

HTML (HyperText Markup Language)

HTML is the code used to structure a web page and its content. The components used to design the structure of websites are called HTML tags.

First HTML File

- **index.html:** The default name for a website's homepage.

HTML Tag

- A container for some content or other HTML tags.

```
html
Copy code
<p>This is a paragraph</p>
```

Basic HTML Page

```
html
Copy code
<!DOCTYPE html>
```

```
<html>
```

```
<head>
  <title>My First Page</title>
</head>
```

```
<body>
  <p>Hello world</p>
</body>
```

```
</html>
```

- **DOCTYPE declaration:** Tells the browser you are using HTML5.
- **html tag:** The root of an HTML document.
- **head tag:** Container for metadata.
- **body tag:** Contains all data rendered by the browser.
- **title tag:** Specifies the page title.
- **p tag:** Paragraph tag.

Quick Points

- The html tag is the parent of the head and body tags.
- Most HTML elements have opening and closing tags with content in between.
- Some tags have no content in between (e.g.,
).
- We can use "Inspect Element" or "View Page Source" to edit HTML.
- Comments in HTML:

```
html
Copy code
<!-- This is an HTML comment -->
```

- HTML is not case sensitive:

```
html
Copy code
<p> = <P>
<html> = <HTML>
<head> = <HEAD>
<body> = <BODY>
```

Basic HTML Tags

HTML Attributes

- Attributes are used to add more information to the tag.

```
html
Copy code
<html lang="en">
```

Heading Tags

- Used to display headings in HTML.

```
html
Copy code
<h1>Most Important</h1>
<h2>Second Most Important</h2>
<h3>Third Most Important</h3>
<h4>Fourth Most Important</h4>
<h5>Fifth Most Important</h5>
<h6>Least Important</h6>
```

Paragraph Tag

- Used to add paragraphs in HTML.

```
html
Copy code
<p>This is a sample paragraph</p>
```

Anchor Tag

- Used to add links to your page.

```
html
Copy code
<a href="https://google.com">Google</a>
```

Image Tag

- Used to add images to your page.

```
html
Copy code

```

Br Tag or

- Used to add line breaks to your page.

```
html
Copy code
<br>
```

Bold, Italic & Underline Tags

- Used to highlight text on your page.

```
html
Copy code
<b>Bold</b>
<i>Italic</i>
<u>Underline</u>
```

Big & Small Tags

- Used to display big and small text on your page.

```
html
Copy code
<big>Big</big>
<small>Small</small>
```

Hr Tag

- Used to display a horizontal ruler, used to separate content.

```
html
Copy code
<hr>
```

Subscript & Superscript Tags

- Used to display text as subscript or superscript.

```
html
Copy code
H<sub>2</sub>O
A<sup>n</sup>
```

Pre Tag

- Used to display text as it is (without ignoring spaces and line breaks).

```
html
Copy code


```
<pre>This
is a sample
text.
</pre>
```


```

Page Layout Techniques

Using Semantic Tags for Layout

- `<header>`
- `<main>`
- `<footer>`

Inside Main Tag

- **Section Tag:** For a section on your page.

```
html
Copy code
<section></section>
```

- **Article Tag:** For an article on your page.

```
html
Copy code
<article></article>
```

- **Aside Tag:** For content aside from the main content (e.g., ads).

```
html
Copy code
<aside></aside>
```

Revisiting Anchor Tag

- To open a link in a new tab.

```
html
Copy code
<a href="https://google.com" target="_main">Google</a>
```

- Clickable image.

```
html
Copy code
<a href="https://google.com"></a>
```

Revisiting Image Tag

- Setting height and width.

```
html
Copy code


```

Div Tag

- A container used for other HTML elements (block-level element).

```
html
Copy code
<div></div>
```

Span Tag

- A container used for other HTML elements (inline element).

```
html
Copy code
<span></span>
```

List of Common Block Elements

- <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>

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List of Common Inline Elements

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



Lists in HTML

Unordered Lists

- Lists items with bullets.

```
html
Copy code
<ul>
  <li>Apple</li>
  <li>Mango</li>
</ul>
```

Ordered Lists

- Lists items with numbers.

```
html
Copy code
<ol>
  <li>Apple</li>
  <li>Mango</li>
</ol>
```

Tables in HTML

- Used to represent table data.

Basic Table Structure

```
html
Copy code
<table>
  <tr>
    <th>Name</th>
    <th>Roll No</th>
  </tr>
  <tr>
    <td>Shradha</td>
    <td>1664</td>
  </tr>
</table>
```



Caption in Tables

```
html
Copy code
<caption>Student Data</caption>
```

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thead & tbody in Tables

```
html
Copy code
<thead>
  <tr>
    <th>Name</th>
    <th>Roll No</th>
  </tr>
</thead>
<tbody>
  <tr>
    <td>Shradha</td>
    <td>1664</td>
  </tr>
  <tr>
    <td>Aman</td>
    <td>1890</td>
  </tr>
</tbody>
```

colspan Attribute

- Used to create cells that span multiple columns.

```
html
Copy code
<td colspan="2">Data</td>
```

Forms in HTML

- Used to collect data from the user (e.g., sign up, login, help requests, contact me).

Basic Form Structure

```
html
Copy code
<form action="/action.php">
  <!-- form content -->
</form>
```

Form Elements: Input

```
html
Copy code
<input type="text" placeholder="Enter Name">
```

Label

```
html
Copy code
<input type="radio" value="class X" name="class" id="id1">
<label for="id1"></label>

<input type="radio" value="class X" name="class" id="id2">
<label for="id2"></label>
```

Class & Id

```
html
Copy code
<div id="id1" class="group1"></div>
<div id="id2" class="group1"></div>
```

Checkbox

```
html
Copy code
<input type="checkbox" value="class X" name="class" id="id1">
<label for="id1"></label>

<input type="checkbox" value="class X" name="class" id="id2">
<label for="id2"></label>
```

Textarea

```
html
Copy code
<textarea name="feedback" id="feedback" placeholder="Please add
feedback"></textarea>
```


Select

html

Copy code

```
<select name="city" id="city">
  <option value="Delhi">Delhi</option>
  <option value="Mumbai">Mumbai</option>
  <option value="Bangalore">Bangalore</option>
</select>
```

iframe Tag

- Embed a website inside another website.

html

Copy code

```
<iframe src="link"></iframe>
```

Video Tag

- Embed a video.

html

Copy code

```
<video src="myVid.mp4" controls height="400" width="600" loop
autoplay>My Video</video>
```

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ALWAYS VISIT MDN TO CHECK DOCUMENTATION