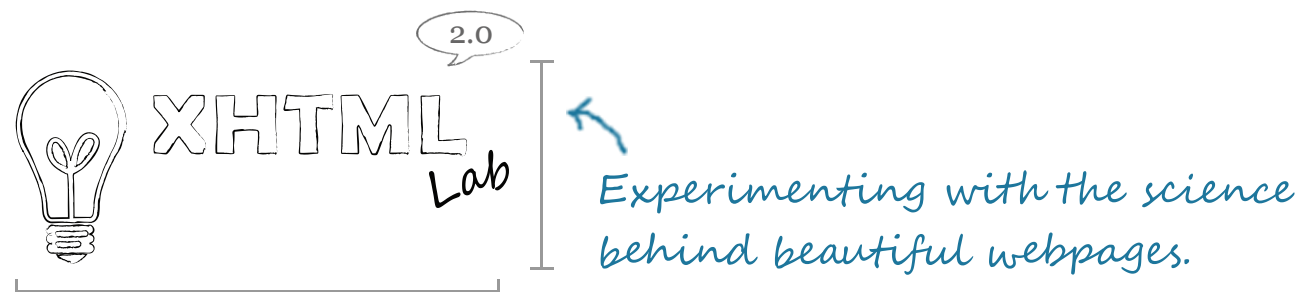




HTML5 is the cornerstone of the W3C's open web platform; a framework designed to support innovation and foster the full potential the web has to offer. Heralding this revolutionary collection of tools and standards, the HTML5 identity system provides the visual vocabulary to clearly classify and communicate our collective efforts.

HTML5 Document Template

```
<!DOCTYPE HTML>
<html>
  <head>
    <meta charset="utf-8">
    <title>HTML5 Document</title>
    <link rel="stylesheet" href="file.css">
    <script src="file.js"></script>
  </head>
  <body>
  </body>
</html>
```



Experimenting with the science behind beautiful webpages.

Metadata and scripting

Tag	Description	Attributes
<head>	First element of the HTML document. Collection of metadata for the Document.	none
<title>	Document title or name.	none
<meta>	Document metadata that can't be expressed with other elements.	charset   content   http-equiv   name
<base>	Specifies URL which non-absolute URLs are relative to.	href   target
<link>	Other resources related to the document.	href   rel   media   hreflang   type   sizes
<style>	Embeds style information in the documents.	media   type   scoped
<noscript>	Contains elements that are part of the document only if scripting is disabled.	none
<script>	Inline or linked client side scripts.	async   type   defer   src   charset

Document sections

Tag	Description	Attributes
<body>	Main content of the document.	Global attributes
<aside>	Content related to surrounding elements that doesn't belong inline, such as a advertising or quotes.	Global attributes
<address>	Contact information for it's nearest article or body element.	Global attributes
<section>	Contains of elements grouped by theme, for example a chapter or tab box.	cite
<header>	Navigation or introductory elements for the current section.	Global attributes
<nav>	A section of a page that links to other pages.	Global attributes
<article>	Section of the page content, such as a blog or forum post.	Global attributes
<footer>	Footer of the current section.	Global attributes
<hgroup>	headings for the current section. The highest ranked heading represents the group in the document outline.	Global attributes
<h1> to <h6>	Heading for the current section.	Global attributes

Text-level semantics

Tag	Description	Attributes
<span>	Container with no semantic meaning.	Global attributes
<a>	Hyperlink (a hypertext anchor).	href   hreflang   media   rel   target   type
<rt>	Annotation of preceding text.	Global attributes
<rp>	Contains semantically meaningless markup for browsers that don't understand ruby annotations.	Global attributes
<dfn>	Defining instance of a term.	Global attributes
<abbr>	Abbreviation or acronym.	Global attributes
<q>	Phrasing content quoted from another source.	cite
<cite>	Title of a referenced piece of work.	Global attributes
<em>	Text that should be emphasized.	Global attributes
<time>	Time defined in a machine readable format.	datetime   pubdate
<var>	Mathematical or programming variable.	Global attributes
<samp>	Sample output of a program.	Global attributes
<i>	Text in a alternate voice or mood, such as a technical term.	Global attributes
<b>	Stylistically separated text of equal importance, such as a product name.	Global attributes
<sub>	Subscript text.	Global attributes
<sup>	Superscript text.	Global attributes
<small>	An aside, such as fine print.	Global attributes
<strong>	Text that is important.	Global attributes
<mark>	Text highlighted for referencing elsewhere.	Global attributes
<ruby>	Contains text with annotations, such as pronunciation hints. Commonly used in East Asian text.	Global attributes
<ins>	Text that has been inserted during document editing.	cite   datetime
<del>	Text that has been removed during document editing.	cite   datetime
<kbd>	Example input (usually keyboard) for a program.	Global attributes
<bdo>	Defines directional formatting for content.	dir
<s>	Text that is outdated or no longer accurate.	Global attributes
<wbr>	Opportunity for a line break.	Global attributes
<code>	Fragment of computer code.	Global attributes

Grouping Content

Tag	Description	Attributes
<hr>	Paragraph-level thematic break.	Global attributes
 	Line break.	Global attributes
<p>	Paragraph content.	Global attributes
<figcaption>	Caption or legend for the figure element.	Global attributes
<figure>	Contains elements related to single concept, such as an illustration or code example.	Global attributes
<div>	Container with no semantic meaning.	Global attributes
<ol>	Ordered list.	start   reversed
<ul>	Unordered list.	Global attributes
<li>	List item.	value
<pre>	A block of preformatted text.	Global attributes
<blockquote>	Quote from another source.	cite
<dl>	An association list consisting of zero or more name-value groups (a description list).	Global attributes
<dt>	Term, or name, part of a term-description group in a description list.	Global attributes
<dd>	Description, definition, or value, part of a term-description group in a description list.	Global attributes

Forms

Tag	Description	Attributes
<fieldset>	Set of form controls grouped by theme.	disabled   form   name
<meter>	Control for entering a numeric value in a known range.	high   low   max   min   optimum   value
<legend>	Define a name for a fieldset.	Global attributes
<label>	Caption for a form control.	for   form
<input>	Generic form input.	accept   alt   auto-complete   autofocus   checked   disabled   form   formaction   formenctype   formmethod   formnovalidate   formtarget   height   list   max   maxlength   min   multiple   name   pattern   placeholder   readonly   required   size   src   step   type   value   width
<textarea>	Multiline free-form text input.	autofocus   cols   disabled   dirname   form   name   readonly   required   rows   maxlength   placeholder   wrap
<form>	Used to create an HTML form for user input.	action   autocomplete   name   novalidate   accept-charset   enctype   method   target
<select>	Control for selecting from multiple options.	autofocus   size   disabled   form   multiple   name
<optgroup>	Group of option.	disabled   label
<option>	Single option within a select control.	disabled   label   selected   value
<output>	Contains the results of a calculation.	form   for   name
<button>	A button.	autofocus   disabled   form   formaction   formenctype   formmethod   formnovalidate   formtarget   name   type   value
<datalist>	Define sets of options.	Global attributes
<keygen>	Generates private-public key pairs.	autofocus   disabled   form   keytype   name
<progress>	Control for displaying progress of a task.	max   value

Embedding content

Tag	Description	Attributes
<img>	An image.	alt   src   height   ismap   usemap   width
<area>	Hyperlink with some text and a corresponding area on an image map, or a dead area on an image map.	alt   cords   href   hreflang   media   rel   shape   target   type
<map>	Image map for adding hyperlinks to parts of an image.	name
<embed>	Integration point for an external (typically non-HTML) application or interactive content.	height   src   type   width
<object>	External resource such as an image, iframe or plugin.	data   height   type   usemap   width   form
<param>	Parameters for the parent object.	name   value
<source>	Alternative sources for parent video or audio elements.	media   src   type
<iframe>	Nested browser frame.	src   name   sandbox   seamless   width   height   srcdoc
<canvas>	Bitmap which is editable by client side scripts.	height   width
<track>	Specifies external timing track for media element.	-
<audio>	Sound or audio stream.	autobuffer   preload   loop   controls   src
<video>	Used for playing videos or movies.	audio   autoplay   controls   height   loop   poster   preload   src   width
<device>	Allows scripts to access devices such as a webcam.	-

Global Attributes

The attributes listed below are supported by all HTML 5 tags, with a few exceptions.

Attribute	Description	Values
accesskey	Specifies a keyboard shortcut to access an element	character
class	Specifies a classname for an element (used to specify a class in a style sheet)	classname
contenteditable	Specifies if the user is allowed to edit the content or not	true   false
contextmenu	Specifies the context menu for an element	menu_id
dir	Specifies the text direction for the content in an element	ltr   rtl
draggable	Specifies whether or not a user is allowed to drag an element	true   false   auto
dropzone	Specifies what happens when dragged items/data is dropped in the element	copy   move   link
hidden	Specifies that the element is not relevant. Hidden elements are not displayed	hidden
id	Specifies a unique id for an element	id
lang	Specifies a language code for the content in an element.	language_code
spellcheck	Specifies if the element must have its spelling and grammar checked	true   false
style	Specifies an inline style for an element	style_definition
tabindex	Specifies the tab order of an element	number
title	Specifies extra information about an element	text

Interactive elements

Tag	Description	Attributes
<menu>	Set of commands.	label   type
<command>	Command the user can perform, such as publishing an article.	checked   disabled   hidden   icon   label   radiogroup   type
<summary>	Caption of a details element.	Global attributes
<details>	Contains additional information, such as the contents of an accordian view.	open

New APIs

In addition to specifying markup, HTML5 specifies scripting application programming interfaces (APIs). Existing document object model (DOM) interfaces are extended and de facto features documented. There are also new APIs, such as:

- The canvas element for immediate mode 2D drawing.
- Timed media playback
- Offline storage database (offline web applications).
- Document editing
- Cross-document messaging
- Drag-and-drop
- Browser history management
- Microdata
- MIME type and protocol handler registration

weadingand XHTML 1.x

The following is a quick list of differences and some specific examples.

- New parsing rules: oriented towards flexible parsing and compatibility; not based on SGML
- Ability to use inline SVG and MathML in text/html
- New elements: article, aside, audio, bdi, canvas, command, datalist, details, embed, figcaption, figure, footer, header, hgroup, keygen, mark, meter, nav, output, progress, rp, rt, ruby, section, source, summary, time, video, wbr
- New types of form controls: dates and times, email, url, search, color
- New attributes: charset (on meta), async (on script)
- Global attributes (that can be applied for every element): id, tabindex, hidden, data-\* (custom data attributes)
- Depreceted elements will be dropped altogether: acronym, applet, basefont, big, center, dir, font, frame, frameset, isindex, noframes, strike, tt, u

- Orange border surrounding some of the rows denotes the tags which are new in HTML5.
- Attributes which are new in HTML5 are underlined in orange.
- Global attributes mentioned in many places can be found in a table titled "Global attributes".
- In addition to the attributes that you see for each tag, you can also use global attributes for these tags.



Class: Multimedia

Audio and video are first class citizens in the HTML5 web, living in harmony with your apps and sites. Lights, camera, action!



Class: Offline & Storage

Web Apps can start faster and work even if there is no internet connection, thanks to the HTML5 App Cache, as well as the Local Storage, Indexed DB, and the File API specifications.



Class: Performance & Integration

Make your Web Apps and dynamic web content faster with a variety of techniques and technologies such as Web Workers and XMLHttpRequest 2. No user should ever wait on your watch.



Class: Semantics

Giving meaning to structure, semantics are front and center with HTML5. A richer set of tags, along with RDFa, microdata, and microformats, are enabling a more useful, data driven web for both programs and your users.



Class: CSS3

CSS3 delivers a wide range of stylization and effects, enhancing the web app without sacrificing your semantic structure or performance. Additionally Web Open Font Format (WOFF) provides typographic flexibility and control far beyond anything the web has offered before.



Class: 3D, Graphics & Effects

Between SVG, Canvas, WebGL, and CSS3 3D features, you're sure to amaze your users with stunning visuals natively rendered in the browser.



Class: Connectivity

More efficient connectivity means more real-time chats, faster games, and better communication. Web Sockets and Server-Sent Events are pushing (pun intended) data between client and server more efficiently than ever before.



Class: Device Access

Beginning with the Geolocation API, Web Applications can present rich, device-aware features and experiences. Incredible device access innovations are being developed and implemented, from audio/video input access to microphones and cameras, to local data such as contacts & events, and even tilt orientation.