
Chapter 1: Getting started with HTML

Remarks

HTML (**H**ypertext **M**arkup **L**anguage) is an **XML**-compliant system of annotating documents with 'tags'. It is used specifically to create content for web pages and web applications, which can then be shared over a network.

Apart from text, the current version of HTML supports many different **types of media**, including images and videos.

Versions

Version	Specification	Release Date
1.0	N/A	1994-01-01
2.0	RFC 1866	1995-11-24
3.2	W3C: HTML 3.2 Specification	1997-01-14
4.0	W3C: HTML 4.0 Specification	1998-04-24
4.01	W3C: HTML 4.01 Specification	1999-12-24
5	WHATWG: HTML Living Standard	2014-10-28
5.1	W3C: HTML 5.1 Specification	2016-11-01

Examples

Hello World

Introduction

HTML (**H**ypertext **M**arkup **L**anguage) uses a markup system composed of elements which represent specific content. *Markup* means that with HTML you declare *what* is presented to a viewer, not *how* it is presented. Visual representations are defined by **Cascading Style Sheets (CSS)** and realized by browsers. **Still existing elements that allow for such**, like e.g. `font`, "are entirely obsolete, and must not be used by authors"^[1].

HTML is sometimes called a programming language but it has no logic, so is a **markup language**. HTML tags provide semantic meaning and machine-readability to the content in the page.

An element usually consists of an opening tag (`<element_name>`), a closing tag (`</element_name>`), which contain the element's name surrounded by angle brackets, and the content in between: `<element_name>...content...</element_name>`

There are some HTML elements that don't have a closing tag or any contents. These are called **void elements**. Void elements include ``, `<meta>`, `<link>` and `<input>`.

Element names can be thought of as descriptive keywords for the content they contain, such as `video`, `audio`, `table`, `footer`.

A HTML page may consist of potentially hundreds of elements which are then read by a web browser, interpreted and rendered into human readable or audible content on the screen.

For this document it is important to note the difference between elements and tags:

Elements: `video`, `audio`, `table`, `footer`

Tags: `<video>`, `<audio>`, `<table>`, `<footer>`, `</html>`, `</body>`

Element insight

Let's break down a tag...

The `<p>` tag represents a common paragraph.

Elements commonly have an opening tag and a closing tag. The opening tag contains the element's name in angle brackets (`<p>`). The closing tag is identical to the opening tag with the addition of a forward slash (`/`) between the opening bracket and the element's name (`</p>`).

Content can then go between these two tags: `<p>This is a simple paragraph.</p>`.

Creating a simple page

The following HTML example creates a simple "Hello World" web page.

HTML files can be created using any [text editor](#). The files must be saved with a `.html` or `.htm`^[2] extension in order to be recognized as HTML files.

Once created, this file can be opened in any web browser.

```

<!DOCTYPE html>
<html lang="en">

  <head>
    <meta charset="UTF-8">
    <title>Hello!</title>
  </head>

  <body>
    <h1>Hello World!</h1>
    <p>This is a simple paragraph.</p>
  </body>

</html>

```

Simple page break down

These are the tags used in the example:

Tag	Meaning
<code><!DOCTYPE></code>	Defines the HTML version used in the document. In this case it is HTML5. See the doctypes topic for more information.
<code><html></code>	Opens the page. No markup should come after the closing tag (<code></html></code>). The <code>lang</code> attribute declares the primary language of the page using the ISO language codes (<code>en</code> for English). See the Content Language topic for more information.
<code><head></code>	Opens the head section, which does not appear in the main browser window but mainly contains information <i>about</i> the HTML document, called <i>metadata</i> . It can also contain imports from external stylesheets and scripts. The closing tag is <code></head></code> .
<code><meta></code>	Gives the browser some metadata about the document. The <code>charset</code> attribute declares the character encoding . Modern HTML documents should always use UTF-8 , even though it is not a requirement. In HTML, the <code><meta></code> tag does not require a closing tag. See the Meta topic for more information.
<code><title></code>	The title of the page. Text written between this opening and the closing tag (<code></title></code>) will be displayed on the tab of the page or in the title bar of the browser.
<code><body></code>	Opens the part of the document displayed to users, i.e. all the visible or audible content of a page. No content should be added after the closing tag <code></body></code> .
<code><h1></code>	A level 1 heading for the page.

Tag	Meaning
	See headings for more information.
<p>	Represents a common paragraph of text.

1. ↑ [HTML5, 11.2 Non-conforming features](#)
2. ↑ `.htm` is inherited from the legacy [DOS](#) three character file extension limit.