**HTML**

(HYPERTEXT MARKUP LANGUAGE)

**INTRODUCTION TO HTML**:

* HTML, or HyperText Markup Language is the standard markup language used to create web pages. It is a combination of Hypertext and Markup language. The Hypertext defines the link between web pages, and Markup defines the text document within tags to structure the web pages. This language annotates text so that machines can understand and manipulate it accordingly. HTML uses a system of elements and tags, which indicate how to browser should display and organize the content on the page. HTML consists of a series of elements . HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.

**TAGS :** Tags are nothing but a keyword which is enclosed between < and > symbols.

* These are used to interact with browsers.
* **TYPES OF TAGS**
* ***1.Container tags*:** A container tag in HTML is an element that groups and contains other elements in a web page.
* **Syntax:** <tagname attribute> content </tagname>
* ***2.Self-closing tags*:** self-closing tags automatically close themselves and do not require an explicit closing element.
* **Syntax:** <tagname attribute>

**Basic HTML Structure :**

The basic structure of an HTML document contains the few mandatory tags, that must be used to create a webpage.

**<!DOCTYPE html>**

**<html>**

**<head>**

**<title>page</title>**

**</head>**

**<body>**

**<h1>heading content</h1>**

**<p>paragraph content </p>**

**</body>**

**</html>**

**Elements of HTML Basic Structure :**

The following are the basic tags that define the basic HTML structure –

**1.<!DOCtype>:** This element defines the document type as HTML. This element must be written before writing any HTML document.

**2.<html></html>**: The <html> tag is the parent tag for all HTML elements. Everything related to create an HTML document must be written inside the tag. CSS, JavaScript, and jQuery must also be written inside this tag.

**3.<head></head>:** The <head> tag is a container tag for all those elements that are not directly displayed on the webpage but required for the page functionalities. It contains meta tags (which are used for SEO purposes), title tag, script tags, etc.

**4.<title></title> :** The <title> tag is used to define the title of the webpage that you can see in the browser's tab, bookmarks list, and search engine results. This tag is also very important for SEO purposes to help search engine to understand the content of the webpage**.**

**5. <body></body> :** The <body> tag is the container tag for all those elements, which represents the main content of a webpage that displays on the browser.

**6. <h1></h1> :** The <h1> tag is one of the heading tags. It is the most important heading tag, which defines the main title or headline of the webpage. Any text written inside <h1> and </h1> is a top-level heading of the content.

**7. <p></p>:** The <p> tag defines a paragraph, anything written inside <p> and </p> displays as a paragraph on the webpage. Use multiple <p> tags to display text in different paragraphs.

**HTML HEADINGS TYPES :**

HTML headings are used to define the content hierarchy and structure of a webpage. They range from <h1> to <h6>, with <h1> being the most important heading and <h6> the least important. Proper use of headings helps improve readability and accessibility. Every heading tag is a block level element.

**Element :** Element is combination of tag , attribute and content given inside the tag.

Ex : < a herf= “#”> Home </a>

**Types of elements :**

1.block elements.

2.inline-block elements.

3.inline elements.

**1.Block elements** :

Block-level elements are fundamental to organizing and structuring content on a webpage. They allow for the creation of sections, paragraphs, lists, forms, and other major components, all of which contribute to creating a meaningful, accessible, and well designed webpage.

Ex: h1 – h6 , p , div , semantic elements.

**2.Inline-block elements :**

Do not break the line. Supports width, height, margin, padding, and borders. Useful for creating flexible, horizontally aligned layouts while maintaining the ability to set dimensions.

Ex : image, iframe tag, button tag.

**3.Inline elements :**

Inline elements take up only as much space as needed, making them essential for precise content formatting without affecting the overall layout structure.

Ex : a, span, formatting tags.