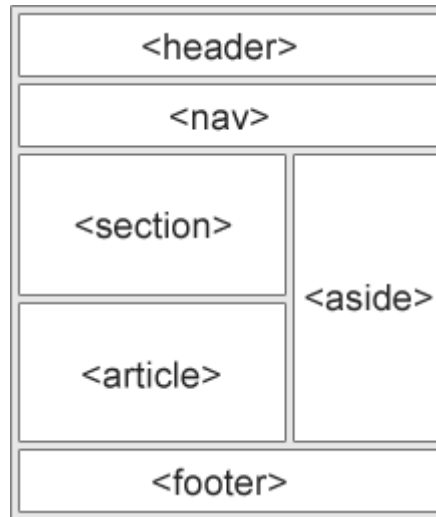
Type	Example
Empty	<input type="text" value="John" disabled >
Unquoted	<input type="text" value=John >
Double-quoted	<input type="text" value="John Doe" >
Single-quoted	<input type="text" value='John Doe' >

HTML5 Graphics

Tag	Description
<canvas>	Defines graphic drawing using JavaScript
<svg>	Defines graphic drawing using SVG

HTML5 offers new semantic elements to define different parts of a web page:

- `<article>`
- `<aside>`
- `<details>`
- `<figcaption>`
- `<figure>`
- `<footer>`
- `<header>`
- `<main>`
- `<mark>`
- `<nav>`
- `<section>`
- `<summary>`
- `<time>`



Le CSS3 est...

CSS3 est la dernière évolution du langage css et vise à étendre CSS2.1. Il apporte beaucoup de nouveautés attendues, comme les angles arrondis, les ombres, les dégradés, les transitions ou animations, aussi bien que de nouvelles mises en page comme les multi-colonnes, les boîtes flexibles ou les mises en pages en grille. Les parties expérimentales ont des préfixes propriétaires et devraient soit être évitées dans les environnements de productions, soit utilisées avec beaucoup de prudence à la fois car leurs syntaxes et sémantiques peuvent changer à l'avenir.