

HTML = Hypertext markup language

URL - Uniform Resource Locator

Key points

HTML tags are not case sensitive

The href attribute of <a> specifies the URL of the page the link goes to

The src attribute of specifies the path to the image to be displayed

The width and height attributes of provide size information for images

The alt attribute of provides an alternate text for an image

The style attribute is used to add styles to an element, such as color, font, size, and more

The lang attribute of the <html> tag declares the language of the Web page

The title attribute defines some extra information about an element

What is HTML?

HTML is the standard text formatting language used for creating and displaying pages on the Web. It was developed in 1991. HTML documents are made up of two things: the content and the tags that format it for proper display on pages.

<!DOCTYPE> Declaration

The <!DOCTYPE> declaration represents the document type, and helps browsers to display web pages correctly.

It must only appear once, at the top of the page (before any HTML tags).

HTML Elements

An HTML element is defined by a start tag, some content, and an end tag.

<tagname>Content goes here...</tagname>

Empty elements

Some HTML elements have no content (like the
 element). Empty elements do not have an end tag!

Nested HTML Elements

HTML elements can be nested (this means that elements can contain other elements).

All HTML documents consist of nested HTML elements.

Here Nested mean elements inside the elements like a web page. it has first <html>, then inside <body>, then inside <h1> and <p>):

HTML Attributes

HTML attributes provide additional information about HTML elements. Attributes usually come in name/value pairs like: name="value"

some HTML Attributes are like →

- href Attribute
- src Attribute
- width and height Attributes
- alt Attribute
- style Attribute
- lang Attribute
- title Attribute

HTML Text Formatting

HTML contains several elements for defining text with a special meaning.

HTML Formatting Elements →

- - Bold text
- - Important text
- <i> - Italic text
- - Emphasized text
- <mark> - Marked text
- <small> - Smaller text
- - Deleted text
- <ins> - Inserted text
- <sub> - Subscript text
- <sup> - Superscript text

HTML Quotation and Citation Elements

<blockquote>

The HTML <blockquote> element defines a section that is quoted from another source.

<q>

The HTML <q> tag defines a short quotation.

<abbr>

The HTML <abbr> tag defines an abbreviation or an short form, like "HTML", "CSS", "Mr.", "Dr.", "ASAP", "ATM".

Marking abbreviations can give useful information to browsers, translation systems, and search engines.

Use the global title attribute to show the description for the abbreviation/acronym when you mouse over the element.

<address>

The HTML <address> tag defines the contact information for the author/owner of a document or an article.

<cite>

The HTML <cite> tag defines the title of creative work (e.g. a book, a poem, a song, a movie, a painting, a sculpture, etc.).

<bdo>

BDO stands for Bi-Directional Override.

The HTML <bdo> tag is used to override the current text direction: example: ROHIT SHUKLA --> ALKUHS TIHOR

Colour

HTML supports 140 standard color.

RGB: RED, GREEN, BLUE

RGBA: Red, Green, Blue, Alpha

HEX: HTML, a color can be specified using a hexadecimal value in the form like #rrggbb

HSL: Hue, saturation, lightness.

HSLA: Hue, saturation, lightness, Alpha like hsla(0, 100%, 50%, 0.5)

HTML Lists

HTML lists allow web developers to group a set of related items in lists.

Block-level Elements

A block-level element always starts on a new line. A block-level element always takes up the full width available (stretches out to the left and right as far as it can). A block-level element has a top and a bottom margin, whereas an inline element does not.

- `<address>`
- `<article>`
- `<aside>`
- `<blockquote>`
- `<canvas>`
- `<dd>`
- `<div>`
- `<dl>`
- `<dt>`
- `<fieldset>`
- `<figcaption>`
- `<figure>`
- `<footer>`
- `<form>`
- `<h1>-<h6>`
- `<header>`
- `<hr>`
- ``
- `<main>`
- `<nav>`
- `<noscript>`
- ``
- `<p>`
- `<pre>`
- `<section>`
- `<table>`
- `<tfoot>`
- ``
- `<video>`

Inline Elements

An inline element does not start on a new line.

An inline element only takes up as much width as necessary.

- `<a>`
- `<abbr>`

- <acronym>
-
- <bdo>
- <big>
-

- <button>
- <cite>
- <code>
- <dfn>
-
- <i>
-
- <input>
- <kbd>
- <label>
- <map>
- <object>
- <output>
- <q>
- <samp>
- <script>
- <select>
- <small>
-
-
- <sub>
- <sup>
- <textarea>
- <time>
- <tt>
- <var>

<div> Element

The <div> element is block-level element and is often used as a container for other HTML elements.

** Element**

The element is an inline container used to mark up a part of a text, or a part of a document.

XHTML :

XHTML stands for Extensible Hypertext Markup Language. It was released in 2000.

It can be considered as a part of the XML markup language this is because of XHTML have features of both XML and HTML. XHTML is extended from XML and HTML. XHTML can be considered as a better version of HTML. It was developed by W3C (World Wide Web Consortium) In this, every tag and attribute should be in lower case. Doctype and close the tags is necessary if they are opened. Filename extension are .xhtml, .xht, .xml.

HTML Encoding (Character Sets)

To display an HTML page correctly, a web browser must know the character set used in the page. There are many charset like ASCII, ANSI, 8859, UTF-8

```
<meta charset="UTF-8">
```

Emojis in HTML

Emojis look like images, or icons, but they are not. But Emojis are characters from the UTF-8 character set:

HTML Layout

An HTML layout is a blueprint used to arrange web pages in a well-defined manner. There are four different techniques.

- CSS framework
- CSS float property
- CSS flexbox
- CSS grid

Responsive Web Design

Responsive web design is about creating web pages that look good on all devices. A responsive web design will automatically adjust for different screen sizes and viewports.

Semantic Elements?

A semantic element clearly describes its meaning to both the browser and the developer.

Examples of **non-semantic** elements: <div> and - Tells nothing about its content.

Examples of **semantic** elements: <form>, <table>, and <article> - Clearly defines its content.

HTML Entities

Some characters are reserved in HTML. If you use the less than (<) or greater than (>) signs in your text, the browser might mix them with tags. Character entities are used to display reserved characters in HTML.

Tags

Tags are the primary component of the HTML that defines how the content will be structured/formatted

void elements?

HTML elements which do not have closing tags or do not need to be closed are Void elements. For Example
, , <hr />, etc

'id' attribute and the 'class' attribute of HTML elements?

Multiple elements in HTML can have the same class value, whereas a value of id attribute of one element cannot be associated with another HTML element.

Image map.

We can link many different web pages using a single image in the Image map. It is represented by <map> tag.

Nested webpage in HTML?

We can use the iframe tag to represent a webpage within a webpage. It defines an inline frame on the HTML page.

How to insert a copyright symbol on a browser page?

You can insert a copyright symbol by using © or © in an HTML file.

Can we change the color of the bullet?

The color of the bullet is the color of the first text of the list. So, whenever we want to change the color of the bullet, we must change the color of the text

marquee tag?

Marquee tag is used to put the scrolling text on a web page. We can scroll the image or text to up, down, left or right automatically. We should put the text within the <marquee></marquee> tag

How to set an image as a background image of a web page?

We should put following code after </head> tag.

```
<body background = "errorsea.gif">
```

What is the use of the canvas element in HTML5?

The <canvas> tag is used as a container to draw graphics on the web page using a scripting language like JS. There are numbers of methods in canvas to draw boxes, paths, circles, add texts and images.

SVG Graphics

SVG stands for Scalable Vector Graphics. SVG is used to define graphics for the Web. SVG is a W3C recommendation. Define with <svg> and </svg> tags.

Which Video tag is supported in HTML 5?

1. mp4
2. WebM
3. Ogg

Which audio tag is supported in HTML 5?

1. mp3
2. WAV
3. Ogg

Figure tags in HTML 5?

We can use the figure tag to add a picture in a specific document on the web page. It is also used to handle the group of diagrams, photos, and code listing with some embedded content.

Datalist tag?

The HTML5 datalist tag facilitates users to choose the predefined options to the users to select data.

<area> Tag

The <area> tag defines an area inside an image map (an image map is an image with clickable areas). <area> elements are always nested inside a <map> tag.

<caption> tag

The <caption> tag defines a table caption. The <caption> tag must be inserted immediately after the <table> tag.

<code> Tag

The <code> tag is used to define a piece of computer code. This is displayed in the browser's default in monospace font.