

■ CSS Selectors

A **CSS Selector** is used to target (select) specific HTML elements so we can apply styles to them.

■ 1. Universal Selector (*)

Selects **all elements** on the page.

```
* { margin: 0; padding: 0; }
```

■ 2. Type Selector (Element Selector)

Selects elements by their HTML tag.

```
p { color: blue; } h1 { text-align: center; }
```

■ 3. Class Selector (.classname)

Selects elements with a **class attribute**.

```
.title { font-size: 24px; color: red; }
```

■ 4. ID Selector (#id)

Selects an element with a **unique ID**.

```
#main { background-color: yellow; }
```

■ 5. Grouping Selector (,)

Apply the same style to **multiple selectors**.

```
h1, h2, p { font-family: Arial, sans-serif; }
```

■ 6. Descendant Selector (A B)

Selects elements inside another element.

```
div p { color: green; }
```

■ 7. Child Selector (A > B)

Selects **direct children only**.

```
div > p { color: red; }
```

■ 8. Adjacent Sibling Selector (A + B)

Selects the **immediate next sibling**.

```
h1 + p { color: purple; }
```

■ 9. General Sibling Selector (A ~ B)

Selects all siblings after a given element.

```
h1 ~ p { font-style: italic; }
```

■ 10. Attribute Selectors

Select elements based on **attributes**.

```
input[type="text"] { border: 1px solid black; } a[target="_blank"] {  
color: red; }
```

■ 11. Pseudo-classes

Target elements in a **specific state**.

```
a:hover { color: blue; } input:focus { border: 2px solid green; }  
li:first-child { font-weight: bold; }
```

■ 12. Pseudo-elements

Style **specific parts** of an element.

```
p::first-line { font-weight: bold; } p::first-letter { font-size: 30px; }  
div::before { content: "■ "; } div::after { content: " ■ "; }
```

■ Summary Table of CSS Selectors

Selector	Example	Meaning
*	* { }	All elements
element	p { }	All <p> tags
.class	.box { }	Elements with class 'box'
#id	#header { }	Element with ID 'header'
A, B	h1, p { }	Both <h1> and <p>
A B	div p { }	<p> inside <div>
A > B	div > p { }	Direct <p> child of <div>
A + B	h1 + p { }	<p> immediately after <h1>
A ~ B	h1 ~ p { }	All <p> after <h1>
[attr]	[title] { }	Elements with attribute 'title'
[attr=value]	input[type=text]	Elements with given attribute value
:hover	a:hover { }	When mouse is over link
:first-child	li:first-child	First
::before	p::before	Insert before element content
::after	p::after	Insert after element content