

\* Element: Combination of starting tag & closing tag with the content.

Ex: `<h1> Hello world </h1>`

\* tag: Anything that's inside an angle bracket. We call these angle brackets is a tag.

Ex: `<h1>`, `</h1>`

\* The content inside the `<body>` section will be displayed in a browser. And the content inside the `<title>` element will be shown in the browser's title bar or tab bar.

### Basic Syntax of HTML

`<!DOCTYPE html>`

`<html lang = "en">`

`<head>`

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

`<title> My website </title>`

`<link> </link>`

`<style> </style>`

`<script> </script>`

`</head>`

`<body>`

`<h1> Hello World </h1>`

`</body>`

`</html>`

**<!DOCTYPE html>** - It tells the browser which version of the file was written in.

- It uses HTML version 5.

**<html lang = "en">** - It is the root of the document.

- The attribute "lang" is the language of the text content in the element.

- en is "english".

- It is important for the users who can see your website through screen reader.

**<head>**

- It is an "area" where important information about the website is placed that is not going to be displayed to user.

\* HTML <Meta> tags :

**<meta charset = "UTF-8">** - Meta tag for the character set encoding of the web page.

- It tells the browser to use the UTF-8 character encoding when translating machine code into human-readable text.

- UTF-8 ensures that the characters that you're using on your website gets displayed correctly.

Ex:- It won't allow emoji's or symbols like multiplication & division.

`<meta name = "description" content = "free web browser">`

- It tells the browser to search by the description.

`<meta name = "Keywords" content = "HTML, CSS, JavaScript">`

- It tells the browser to search by the keywords.

`<meta name = "author" content = "John Doe">`

- It tells the browser to search by the author.

`<meta name = "viewport" content = "width=device-width, initial-scale=1.0">`

- It adjust the screen size according to the size of the screen for comfortable view.

`<title> </title>` - It usually gets displayed up in the Tab bar.

`<link> </link>` - It is a link to external stylesheet.

- `<link rel = "stylesheet" href = "styles.css">`

`<style> </style>` - This is used to apply simple stylesheet CSS rules to the HTML document.

`<script> </script>` - This is used to apply Javascript file which are in other files.

`<body>` - All the HTML contents are written here. like header tag, links, images, etc.



## \* HTML Heading Elements:

- It looks like

`<h1>` Hello world `</h1>`  
↓                    ↓                    ↓  
opening            content            closing  
tag                                    tag

- There are 6 levels of headings

`<h1>` to `<h6>`

`<h1>` defines the most important heading

`<h6>` defines the least important heading

## \* Paragraph element:

- It defined with the `<P>` tag

Ex: `<P>` This is a paragraph `</P>`

## \* HTML Comments:

- It defined with `<!-- comments -->`

## \* `<br>` tag:

- It is a break tag

- It inserts a single line break.

- It is an empty tag which means that it has no end tag.

## \* `<pre>` `</pre>` tag:

- It is used to display the content in the exact format in which it is written in the notepad.

### \* HTML <marquee> tag :

- <marquee> </marquee>
- scrolling content is displayed by using this tag.

### \* HTML <hr> tag :

- When we use it in paragraph, it gives a horizontal line in b/w the paragraph.

### \* Anchor elements :

- It looks like  
`<a href = "link of website" target = "blank">`  
content </a>

- The <a> (Anchor) element with its href attribute create a hyperlink to webpages, files, Email addresses in the same page.

- The target attribute tells where the linked document should open.

It has different values.

1. blank : opens the linked document in a new window or tab.
2. self : opens the linked document in same window or tab.

### \* Attributes :

- Which gives additional information to the element.
- attribute is a pair of name & value.
- attribute value should be mention in the " " or ' ', but good practice is " " ;
- attribute should be mentioned in the open tag only.

\* Difference b/w Link tag & anchor tag :

Link tag : It is used to link the external documents to our HTML document.

Anchor tag : It is used to create hyperlink to other web pages.

\* Div tag : It defines a division or a section in an HTML document.

- It is used as a container for HTML elements

\* span tag : It is used for grouping of inline elements.

\* Display behaviour of Inline & block elements :

Inline :- Which occupies the space required.

- This element does not start in new line

Ex: `<span>` , `<a>`

Block :- Which will occupies entire space in the same line.

- This element always starts on a new line.

Ex: `<p>` , `<div>` , `<heading tags>`



\* Image elements:  $\rightarrow$  url is the value

`<img src = "url" / height = " " width = " " alt = " " >`

$\rightarrow$  src means source of the image.

$\rightarrow$  It is an void element.

$\rightarrow$  The alt attribute:

We use this alt attribute for the people who are blind or visually impaired, they don't look at the internet the same way we do.

They use screen reader.

This screen reader will read the alternative text when the image is clicked.

\* In how many ways we can include images in our html documents:-

1. absolute path
2. relative path.

\* <img> attributes

$\rightarrow$  alt

1 To adjust the height of the image

$\rightarrow$  width

To adjust the width of the image

$\rightarrow$  crossorigin (anonymous, use-credentials)

Allow images from third party sites

$\rightarrow$  loading (eager, lazy)

specifies whether a browser should load an image immediately or to defer.

$\rightarrow$  srcset (url-list)

specifies a list of images files to use in different situations.

→ longdesc (url)  
specifies a url to a detailed description of an image

### \* Marquee Tag attributes —

→ behavior (scroll, slide, alternate)

It sets the behavior

→ direction (left, right, up & down)

defines direction for scrolling content

→ width

defines the width

→ height

defines the height

→ hspace

defines horizontal space

→ vspace

defines vertical space

→ scrolldelay

defines scroll delay in seconds

→ loop

defines loop for marquee content in number

→ bgcolor

defines background color.

### \* Anchor tag attributes —

→ download (filename) → `<a href = " " download > | a`

Specifies that the target will be downloaded when a user clicks on the hyperlink.

→ hreflang (language-code)

Specifies the language of the linked document



\* <caption> tag

It is title for the table.

\* <table> tag

<table>

<tr>

<th> </th>

<th> </th>

</tr>

<tr>

<td> </td>

<td> </td>

</tr>

</table>

<th> → Table header element

<tr> → Table Row element

<td> → Table Data cell element

\* → rowspan (number)

specifies the no. of rows a cell should span.

→ colspan

specifies the no. of columns a table cell should span.

\* The list elements :

→ unordered list <ul> </ul>

↳ it creates bullet points for list items.

Ex:-

<ul>

<li> milk </li>

<li> bread </li>

<li> eggs </li>

</ul>

→

• Milk

• bread

• eggs

→ ordered list <ol> </ol>

↳ It gives numbers for list items

Ex:

<ol>

<li> Milk </li>

<li> bread </li>

<li> eggs </li>

1. Milk

2. Bread

3. eggs

→ If u want to get Roman type, then

<ol type = "i"> </ol>

→ If u want to start from middle of the number then

<ol start = "5"> </ol>

→ Reversed -

<ol reversed = "5"> </ol>

This specifies that the list items are in reverse order.

Items will be numbered from low to high

Ex -

<ol reversed = "3">

<li> milk </li>

<li> eggs </li>

<li> lays </li>

</ol>

3. Milk

2. eggs

1. lays

→ type -

<ol type = "i"> </ol>

Sets the numbering type -

→ 'a' for lowercase letters

'A' for uppercase letters

'i' for lowercase Roman numerals

'I' for uppercase " "

'1' for numbers (default)

## → Description List -

For each list it has description.

EX:-

```
<dl>
```

```
<dt> milk </dt>
```

```
<dd> white cold drink </dd>
```

```
<dt> coffee </dt>
```

```
<dd> Black hot drink </dd>
```

```
</dl>
```

dl → description list

dt → term in description list

dd → describe a term in description list

## \* details & summary tag -

li\*5

Summary tag defines a visible heading for the `<details>` element. The heading can be clicked to view / hide the details.

```
<details>
```

```
<summary> html </summary>
```

```
<p> </p> or img tag
```

```
</details>
```

## \* Iframes -

→ It is used to display a web page within a web page.

Syntax -

```
<iframe src = "url" title = "description"> </iframe>
```



## iframe attributes —

→ height

size of the iframe

→ width

width of the iframe

→ title

description for the link

→ border

To keep / remove the border

## \* Semantic elements —

→ It clearly describes its meaning to both the browser & the developer.

Ex: <article>

<aside>

<details>

<figcaption>

<figure>

<footer>

<header>

<main>

<mark>

<nav>

<section>

<summary>

<time>