

Command in html

```
<!-- Mani-->  
<!-- <h>-->
```

# HTML

## A. Head Section

The `<head>` section contains **metadata** and **configuration information** for the webpage. Content inside `<head>` is **not displayed** in the browser.

**Purpose of `<head>`:**

- Provide page information to the browser
- Link CSS files
- Set title and encoding
- Improve SEO and responsiveness

### A.1. `<title>`

- Defines the **title of the webpage**.

```
<title>My ML Project</title>
```

### A.2. `<Meta>`

- Provides **metadata** about the HTML document.

#### a. Character Encoding

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

- Supports all languages and symbols
- Prevents text display issues

#### b. Viewport (Responsive Design)

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

- Required for mobile responsiveness
- Adjusts layout based on device width

### A.3. `<link>`

- Used to link **external resources**, mainly CSS files.

```
<link rel="stylesheet" href="style.css">
```

- Also used to add the fav-icon

```
<link rel="icon" type = "image/x-icon" href="images/logo.png">
```

## A.4. <style>

- Used to write **internal CSS** inside HTML.

```
<style>
```

```
body {  
    background-color: white;  
}  
</style>
```

# B. Body Section

## <body>

- The <body> tag contains **all the visible content** of the web page.
- Anything that should appear in the browser window must be written **inside <body>**.

```
<body>
```

```
    <!-- Visible content goes here -->
```

```
</body>
```

- Only **one <body> per HTML document**

## B.1 <div>

- <div> is a **block-level container** used to group multiple HTML elements together.

```
<div>
```

```
<h2>Model Output</h2>  
<p>Accuracy: 95%</p>  
</div>
```

- Takes full width by default
- Starts on a new line
- Mainly used for **layout and styling**

## B.2 Headings <h1 > to <h6>

- Used to define **headings and subheadings** in a web page.

```
<h1>Main Title</h1>
```

```
<h2>Section</h2>
```

```
<h3>Subsection</h3>
```

- <h1> is the most important heading
- <h6> is the least important
- Use headings **in order** (don't skip levels)

## B.3 <p>

- Defines a **paragraph of text**.

```
<p>This model predicts heart disease.</p>
```

## B.4 <pre>

- <pre> preserves spaces, tabs, and line breaks exactly as written.

```
<pre> This is quote  
this might be reduced</pre>
```

## B.5 <span>

- Used to style or group **inline text**.

```
<p>Accuracy: <span>95%</span></p>
```

## B.6 <a> (Anchor)

- Used to create **links**.

```
<a href="https://example.com" target="_blank">Visit</a>
```

- href → link address
- target="\_blank" → opens in new tab
  - We can create another img tag inside the a tag... So that by clicking img also we can reach-out the link

```
<i><a href="https://github.com/m-manikandan22" target="_blank" >  Github</a></i>
```

- We can use mailto to autofill the “to address” while mailing

```
<a href="mailto: mmanikandan0005@gmail.com"> Mailme</a>
```

## B.7 <img>

- Used to display **images**.

```

```

- Self-closing tag
- alt is mandatory (accessibility + SEO)

## B.8 <br>

- used to break that line
- it is self closing tag

```
<br>
```

## B.9 <hr>

- used to introduce a horizontal line in the page.

- self closing tag

`<hr>`

## B.10 <b>

- used to give bold text (Only appearance)

`<b>This is bold text</b>`

## B.11 <strong>

- used to represent it is importance
- Screen reader emphasize this text

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

## B.12 <em>

- Used to add emotional or verbal stress to word
- Screen reader changes voice tone
- By default italic font

`<em>This text is emotional added</em>`

## B.13 <i>

- Used to show text in italic

`<i>This text is italic</i>`

## B.14 <mark>

- Used to highlight the text (looks like highlighter)

`<mark>This is highlighted</mark>`

## B.15 <sup>

- Used to write in superscript like  $a^2$

`<p>a<sup>2</sup></p>`

## B.16 <sub>

- Used to write in subscript like  $a_2$

`<p>a<sub>2</sub></p>`

## B. 17 <q>

- used to make text inside “ ”.

`<p>I'm <q> Machine learning Engineer</q></p>`

## B.18 <abbr>

- Used to write abbreviations and title can be add and seen when hover the cursor
- `<p>I'm <abbr title="Artificial Intelligence">AI</abbr> Engineer</p>`

## B.19 <del>

- Used to strikeout the content

`<del>B.tech</del>`

*Op:*

~~B.tech~~

## B.20 <ins>

- Used to insert the new element in the the document
  - Shown as underlined text
- `<ins>This is newly inserted</ins>`

- Show newly added content
- Track changes in documents
- Indicate updates or corrections

## B.21 <u>

- Used to underline the written text
- `<u>This is just underlined text</u>`
- Just for styling purpose

## B.22 <table>

- Used to draw table
- There is head and body in table.  
Head is used to write the 1st row of table (Heading)  
Body is used to write the other rows of the table(Body of table)

### B.22.1 <caption>

- Used to mention any caption about the table

## B.22.2 <thead>

- Table head

## B.22.3 <tbody>

- Table body

## B.22.4 <tr>

- Table row – to create each row in the table

## B.22.5 <th>

- Table header – to create the data in 1st row of data

## B.22.6 <td>

- Table data – to create other all data in table

```
<table>
  <caption>My projects</caption>
  <thead>
    <tr>
      <!--<th>Sno</th>-->
      <th colspan="2">Projects</th>
      <th>Language</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>1</td>
      <td>Airboard</td>
      <td rowspan="2">Python</td>
    </tr>
    <tr>
      <td>2</td>
      <td>Stock Market Prediction</td>
    </tr>
  </tbody>
</table>
```

Op:

Projects	Language
1	Airboard
2	Stock market prediction

Attributes:

1. Rowspan :
  - used to span(combine) cells in row wise
2. Colspan
  - Used to span(combine) cells in column wise

## B.23 List Tags

- Lists are used to display **multiple related items** in an ordered or unordered way.

### B.23.1 <ul> – Unordered List

- Creates a **bulleted list** (no specific order).

```
<ul style="list-style-type: square">  
<li>Accuracy</li>  
<li>Precision</li>  
<li>Recall</li>  
</ul>
```

*Attribute:*

*list-style-type : square*

– *To get the lists in square*

### B.23.2 <ol> – Ordered List

- Creates a **numbered list** (order matters).

```
<ol type="i ">  
<li>Load dataset</li>  
<li>Train model</li>  
<li>Evaluate results</li>  
</ol>
```

*Attribute:*

*Type = "i"*

– *To get the list style in i,ii,iii,....*

### B.23.3 <li> – List Item

- Defines an **individual item** inside a list.

```
<li>Item name</li>
```

- Must be inside <ul> or <ol>
- Cannot be used alone

### B.24.<iframe>

- Used to embed another website into our site

```
<iframe src="mysite.html" frameborder="2"></iframe>
```

### B.25 <form>

- Used to create forms

```
<fieldset>
  <legend>Sign Up</legend>
  <form action="">
    <label>Name</label>
    <input type="text" placeholder="FirstName" >
    <br><br>
    <label>Password</label>
    <input type="password" required>
    <br><br>
    <label>DOB</label>
    <input type="date">
    <br><br>
    <label>Gender</label>
    <input type="radio">
    <label>male</label>
    <input type="radio">
    <label>female</label>
    <input type="radio">
    <label>others</label>
    <br><br>
    <input type="checkbox">
    <label>Terms and conditions</label>
    <br><br>
    <input type="submit">
  </form>
</fieldset>
```

#### *B.25.1 <fieldset>*

- used to group related elements in a form

#### *B.25.2 <legend>*

- Used to set caption or title for the content grouped within a <fieldset>
- To use legend <fieldset> is mandatory

#### *B.25.3 <label>*

- Used to define label

#### *B.25.4 <input>*

- To get various types of input from user
- For radio buttons, always use name, Otherwise all radios act independently.

#### **Attributes:**

1. Action – when hitting submit button then will tell what to do.. May be to reload or redirect to another page
2. Placeholder – used to store the place holder value in the input fields
3. Value – used to store default value in the input fields
4. disabled – to disable the input field
5. Required – used to mark the fields to fill mandatory

## C. Common Attributes

### C.1 class Attribute

- Used to apply **CSS styles** to one or more elements.

`<div class="card"></div>`

### C.2 id Attribute

- Used to uniquely identify **one element**.

`<div id="result"></div>`

- Must be **unique**
- Used for JavaScript access

- Higher priority than class

## C.3 src Attribute

- Specifies the **source file**.

```

```

### Used With

- <img>
- <video>
- <audio>

## C.4 href Attribute

- Specifies the **link destination**.

```
<a href="https://github.com">GitHub</a>
```

## C.5 alt Attribute

Provides **alternate text** for images.

```

```

## C.6 style Attribute

- Used to apply **inline CSS**.

```
<p style="color:red">Warning</p>
```

# D. Layout & Grouping Tags

## D.1 <header>

- Used for top section of a page (logo, navigation, title).

```
<header>
  <h1>My ML Dashboard</h1>
</header>
```

## D.2 <nav>

- Used to define navigation links.

```
<nav>
  <a href="#">Home</a>
  <a href="#">Projects</a>
</nav>
```

<a> = creates a hyperlink

<nav> = tells the browser, search engine & screen readers

<nav> is about meaning & structure, not functionality.

## D.3 <section>

- Groups related content.

```
<section>
  <h2>Model Results</h2>
  <p>Accuracy: 95%</p>
</section>
```

If content can be reused or shared independently → <article>

If content belongs to a topic on a page → <section>

If you just need a container → <div>

## D.4 <article>

- represents independent, self-contained content that can be reused or distributed separately from the rest of the page

```
<article class="project">
  <h3>Stock Prediction</h3>
  <p>Uses LSTM to predict closing prices.</p>
</article>
```

## D.5 <aside>

<aside> is for secondary / supporting content that is related to the main content but not part of the main flow.

```
<aside>
  <p>Side content (ads, tips, related links).</p>
  <p>Related models</p>
</aside>
```

## D.6 <footer>

- Bottom of page.

```
<footer>
  <p>© 2025 Manikandan</p>
</footer>
```

# E. Forms & Inputs

## E.1 <textarea>

- Used to get multi-line input from user

```
<form>
  <label>Message:</label><br>
  <textarea rows="5" cols="40"></textarea>
</form>
```

## E.2 <select> + <option>

- <select> creates a dropdown menu.
- <option> defines each selectable item inside it.

```
<label>Select Model:</label>

<select>
  <option>CNN</option>
  <option>LSTM</option>
  <option>Random Forest</option>
  <option>Transformer</option>
</select>
```

## E.3 <button>

- Used to create buttons

```
<button>Submit</button>
```

## E.4 Important Input Types

Type	Purpose
email	Email input
number	Numbers only
file	Upload file
range	Slider
color	Color picker

## F. Media Tags

### F.1. <audio>

```
<audio controls>
  <source src="sound.mp3">
</audio>
```

### F.2. <video>

```
<video controls width="300">
  <source src="demo.mp4">
</video>
```

## G. Semantic HTML

### G.1 <main>

- Contains the main content of the webpage.
- There must be only one <main> per page.

```
<main>
  Main content here
</main>
```

## G.2 <figure>

- Wraps self-contained content like images, charts, diagrams, code blocks.

```
<figure>
  
  <figcaption>ECG Signal Output</figcaption>
</figure>
```

## G.3 <figcaption>

- Provides a caption or explanation for <figure> content.

```
<figcaption>Model Accuracy: 95%</figcaption>
```

## G.4 <time>

- Represents date or time in a machine-readable format.

```
<time datetime="YYYY-MM-DD">Display text</time>
```

## G.5 <details>

- Creates expandable content block.

```
<details>
  <summary>Model Architecture</summary>
  <p>LSTM with 3 hidden layers.</p>
</details>
```

## G.6 <summary>

- Defines the visible title for <details>.

```
<summary>Training Details</summary>
```