**Block Elements:**

Always start on a new line and take up the full width

**Common Block Elements**

* <div>
* <p>
* <h1> to <h6>
* <ul>,<ol>,<li>
* <table>
* <from>

**Example**

**<div style="background: lightblue; width: 300px; padding: 10px;">**

**I am a block element.**

**</div>**

**<p style="background: lightgreen;">I take the full width.</p>**

**Inline Elements**

Do not start on a new line only take up as much width as needed.  
 Cannot have **width & height** applied.

**Common Inline Elements**

* <span>
* <a>
* <img>
* <b>
* <strong>
* <label>

**Example**

**<p>This is <span style="color: red;">inline text</span> inside a paragraph.</p> <a href="#" style="background: yellow;">I am an inline link.</a>**

**Inline Frame:**

The <iframe> (short for **inline frame**) is used to **embed another webpage, video, map, or document inside a web page**.

**Attribute**

1. **src**
2. **width**
3. **height**
4. **frameborder**

**url** https://audio.com/sacrebleu\_club/audio/soulflow-spiritual-beats

**video url** https://www.w3schools.com/html/mov\_bbb.mp4

**VS Code Extentions**

1. **Auto tag rename**
2. **Image preview**
3. **jellyFish Theme**

**What is Css?**

CSS is the language we use to style a Web page.

CSS stands for Cascading Style Sheets

CSS describes how HTML elements are to be displayed on screen, paper, or in other media

Styling HTML Elements – CSS controls colors, fonts, spacing, borders, and more.

Layout Control – It helps position elements on a page using techniques like Flexbox and Grid.

Efficiency – A single CSS file can style multiple web pages.

**What are CSS Selectors?**

CSS selectors are patterns or rules that define which HTML elements should be styled. They allow you to apply styles to specific elements in an HTML document based on their tag names, classes, IDs, attributes, and more.

Selectors help you target elements in your HTML so you can change their appearance using CSS.

**Type Css Selectors:**

**1) Universal Selector (\*) – Selects all elements.**

**2) Class Selector (.) – Targets elements with a specific class.**

**3) ID Selector (#) – Targets a single element with a specific ID.**

**4) Element Selector (Tag Name) – Targets specific HTML tags (e.g., p, h1, div).**

**5) Attribute Selector ([attribute]) – Selects elements with a specific attribute.**

**6) Pseudo-Class Selectors**

:hover – When Mouse Hovers Over an Element

:focus – Applies styles when an element (like input) is focused.

:first-child – Selects the first child of a parent.

:last-child – Selects the last child of a parent.

**7) Pseudo-Element Selectors**

Pseudo-elements allow you to style specific parts of an element, such as adding content before/after an element or styling only the first letter/line.

::before – Inserts Content Before an Element

p::before {

content: "🔥 ";

color: red;

}

::after – Inserts Content After an Element

Inserts content after the selected element.

p::after {

content: " ✅";

color: green;

}

::first-letter – Styles the First Letter

Changes the style of the first letter in a block of text.

p::first-letter {

font-size: 30px;

color: blue;

font-weight: bold;

}

::first-line – Styles the First Line

do by your self

**CSS Comments:**

Comments are used to explain the code, and may help when you edit the source code at a later date.

Comments are ignored by browsers.

/\* This is a single-line comment \*/

**CSS Properties**

|  |  |  |
| --- | --- | --- |
| **Property** | **Description** | **Example** |
| **color** | Text color | color: red; |
| **font-size** | Font size | font-size: 20px; |
| **font-family** | Font type | font-family: Arial, sans-serif; |
| **font-weight** | Text thickness | font-weight: bold; |
| **text-align** | Text alignment | text-align: center; |
| **text-decoration** | Underline, overline, etc. | text-decoration: underline; |
| **line-height** | Space between lines | line-height: 1.5; |

**CSS Units**

CSS units define the measurement of different properties like width, height, margin, padding, font-size, etc.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | | **Unit** | **Name** | **Example** | **Description** | | **em** | Relative to parent font size | font-size: 2em; | 2× parent font size. | | **rem** | Relative to root (html) font size | font-size: 1.5rem; | 1.5× root font size. | | **%** | Percentage | font-size: 120%; | 120% of parent font size. | |

**CSS Color:**

CSS color is used to define the color of text, backgrounds, borders, and other elements. There are multiple ways to specify colors in CSS.

**1. Named Colors**

CSS has **147 predefined color names**, like red, blue, green, yellow, etc.

**Example:**

**h1 {**

**color: red;**

**}**

**2. Hexadecimal (#RRGGBB)**

A **hex color code** consists of six characters (0-9, A-F), representing **red**, **green**, and **blue** values.

|  |  |
| --- | --- |
| **Hex Code** | **Color** |
| |  | | --- | | **#FF0000** |  |  | | --- | |  | | Red |
| **#00FF00** | Green |
| **#0000FF** | Blue |

**CSS Fonts:**

CSS provides various properties to control the **appearance, size, weight, and style** of text.

## **1. Font Family (**font-family**)**

Defines the typeface of text. You can use:

* **Generic fonts**: serif, sans-serif, monospace, cursive, fantasy
* **Specific fonts**: "Arial", "Times New Roman", "Courier New"
* Always provide a **fallback font** in case the primary font is unavailable.

### ****Example:****

p {

font-family: "Arial", sans-serif;

}

## **2. Font Size (**font-size**)**

Controls the size of text. Values can be in:

px, cm, mm, in, pt, pc

%, em, rem, vw, vh

### ****Example:****

h1 {

font-size: 24px;

}

p {

font-size: 1.2em; /\* 1.2 times the parent font size \*/

}

## **3. Font Weight (**font-weight**)**

Controls the **thickness** of text. Can use:

* **Numeric values**: 100 (thin) to 900 (bold)
* **Keywords**: normal, bold, bolder, lighter

### ****Example:****

strong {

font-weight: bold;

}

h2 {

font-weight: 600; /\* Semi-bold \*/

}

## **4. Font Style (**font-style**)**

Defines whether text is **normal, italic, or oblique**.

### ****Example:****

p {

font-style: italic;

}

## **6. Line Height (**line-height**)**

Defines **vertical spacing** between lines of text.

### ****Example:****

p {

line-height: 1.5;

}

## **7. Letter Spacing (**letter-spacing**)**

Adjusts the **spacing between characters**.

### ****Example:****

h1 {

letter-spacing: 2px;

}

## **8. Word Spacing (**word-spacing**)**

Adjusts the **spacing between words**.

### ****Example:****

css

CopyEdit

p {

word-spacing: 5px;

}

## **9. Text Transform (**text-transform**)**

Changes the **case of text**.

| **Value** | **Effect** |
| --- | --- |
| uppercase | Converts text to uppercase |
| lowercase | Converts text to lowercase |
| capitalize | Capitalizes the first letter of each word |

### ****Example:****

p {

text-transform: uppercase;

}

## **11. Google Fonts (Import Custom Fonts)**

You can use **Google Fonts** for unique styles.

### ****Steps:****

1. Visit [Google Fonts](https://fonts.google.com/).
2. Choose a font (e.g., "Roboto").
3. Import it using @import or <link>.

### ****Example (Using @import in CSS):****

@import url('https://fonts.googleapis.com/css2?family=Roboto:wght@400;700&display=swap');

body {

font-family: 'Roboto', sans-serif;

}

### ****Example (Using**** <link> ****in HTML):****

<head>

<link href="https://fonts.googleapis.com/css2?family=Roboto:wght@400;700&display=swap" rel="stylesheet">

</head>

### ****Choosing the Right Font****

| **Use Case** | **Recommended Fonts** |
| --- | --- |
| Professional Websites | "Arial", "Helvetica", "Georgia" |
| Blogs & Articles | "Times New Roman", "Merriweather", "Lora" |
| Coding Interfaces | "Courier New", "Consolas", "Monaco" |
| Modern & Minimalist | "Roboto", "Montserrat", "Poppins" |

**CSS Positioning:**

CSS **positioning** allows you to control where elements appear on a webpage. The position property defines how an element is placed in relation to other elements and the page itself.

**1. Types of Positioning**

| **Position Type** | **Description** |
| --- | --- |

|  |  |
| --- | --- |
| **static** | **:** Default positioning (normal document flow). |
|  |  |

|  |  |
| --- | --- |
| **relative** | **Positions:** an element **relative to its normal position**. |
|  |  |

|  |  |
| --- | --- |
| **absolute** | **Positions: an element relative to its nearest positioned ancestor.** |
|  |  |

|  |  |
| --- | --- |
|  |  |

**Sticky**: The Element sticks to a position when scrolling

**Css Borders:**

Borders in CSS allow you to add **lines around elements** to enhance design and layout. You can customize border **style, width, color, and even create rounded corners**

**CSS supports different border styles**:

border-style: solid; /\* Standard line \*/

border-style: dashed; /\* Dashes \*/

border-style: dotted; /\* Dots \*/

border-style: double; /\* Two solid lines \*/

border-style: groove; /\* 3D effect \*/

border-style: inset; /\* Inside shadow \*/

border-style: outset; /\* Outside shadow \*/