

# HTML

H – Hyper

T – Text

M – Markup

L – Language

HTML: Hyper Text markup language

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# DEFINITION OF HTML

- HTML (HyperText Markup Language) is the standard language used to create and design web pages, defining the structure and content of web content.
- It provides the structure of a webpage by using a system of elements (or tags) that define different parts of the content, such as headings, paragraphs, images, links, and more.

# KEY FEATURES OF HTML

- **Elements & Tags:** HTML uses tags like `<p>`, `<h1>`, `<img>`, and `<a>` to structure content.
- **Hyperlinks:** Links between web pages are created using the `<a>` tag.
- **Forms & Inputs:** Used to collect user input with `<form>`, `<input>`, `<button>`, etc.
- **Media Support:** Supports images, videos, and audio with `<img>`, `<video>`, and `<audio>`.

# BASIC SYNTAX OF HTML CODE

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

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

```
</head>
```

```
<body>
```

```
  <h1>Welcome to My Website</h1>
```

```
  <p>This is a simple HTML page.</p>
```

```
</body>
```

```
</html>
```

Output:-

Welcome to My Website

This is a simple HTML page

# Basic Explanation Of the syntax

Tag	Description
<code>&lt;!DOCTYPE html&gt;</code>	Defines the document type (HTML5).
<code>&lt;html&gt;</code>	Root element of the HTML document.
<code>&lt;head&gt;</code>	Contains metadata like title and styles.
<code>&lt;title&gt;</code>	Sets the title of the web page (shown in the browser tab).
<code>&lt;body&gt;</code>	Contains the visible content of the webpage.
<code>&lt;h1&gt;</code> to <code>&lt;h6&gt;</code>	Heading tags (h1 = largest, h6 = smallest).
<code>&lt;p&gt;</code>	Defines a paragraph.

## Key Points:

- HTML is case-insensitive (but lowercase is preferred).
- Every opening tag `<tag>` must have a closing tag `</tag>`, except for self-closing tags like `<img>`, `<br>`, and `<input>`.

# ADVANTAGES OF HTML

- Standard Markup Language for Web: All browsers understand HTML, making it the universal choice for web content.
- Easy to Learn and Implement: Simple syntax and structure make it beginner-friendly.
- Compatibility with All Devices: HTML works on desktops, tablets, and mobile phones.
- Supports Multimedia: Can display images, audio, and video without extra plugins.
- Responsive and Mobile-Friendly: Supports responsive design using CSS and frameworks like Bootstrap.
- Secure and Reliable: Since HTML is a static language, it is less vulnerable to hacking compared to dynamic scripts.



# APPLICATIONS OF HTML

Some of the application of html are:-

- 1. Web Development: HTML is the backbone of websites.
- 2. Web Applications: Used with frameworks like React, Angular, and Vue.
- 3. Mobile App Development: Used in hybrid apps with React Native and Flutter WebView.
- 4. Game Development: HTML5 introduced the `<canvas>` element for web-based games.
- 5. E-Learning & Online Education: Used to structure course content.
- 6. IoT & Embedded Systems: Used for web-based control panels for smart devices.



THANK YOU