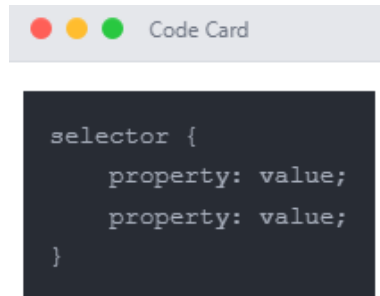# CSS Basics

CSS Rule Set: The Basics

CSS is written as a **rule set**, which consists of:

- **Selector** → the HTML element(s) you want to style.

- **Declaration Block { }** → contains one or more style rules.

Basic Syntax:


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

Example:

```
h1 {
   color: blue;      /* Property: value */
   font-size: 24px;
}


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

- h1 → targets all <h1> elements, making them **blue** and **24px**.

- p → targets all <p> elements, making them **green** and **16px**.

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CSS Selectors

Selectors define **which HTML elements** will be styled.

1. Universal Selector

Applies styles to **all elements**.

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

2. Type Selector

Targets a specific HTML tag.

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

3. Class Selector

Targets elements with a specific class attribute.

```css
.box {
   border: 1px solid black;
   padding: 10px;
}
```

Usage in HTML:

```html
<div class="box">Content inside a box</div>
```

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4. ID Selector

Targets a single element with a unique id.

```css
#header {
   background-color: lightgray;
}
```

Usage in HTML:

```html
<div id="header">This is the header</div>
```

Declaration Block

Each declaration = **property + value**, separated by a colon : and ending with a semicolon ;.

Common Properties:

- **color** → text color
- **background-color** → background color
- **font-size** → size of text
- **margin** → space outside element
- **padding** → space inside element

Example:

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

All <p> elements will be **blue** and **center-aligned**.

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Grouping and Nesting Selectors

Grouping

Apply the same style to multiple elements.

```
h1, h2, h3 {
    color: darkblue;
}
```

Nesting (Descendant Selector)

Target elements inside another element.

```
ul li {
    list-style-type: square;
}
```

Styles all <li> inside a <ul>.

Pseudo-classes and Pseudo-elements

Pseudo-classes

Style elements based on **state** (hover, active, visited, etc.).

```
a:hover {
    color: green;
}
```

Changes link color when hovered.

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Pseudo-elements

Style **specific parts** of an element.

p::first-line {

   font-weight: bold;

}

Makes the first line of every paragraph bold.

Key Takeaways

- A **rule set** = selector + declaration block.

- **Selectors** determine *what* to style.

- **Declarations** define *how* to style (property + value).

- You can **group** selectors or **nest** them for precision.

- **Pseudo-classes** = element states; **Pseudo-elements** = parts of elements.