HTML is a markup language used by the browser to manipulate text, images, and other content, in order to display it in the required format. HTML was created by Tim Berners-Lee in 1991. The first-ever version of HTML was HTML 1.0, but the first standard version was HTML 2.0, published in 1995. However, it’s worth noting that HTML is not considered a programming language as it can’t create dynamic functionality.

HTML Semantic (also called semantic markup) is HTML code that uses HTML tags to effectively describe the purpose of page elements. HTML Semantic code communicates the meaning of its elements to both computers and humans, which helps web browsers, search engines, assistive technologies, and human developers understand the components of a web page. The key to well-written HTML semantic is the use of semantic tags. HTML semantic tags have names that tell the person or machine reading the code what exactly they’re meant to do.

HTML uses predefined tags that tell the browser how to display the content. Tags are nothing but some instructions that are enclosed in angle braces (i.e. <>). Tags are used in many places of the webpage but many users are often confused about some tags whether it is a container or an empty tag. They get this confusion because they don’t know for what tag there should be an ending tag along with the opening tag or not. There are two types of tags in HTML:

* Empty
* Container

**Container tags**

Container tags are generally divided into three parts, i.e., opening tag, content (which will display on the browser), and closing tag. In the content part, they can also contain some other tags. These opening and closing tags are used in pairs which are start tag and end tag, which is often called ON and OFF tags. If you forget to close the container tag, the browser applies the effect of the opening tag until the end of the page. So be careful while working with container tags. The majority of tags present in HTML are container tags. Here are some container tags:

* **<h1> to <h6> </h1>to</h6>** this are the Heading Tags. They are in ranges of front sizes and thickness i.e. h1 has the largest and thickest front sizes while h6 has the lowest and thinness front sizes.
* **<html>….</html>**: This marks the beginning and ending of the webpage also it tells that the document is an HTML document. This contains all other tags in between these tags which are considered for making a webpage.
* **<head>…</head>**: This tag is used to define the head part of the document which contains the information related to the webpage.
* **<title>…</title>**: This tag stores the description of the web page, whatever given in these tags appears on the tab name while opened by the browser. It is described in the head tag.
* **<body>….</body>:** This tag is used to display all the information or data, i.e, text, images, hyperlinks videos, etc., on the webpage to the user.
* **<p>….</p>**: When paragraphs are needed to be included, this tag is used
* **<b>….</b>**: Makes the contained text to bold.
* **<i>…</i>**: Makes the contained text to italic.
* **<a href=”link.com”>…</a>:** When we link some other webpages we add the hyper links to other webpages using this <a …>…</a>tag.
* **<button>…</button>:** This is used in many ways but mainly used to manipulate dom by adding events and many more.
* **<nav>…</nav>:** Defines a navigation bar that contains a set of menu or a menu of hyperlinks.
* **<script>…</script>** : This contains the javascript code that adds interactivity to the webpage.
* <span></span> A container for in-line content, such as content inside a paragraph.
* **<! — …— !>** this is the Comment Tag. It is use to insert a comment into HTML code
* **<em>…</em>**Gives the contained text emphasis (usually as italics).
* **<strong>…</strong>** this tag makes the contained text bold
* **<ol>…</ol>** this tags creates ordered (numbered) list
* **<ul>…</ul>** this tag creates an unordered (bulleted) list
* **<li>…</li>**this tag create a list item, must be nested inside a list element such as a <ol> or <ul>
* **<SUP>…</SUP>** this tag is use to write in power of something like a².
* **<SUB>…</SUB>** — to write in lower phase like H2O (water)

**Empty Tags**

An empty element is an element from HTML, SVG, or MathML that cannot have any child nodes (i.e., nested elements or text nodes). The HTML, SVG, and MathML specifications define very precisely what each element can contain. Many combinations have no semantic meaning, for example an <audio> element nested inside an <hr> element. In HTML, using a closing tag on an empty element is usually invalid. For example, <input type="text"></input> is invalid HTML. Some example of empty tag include:

* **<br>:** Inerts a line break in a webpage wherever needed.
* **<hr>:** Inserts a horizontal line wherever needed in the webpage.
* **<img>:** This tag is used to display the images on the webpage which were given in the src attribute of the tag.
* **<input>**: This is mainly used with forms to take the input from the user and we can also define the type of the input.
* **<link>:** When we store our CSS in an external file this can be used to link external files and documents to the webpage and it is mainly used to link CSS files.
* **<meta>:** Contains all metadata of the webpage. Metadata is the data about data and is described in the head tag.
* **<source>:** When an external media source is needed to be included in the webpage. source tag is used to insert any media source like audio, video etc… in our webpage.
* **<area>:** Defines a clickable area in an image map
* **<base>:** Defines the base URI or URL for all the relative links in the HTML document
* **<col>:** Specifies grouped attributes for columns
* **<colgroup>:** Specifies a common formatting style for a group of columns
* **<embed>:** Defines an embedded resource
* **<keygen>:** DEPRECATED. Defined a key-pair used while submitting an HTML form
* **<param>:** Defines parameters for an object element
* **<track>:** Defines text tracks for all the media elements
* **<wbr>:** Defines a possible line-break in a text

Reference:

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