

# HTML & CSS Overview

## HTML

### What is HTML?

HTML stands for **HyperText Markup Language**. It is a standard markup language used to give structure to web pages and websites.

To create an HTML page, create a file with a .html extension.

HTML is case-insensitive, meaning anything you write will display in your browser.

### What are Tags?

In HTML, tags are the building blocks used to create and structure web content.

Tags are enclosed in angle brackets (<>) and typically come in pairs: an opening tag and a closing tag.

### What are Attributes?

Attributes provide additional information about an element. They are written inside the opening tag of an HTML element. For example:

```
<meta charset="UTF-8">
```

Here, "charset" is an attribute.

### HTML Template

To get an HTML template in VS Code, press **Shift + !**.

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Intro</title>
  </head>
  <body>
    content
  </body>
</html>
```

### Charset Attribute

The charset="UTF-8" attribute in HTML specifies the character encoding used for the webpage.

## DOCTYPE

The DOCTYPE declaration defines the version of HTML you're using. The latest version is HTML5, and it is a declaration statement.

Even if you don't declare it, HTML will work, but some tags may not display correctly.

## Do You Need to Close All HTML Tags?

No, it is not necessary to close all tags. Some tags require closing, such as `<h1></h1>`, `<div></div>`, and `<p></p>`.

However, there are self-closing tags like `<br>` (break), `<hr>` (horizontal line), `<img>`, `<input>`, and `<link>` that do not require closing.

## Difference Between Inline Block and Block-Level Elements

Block-level elements start on a new line and take up the full width of the page. Examples include: `<h1>`–`<h6>`, `<p>`, `<div>`.

Inline elements do not start on a new line and take up as much width as necessary. Examples include: `<span>`, `<input>`, `<img>`.

## Comments in HTML ctrl + ?

Comments are used to add notes or explanations within the code. They are not displayed on the webpage and are visible only in the source code. There are two types of comments:

```
<!-- single line -->
```

```
<!-- multi-line  
comment -->
```

---

## CSS

### What is CSS?

Cascading Style Sheets (CSS) is a style sheet language used to control the presentation of web pages that contain HTML. CSS makes websites more attractive and visually appealing.

There are three ways to define a CSS stylesheet:

1. **Internal CSS** (using the `<style>` tag inside the `<head>` section)
2. **Inline CSS** (using the `style` attribute directly in an HTML tag)
3. **External CSS** (creating a separate `.css` file and linking it in the HTML with the `<link>` tag)

### Internal CSS Example:

```
<style>  
h1 {  
    background-color: aqua;
```

```
        text-align: center;
        font-size: 20px;
    }
</style>
```

## Inline CSS Example:

```
<h2 style="background-color: orangered">Hello Day 1 Again</h2>
```

## External CSS Example:

To use an external CSS file, create a file named `day-one.css` and link it to your HTML file using the `<link>` tag:

```
<link rel="stylesheet" href="day-one.css" />
```

## CSS Syntax

The basic syntax to write CSS is:

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

For example:

```
h1 {
    background-color: aqua;
    text-align: center;
    font-size: 20px;
}
```

- Css box model

