

# Basic Structure Tags

## ❑ **<!DOCTYPE html>**

- Definition: Declares the document type and version of HTML being used (HTML5).
- *Example:*                   <!DOCTYPE html>

## ❑ **<html>**

- Definition: The root element that contains all the HTML code.
- *Example:*  
    <html lang="en">  
        <!-- Content goes here -->  
    </html>

## ❑ **<head>**

- Definition: Contains meta-information about the HTML document, such as its title and links to stylesheets.
- *Example:*  
    <head>  
        <title>Page Title</title>  
    </head>

## ❑ **<body>**

- Definition: Contains the content of the web page, such as text, image and links.

- *Example:*

```
<body>
```

```
    <h1>Welcome to My Web Page</h1>
```

```
</body>
```

## ❑ **<title>**

- Definition: Sets the title of the webpage, which appears in the browser tab.

- *Example:*

```
<title>My web page</title>
```

# Metadata Tags

## ❑ **<meta>**

- Definition: Provides metadata such as the character set, viewport settings, and SEO keywords.
- *Example:*  
    <meta charset="UTF-8">  
    <meta name="viewport" content="width=device-width, initial-scale=1.0">

## ❑ **<link>**

- Definition: Links external resources like stylesheets.
- *Example:*               <link rel="stylesheet" href="styles.css">

## ❑ **<script>**

- Definition: Embeds internal CSS styles within the HTML document.
- Example:  
    <style>  
        body { background-color: lightblue; }  
    </style>

## ❑ **<script>**

- Definition: Embeds or references JavaScript code within the HTML document.
- *Example:*

```
<script src="script.js"></script>
```

# Text and Structural tag

## ❑ **<p> (Paragraph)**

- Definition: Defines a paragraph of text.
- *Example:* `<p>This is a paragraph of text.</p>`

## ❑ **<h1> to <h6> (Headings)**

- Definition: Defines HTML headings, with `<h1>` being the highest (or most important) and `<h6>` the lowest.
- *Example:*
  - `<h1>Heading 1</h1>`
  - `<h2>Heading 2</h2>`
  - `<h3>Heading 3</h3>`
  - `<h4>Heading 3</h4>`
  - `<h5>Heading 3</h5>`
  - `<h6>Heading 3</h6>`

## ❑ **<br> (Line Break)**

- Definition: Inserts a line break in the text.
- *Example:* `<p>This is a line of text.<br>This is another line of text.</p>`

## ❑ **<hr> (Horizontal Rule)**

- Definition: Inserts a horizontal line, typically used to separate content.
- *Example:*  
`<hr>`

# Text Formatting Tags

## ❑ **<b> (Bold)**

- Definition: Makes the enclosed text bold.
- *Example:* `<p>This text is <b>bold<b></p>`

## ❑ **<i> (Italic)**

- Definition: Italicizes the enclosed text.
- Example: `<i>This text is italic</i>`

## ❑ **<u> (Underline)**

- Definition: Underlines the enclosed text.
- *Example:*  
`<u>This text is underlined</u>`

## ❑ **<strong> (Strong Emphasis)**

- Definition: Indicates that the text has strong importance; typically renders in bold.
- Example:

`<strong>This text is strongly emphasized</strong>`

## ❑ **<em> (Emphasis)**

- Definition: Emphasizes the text; typically renders in italics.
- *Example:* `<em>This text is emphasized</em>`

## ❑ **<mark> (Highlights Text)**

- Definition: Highlights the enclosed text.
- Example: `<mark>This text is Highlighted</mark>`

## ❑ **<Small> (Small text)**

- Definition: Decreases the size of the enclosed text.
- *Example:*

`<small>This text is underlined</small>`



## ❑ **<Big> (Big text)**

- Definition: Increased the size of the enclosed text.
- Example:

`<big>This text is big</big>`

## ❑ **<sup> (Superscript)**

- Definition: Displays the text as superscript (raised text).
- *Example:* `x<sup>2</sup>`

## ❑ **<sub> (Subscript)**

- Definition: Displays the text as subscript (lowered text).
- Example: `<mark>This text is Highlighted</mark>`

## ❑ **<strike>/<del> (deleted text)**

- Definition: Strikes through the enclosed text, indicating it as deleted.
- *Example:*

`<del>This text is deleted</del>`

`<strike> This text is strike</strike>`

## ❑ **<pre> (Preformatted Text)**

- Definition: Preserves both spaces and line breaks.
- Example:

```
<pre>
```

```
    This text is  
    preformatted
```

```
</pre>
```

# Links

❑ Links are created using the <a> (anchor) tag in HTML, which allows you to navigate between different pages or resources.

- <a> Tag
- Purpose: Creates a hyperlink to another webpage or resource.
- Attributes:
- href: Specifies the URL of the page or resource the link points to or can link to another HTML file.
- Example:

```
<a href="https://www.example.com" >Visit Example</a>
```

```
<a href="../Next.html" >Visit Example</a>
```

# Lists

❑ Lists are used to group related items in a structured format. HTML provides three types of lists: **unordered lists**, **ordered lists**, and **definition lists**.

- **<ul> Tag**

- Purpose: Creates an unordered list, where list items are typically displayed with bullet points.

```
<ul>
```

```
<li>Item 1</li>
```

```
<li>Item 2</li>
```

```
<li>Item 3</li>
```

```
</ul>
```

# Lists

❑ Lists are used to group related items in a structured format. HTML provides three types of lists: **unordered lists**, **ordered lists**, and **definition lists**.

- **<ol> Tag**

- Purpose: Creates an ordered list, where list items are numbered.
- Attributes :
  - Start: Specifies the starting number for the list items.
  - Type: Specifies the type of numbering (1,A,a,l,i)

```
<ol type="1" start="4">
```

```
<li>First item</li>
```

```
<li>Second item</li>
```

```
<li>Third item</li>
```

```
</ol>
```

# Lists

❑ Lists are used to group related items in a structured format. HTML provides three types of lists: **unordered lists**, **ordered lists**, and **definition lists**.

- **<li> Tag**

- Purpose: Defines an individual list item within an unordered or ordered list..

Example:

```
<ul>
```

```
<li>List item 1</li>
```

```
<li>List item 2</li>
```

```
</ul>
```

# Tables

❑ Tables are used to organize data into rows and columns, making it easy to display structured information.

## ❑ **<table> Tag**

- Purpose: Creates a table to display data.
- Attributes:
  - border: Specifies the width of the table's borders.

## ❑ **<th> Tag**

- **Purpose:** Defines a header cell in a table, usually displayed as bold and centered.

## ❑ **<td> Tag**

- **Purpose:** Defines a standard cell in a table (Use for inserting table data).

## ❑ **<tr> Tag**

- Purpose: Defines row in the table.

# Tables Attributes

## ❑ Rowspan Attribute

- Purpose: The rowspan attribute is used to merge a cell across multiple rows in a table. It allows a single cell to span across two or more rows.
- Example:

```
<td rowspan="3">Content</td>
```

## ❑ Colspan Attribute

- Purpose: The colspan attribute is used to merge a cell across multiple columns in a table. It allows a single cell to span across two or more columns.
- Example:

```
<td colspan="2">Content</td>
```



# Example for Tables

```
<table border="1">
  <tr>
    <th colspan="2">Header spanning two columns</th>
    <th>Header 3</th>
  </tr>
  <tr>
    <td rowspan="2">This cell spans two rows</td>
    <td>Row 1, Column 2</td>
    <td>Row 1, Column 3</td>
  </tr>
  <tr>
    <td colspan="2">This cell spans two columns</td>
  </tr>
</table>
```

# Multimedia

## ❑ **<img> Tag**

- Purpose: Embeds an image in a web page.
- Attributes:
  - src: Specifies the path to the image.
  - alt: Provides alternative text for the image if it cannot be displayed.
  - width and height: Specifies the dimensions of the image.

Example:

```

```

# Multimedia

## ❑ <audio> Tag

- Purpose: Embeds an audio file in a web page.
- Attributes:
  - src: Specifies the path to the audio file.
  - controls: Adds audio controls such as play, pause, and volume.
  - autoplay: Automatically starts playing the audio when the page loads.
  - loop: Repeats the audio playback when it ends.
  - Muted: Mute the audio when the page is initially run.

Example:

```
<audio controls muted loop autoplay src="/audio.mp3">
```

This audio is not supported

```
</audio>
```

# Multimedia

## ❑ <video> Tag

- Purpose: Embeds an video file in a web page.
- Attributes:
  - src: Specifies the path to the video file.
  - controls: Adds video controls such as play, pause, and volume.
  - autoplay: Automatically starts playing the video when the page loads.
  - loop: Repeats the video playback when it ends.
  - width and height: Specifies the dimensions of the video.
  - Muted: Mute the video when the page is initially run.

Example:

```
<video controls muted loop autoplay src="/video.mp4">  
    This video is not supported  
</video>
```

# Multimedia

## ❑ <embed> Tag

- Purpose: Embeds external content or plugins, such as a PDF viewer, in a web page.
- Attributes:
  - src: Specifies the path to the embedded file.
  - width and height: Specifies the dimensions of the embedded content.
  - type: Specifies the MIME type of the embedded content.

Example:

```
<embed src="document.pdf" width="600" height="500" type="application/pdf">
```

# Multimedia

## ❑ <object > Tag

- Purpose: Embeds multimedia objects such as images, videos, and PDFs. It can also be used to embed HTML content.
- Attributes:
  - data: Specifies the path to the object file.
  - type: Specifies the MIME type of the object.
  - width and height: Specifies the dimensions of the object.

Example:

```
<object data="document.pdf" type="application/pdf" width="600" height="500">
```

Your browser does not support embedded PDF files.

```
</object>
```