

► HTML

- stands for Hyper Text Markup Language
- describes the structure of a Web page
- consists of a series of elements that tells the browser how to display the content.

An HTML element is defined by a start tag, some content, and an end tag:

`<tagname> Content </tagname>`

► HTML Tags:

Here are some basic HTML tags:

- `<html>`: The root element that contains all other HTML elements.
- `<head>`: Contains meta-information about the HTML document, such as its title and links to stylesheets.
- `<body>`: Contains the content of the HTML document that is displayed in the browser.
- `<div>`: A container element used to group together other elements for styling or layout purposes.
- `<h1>`: Defines a top-level heading, typically used for the main title of the page.
- `<p>`: Defines a paragraph of text
- ``: Defines text with strong importance, typically in bold.
- `
`: Inserts a line break.
- ``: Defines an unordered list
- ``: Defines a list item within an ordered or unordered list
- `<a>`: Defines a hyperlink, used to link to other pages or resources.
- `<footer>`: Defines a footer for a document
- `<header>`: Defines a header for a document
- ``: Inserts an image in our HTML page.

► HTML Attributes

- All HTML elements can have attributes
- HTML attributes provides additional information about elements.
- Attributes are always specified in the start tag
- Attributes ^{usually} always come in name/value pairs like: name="value"

► HTML Style

The HTML style attribute is used to add styles to an element, such as colour, font size, and more. The HTML style attribute has the following syntax:

`<tagname style = "property: value">`.

The property is a CSS property. The value is a CSS value.

► Block-Level Elements

- A block-level element always starts from a new line, and the browser automatically adds some space before and after the element
- A block-level element always takes up full width available.

► Inline Element

- An inline element does not start on a new line.
- An inline element only takes up as much width as necessary

► ~~The~~ HTML class Attribute

The HTML class attribute is used to specify a class for an HTML element. Multiple HTML elements can share the same class.

► HTML id Attribute

The HTML id attribute is used to specify a unique id for an HTML element. You cannot have more than one element with the same id in an HTML document.

► CSS

Cascading Style Sheets is a style sheet language used to control the presentation of HTML elements. It allows developers to define the looks and feels of the web page, including layouts, colors, fonts and animations.

► Types of CSS

→ Inline CSS:

Applied directly within an HTML element using the style attribute. Example: `<h1 style="color: red;"> Hello </h1>`

→ Internal CSS:

Defined within a `<style>` tag in the `<head>` section of an HTML document. Example `<style>`

```
h1 { color: blue;
      background-color: pink }
</style>
```

→ External CSS:

Defined in a separate file with a .css extension and linked using the `<link>` tag. Example: `<link rel="stylesheet" href="style.css">`

► CSS Syntax

```
selector {
  property: value;
}
```

Example: `p { font-size: 16px; color: green; }`

► Selectors

→ Universal Selector: `*` (Applies to all elements)

→ Type selector: `h1, p, div`

→ Class Selector : .class-name (Prefixed with .)

→ ID selector : #id-name (Prefixed with #)

→ Pseudo-class : :hover, :first-child

Note: Selectors are used to find or select the HTML elements we want to style.

► CSS Content vs Padding vs Border vs Margin

Property	Location	Function
Content	Inside the element	Displays the element's core data
Padding	Between content and border	Adds space within the element
Border	Around the padding	Adds a decorative or structural outline
Margin	Outside the border	Creates spacing between elements.

