Chapter 1: Getting started with HTML

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

Section 1.1: Hello World

Introduction

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

\<h1>	A level 1 heading for the page. See headings for more information.
\<p>	Represents a common paragraph of text.

1. ↑ <u>HTML5, 11.2 Non-conforming features</u>
2. ↑ `.htm` is inherited from the legacy <u>DOS</u> three character file extension limit.

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