

Complete HTML



HTML (HyperText Markup Language) is the standard language for creating web pages.

- It provides the **structure** of a webpage.
- Everything on the internet (websites, blogs, etc.) starts with HTML.
- Other famous Markup languages are Markdown, LaTeX, XML etc.

Basic Structure:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <title>Page Title</title>
```

```

</head>
<body>
  <h1>Welcome to Web Development!</h1>
  <p>This is a paragraph.</p>
</body>
</html>

```

Basic HTML Tags

Tag	Purpose
<h1> to <h6>	Headings (largest to smallest)
<p>	Paragraph
<a>	Anchor (links)
	Insert images
 , , 	Lists (unordered, ordered)
<div>	Block container
	Inline container
 , <hr>	Line break, horizontal line
<i> , <u> , , , 	Formatting tags

```

<h1>Hello, World!</h1>
<p>This is my first web page.</p>
<a href="https://www.google.com">Visit Google</a>


```

Setup VS code

Steps:

1. Download and install Visual Studio Code.
2. Install important extensions on VS Code:
 - **Live Server:** To see the updates using local host.

- **Prettier:** It will format the code in better way.
3. Create a new folder for your project.
 4. Open the folder in VS Code.
 5. Create a file named `index.html` and let's start coding!

Advanced HTML Tags: Forms, Tables, Semantic Elements

Forms

Used to collect user input.

```
<form action="/submit" method="POST">
  <label>Name:</label>
  <input type="text" name="username" />
  <input type="submit" value="Submit" />
</form>
```

Common Form Elements:

- `<input>` — for text, email, password, etc.
- `<textarea>` — for multi-line text.
- `<button>` — for clickable buttons.
- `<select>` and `<option>` — dropdown lists.

For more detail about Form input methods visit official [mdn documentation](#).

Tables

Used to display tabular data.

```
<table border="1">
  <tr>
    <th>Name</th>
    <th>Age</th>
  </tr>
```

```

<tr>
  <td>Alice</td>
  <td>24</td>
</tr>
</table>

```

Semantic Elements

HTML5 introduced elements that clearly describe their meaning:

Tag	Purpose
<code><header></code>	Top section of a page
<code><footer></code>	Bottom section of a page
<code><nav></code>	Navigation links
<code><section></code>	Defines sections in a page
<code><article></code>	Independent, self-contained content
<code><aside></code>	Content aside from the main content

For Example:

```

<header>
  <h1>My Website</h1>
</header>
<nav>
  <a href="#home">Home</a> |
  <a href="#about">About</a>
</nav>
<section id="home">
  <h2>About Me</h2>
  <p>This is my story.</p>
</section>
<footer id="about">
  <p>Copyright © 2025</p>
</footer>

```

Introduction to HTML5 Tags

HTML5 brought many **new tags** for richer content and better structure.

New Tag	Purpose
<code><video></code>	Embeds video content
<code><audio></code>	Embeds sound content
<code><canvas></code>	Draw graphics on the fly using JavaScript
<code><section></code> , <code><article></code> , <code><header></code> , <code><footer></code> , <code><aside></code>	Structure content semantically
<code><figure></code> and <code><figcaption></code>	For images with captions
<code><main></code>	Main content of the document

Video Tag Syntax:

```
<video controls>
  <source src="video.mp4" type="video/mp4" />
  You can write anything
</video>
```

Audio Tag Syntax:

```
<audio controls>
  <source src="audio.mp3" type="audio/mp3" />
  you can write anything
</audio>
```

Image Tag Syntax:

```

```

Quick Tip:

When working with **MERN Stack**, HTML is still very important because **React components** often generate HTML-like code (JSX).

Now, next step? — CSS