

HTML-Basics-1 lecture notes

What is HTML?

HTML stands for **Hyper Text Markup Language** is the most basic building block of the web. It defines the meaning and structure of the web content.

| HyperText

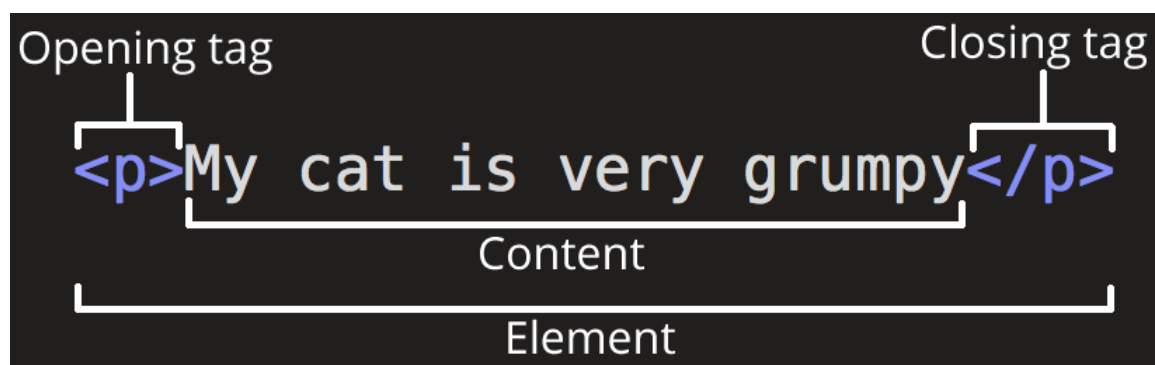
refers to links that connect web pages to one another, either within a single website or between websites.

| Markup

HTML uses “markup” to annotate text, images, and other content for display in the web browser. HTML markup includes special “elements” such as `<head>`, `<title>`, `<body>`, `<header>`, `<footer>`, `<article>`, `<section>`, `<p>`, `<div>`, ``, ``, ``, ``, `<image>`, `<aside>`, `<audio>` and many others.

Anatomy of an HTML element

Let's explore this paragraph element a bit further:



The main parts of our element are as follows:

1. **The opening tag:** This consists of the name of the element (in this case, p), wrapped in an opening angle bracket and closing angle bracket.
2. **The closing tag:** This is the same as the opening tag, except that it includes a forward slash before the element name.
3. **The content:** This is the content of the element.
4. **The element:** The opening tag, the closing tag, and the content together comprise the element.

Anatomy of an HTML document

```
<!DOCTYPE html>
<html lang="en-IN">
  <head>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width" />
    <title>My test page</title>
  </head>
  <body>

  </body>
</html>
```

1. **<!DOCTYPE html>:** It defines that this document is an HTML5 document.
2. **<html>:** This element wraps all the content on the entire page and is sometimes known as the root element.
3. **<head>:** This element acts as a container for all the stuff you want to include on the HTML page but isn't the content you are showing to your page viewers.
4. **<meta charset="utf-8">:** This element sets the character set should use UTF-8 in your HTML page. Which includes most characters from the vast majority of written languages.
5. **<meta name="viewport" content="width=device-width">:** This viewport element ensures the page renders at the width of the viewport, preventing mobile browsers from rendering pages wider than the viewport and then shrinking them down.
6. **<title>:** This sets the title of your page, which is the title that appears in the browser tab the page is loaded in. It is also used to describe the page when you

bookmark/favorite it.

7. **<body>**: This contains all the content that you want to show to web users when they visit your page.

Block versus inline element

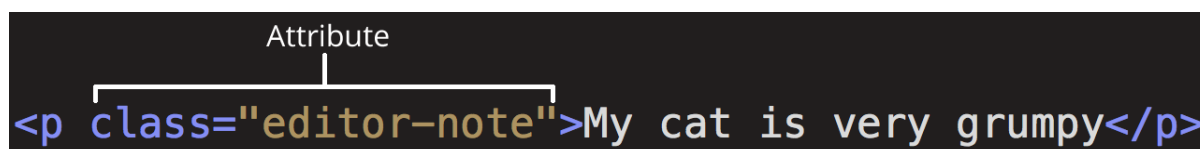
Inline Elements	Block Elements
Inline elements occupy only sufficient width required.	Block elements occupy the full width irrespective of their sufficiency.
Inline elements don't start in a new line.	Block elements always start in a new line.
Inline elements allow other inline elements to sit behind.	Block elements don't allow other elements to sit behind.
Inline elements don't have top and bottom margins.	Block elements have top and bottom margins.
Ex: <a>, , <script>, <input>, , , , <label>	Ex: <h1>-<h6>, <div>, <hr>, , , , <p>, <table>, <header>, <nav>, <footer>, <main>, <section>, <aside>, <article>

Void elements

Not all elements follow the pattern of an opening tag, content, and closing tag. Some elements consist of a single tag which is typically used to insert/embed something in the document. Such elements are called void elements. For example, the element embeds an image file onto a page.

Attributes in HTML

HTML provides additional information about HTML elements that won't appear in the content.



HTML self-closing tag

A self-closing tag in HTML is a type of HTML tags that need not be closed manually by its closing tag, which means there is no separate closing tag for it as </tag>.

For example, , <input/>,
, <hr/>

HTML text formatting

Formatting elements were designed to display special types of text:

1. ****: For bold text
2. ****: Use for important text
3. **<i>**: Use for italic text
4. ****: Use for emphasized text
5. **<mark>**: Use for marked text
6. **<small>**: Use for smaller text
7. ****: Use for deleted text
8. **<ins>**: Use for Inserted text
9. **<sub>**: Use for subscript text
10. **<sup>**: Use for superscript text