



Agenda

- What is HTML?
- Benefits of HTML
- Basic Structure of HTML (DOM Structure)
- Editors



What is HTML?

- HTML, or Hypertext Markup Language, is the standard markup language used to create web pages.
- It provides the structure and layout for web content by using tags and attributes to define different elements on a web page
- Eg:- headings, paragraphs, images, links, forms, and more.



Hypertext Markup Language

- "Hypertext" refers to links that connect web pages to one another, either within a single website or between websites.
- HTML is called a 'markup language' because it allows users to organize the appearance and presentation of all the content that should go on a web page.
- It tells the web browser how to display the page's words and images to the user.



Is HTML compiled or

~~interpreted~~

HTML is neither compiled nor interpreted .

- Instead, it's parsed by web browsers.
- **Parsing** means when a web browser receives an HTML document from a web server, it parses the HTML code.
- Parsing involves breaking down the HTML code into a structured representation, often referred to as the Document Object Model (DOM).
- During this process, the browser identifies HTML elements, their attributes, and their relationships with one another.



Is HTML compiled or interpreted? Rendering

- After parsing the HTML, the web browser then renders the content visually based on the DOM structure.
- This involves applying styles (CSS) and executing any scripts (JavaScript) that may be included in the HTML document.
- The rendering process converts the structured representation of the HTML document into the visual layout that users see on their screens.



Benefits of HTML

- **Universal Compatibility:** HTML is supported by all web browsers and is compatible across various platforms and devices.
- **Ease of Learning and Use:** HTML has a simple syntax, making it relatively easy to learn for beginners.



Benefits of HTML

- **SEO-Friendliness:** HTML provides the foundation for search engine optimization (SEO), as it allows developers to structure content using meta tags that help search engines understand and index web pages effectively.
- **Interactivity and Multimedia:** While HTML primarily focuses on text-based content, it also supports multimedia elements such as images, audio, and video.



Basic Structure of HTML

document

```
<!DOCTYPE html>
<html>
<head>
<title>.....</title>
</head>
<body>
```

Contents

```
</body>
</html>
```



Basic Structure of HTML document

```
<!DOCTYPE html>
```

- The HTML document type declaration, also known as DOCTYPE , is the first line of code required in every HTML document.
- The DOCTYPE declaration is an instruction to the web browser about what version of HTML the page is written in.
- This ensures that the web page is parsed the same way by different web browsers.⁹



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Basic Structure of HTML document

- The `<html>` element is the root element of an HTML page.
- The `<head>` element contains meta information about the HTML page.
- The `<title>` element specifies a title for the HTML page (which is shown in the browser's title bar or in the page's tab)
- The `<body>` element defines the document's bodyIt
contains headings, paragraphs, images, hyperlinks,



Editors

- Notepad
- Notepad++
- VSCode
- EditPlus

<https://code.visualstudio.com/Download>