Introduction to HTML

HTML is an acronym which stands for **Hyper Text Markup Language** which is used for creating web pages and web applications.

Hyper Text:

- Hyper Text simply means "Text within Text." A text has a link within it, is a hypertext.
- Whenever you click on a link which brings you to a new webpage, you have clicked on a hypertext.
- Hyper Text is a way to link two or more web pages (HTML documents) with each other.

Markup language:

- A markup language is a computer language that is used to apply layout and formatting conventions to a text document.
- Markup language makes text more interactive and dynamic.
- It can turn text into images, tables, links, etc.

Web Page:

- A web page is a document which is commonly written in HTML and translated by a web browser.
- A web page can be identified by entering an URL. A Web page can be of the static or dynamic type.
- With the help of HTML only, we can create static web pages.

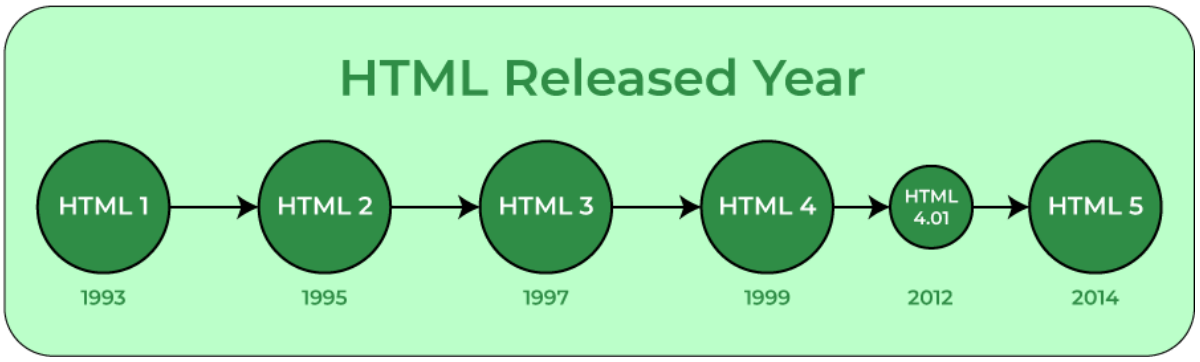
Hence, HTML is a markup language which is used for creating attractive web pages with the help of styling, and which looks in a nice format on a web browser. An HTML document is made of many HTML tags and each HTML tag contains different content.

❖ History of HTML

In the late 1980's , a physicist, Tim Berners-Lee who was a contractor at CERN, proposed a system for CERN researchers. In 1989, he wrote a memo proposing an internet based hypertext system.

Tim Berners-Lee is known as the father of HTML. The first available description of HTML was a document called "HTML Tags" proposed by Tim in late 1991. The latest version of HTML is HTML5, which we will learn later in this tutorial.

❖ HTML Versions



❖ Characteristics of HTML:

- **Easy to understand:** It is the most straightforward language you can say, very easy to grasp this language and easy to develop.
- **Flexibility:** This language is so much flexible that you can create whatever you want, a flexible way to design web pages along with the text.
- **Linkable:** You can make linkable text like users can connect from one page to another page or website through these characteristics.
- **Limitless features:** You can add videos, GIFs, pictures, or sound anything you want that will make the website more attractive and understandable.
- **Support:** You can use this language to display the documents on any platform like Windows, Linux, or Mac.
- **Not a Programming Language:** HTML is not a programming language as it is only concerned with presenting the information on the web. It is not used to program any logic but to give structure and semantically meaning to our website. Though we can link **JavaScript** code to it which is a programming language.

- **Language Support:** HTML can support various other languages like **JavaScript**, **Ruby**, **PHP**, **Perl**, and many more. You can also able to run embed python during the runtime.

❖ Advantages of HTML:

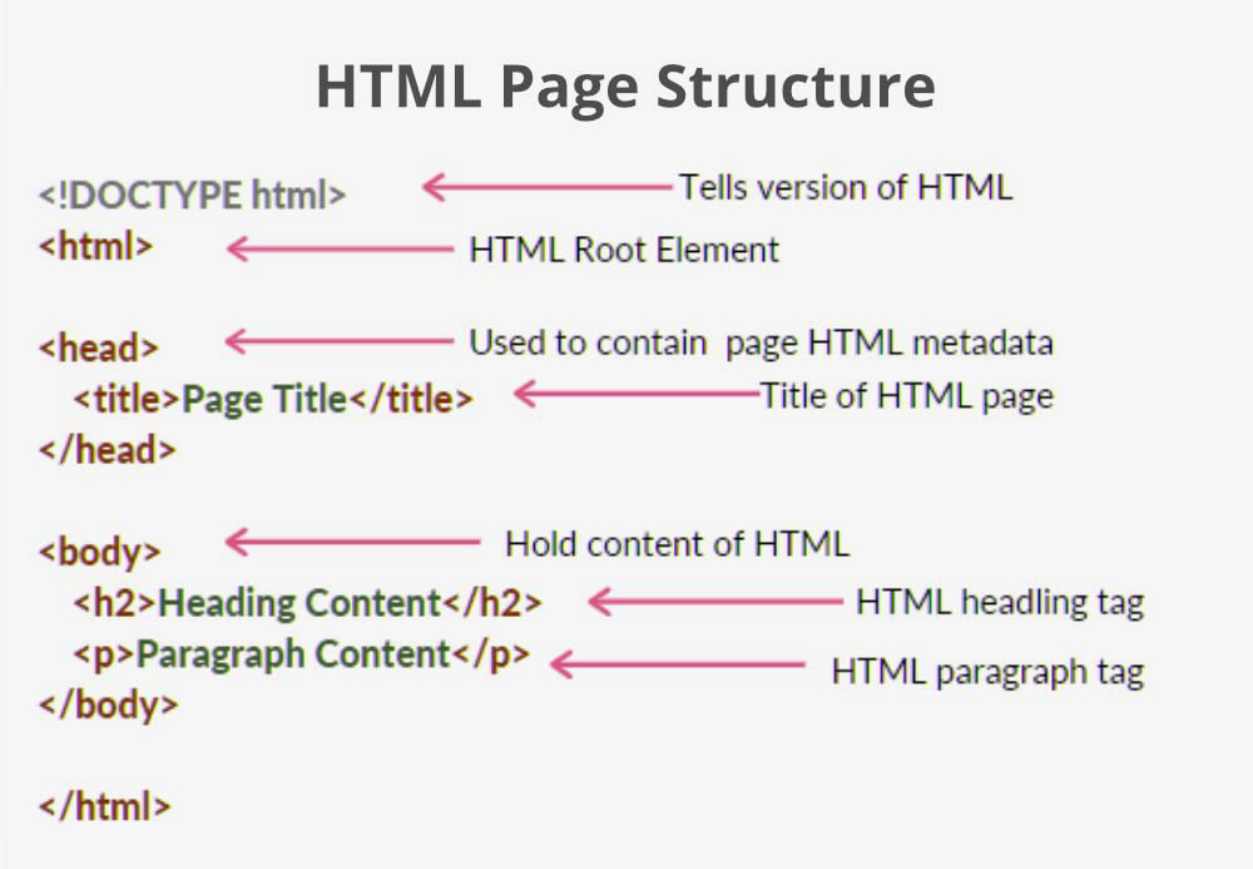
1) HTML is easy to learn, easy to apply and it's totally free you will just need a text editor and a browser.
2) HTML is supported by all the browsers and it is the most friendly search engine.
3) HTML can easily integrate with other languages and is easy to develop.
4) It is the basic of all programming languages and the lightest language ever.
5) In HTML, the display changes frequently depending on the window size or the device size making it comfortable to read by the user.

❖ Disadvantages of HTML:

1) HTML can be used to create only static Web-page, it can not create dynamic web-page.
2) There is a lack of security in HTML.
3) Creating a simple Web-page required so many tags.
4) HTML language is not centralised i.e. all the web pages that are connected, you have to design them separately else need to use CSS.
5) HTML becomes complex when you try to create a huge website.

❖ HTML Basic Structure of Web Page

The basic structure of an HTML page is laid out below. It contains the essential building-block elements (i.e. doctype declaration, HTML, head, title, and body elements) upon which all web pages are created.



❖ Description of HTML Example

- **<!DOCTYPE>:** It defines the document type or it instruct the browser about the version of HTML.
- **<html >** :This tag informs the browser that it is an HTML document. Text between html tag describes the web document. It is a container for all other elements of HTML except <!DOCTYPE>
- **<head>:** It should be the first element inside the <html> element, which contains the metadata(information about the document). It must be closed before the body tag opens.
- **<title>:** As its name suggested, it is used to add title of that HTML page which appears at the top of the browser window. It must be placed inside the head tag and should close immediately. (Optional)
- **<body>** : Text between body tag describes the body content of the page that is visible to the end user. This tag contains the main content of the HTML document.

- **<h1>** : Text between <h1> tag describes the first level heading of the webpage.
- **<p>** : Text between <p> tag describes the paragraph of the webpage.