

Introduction to HTML

HTML stands for HyperText Markup Language. It is the standard language used to create and design web pages. HTML structures the content on the internet by using different tags and elements.

Every website on the internet is built using HTML as its basic structure. Web browsers read HTML code and display the content in the form of text, images, links, and multimedia.

Popular web browsers such as Google Chrome, Mozilla Firefox, and Microsoft Edge interpret HTML code and display web pages to users.

Structure of an HTML Document

An HTML document usually contains the following basic structure:

1. **DOCTYPE declaration** – Defines the HTML version
2. **HTML tag** – Root element of the page
3. **Head section** – Contains title and metadata
4. **Body section** – Contains the visible content of the webpage

The body section includes headings, paragraphs, images, links, and other elements displayed on the web page.

Basic HTML Elements

Heading Tags

Heading tags are used to define headings on a webpage. They range from `<h1>` to `<h6>`.

Paragraph Tag

The `<p>` tag is used to define paragraphs of text.

Link Tag

The `<a>` tag is used to create hyperlinks that connect one webpage to another.

Image Tag

The `<img>` tag is used to display images on a webpage.

Advantages of HTML

1. **Easy to learn and use**
2. **Supported by all web browsers**
3. **Forms the foundation of web development**

4. Can be combined with CSS and JavaScript for advanced web design

Limitations of HTML

1. HTML alone cannot create dynamic websites
2. It requires other technologies like CSS and JavaScript for advanced functionality
3. Limited capabilities for complex applications

Applications of HTML

HTML is widely used for:

- Creating websites
- Designing web pages
- Structuring content on the internet
- Developing web applications

Many websites, including platforms like YouTube, use HTML as part of their web structure.