



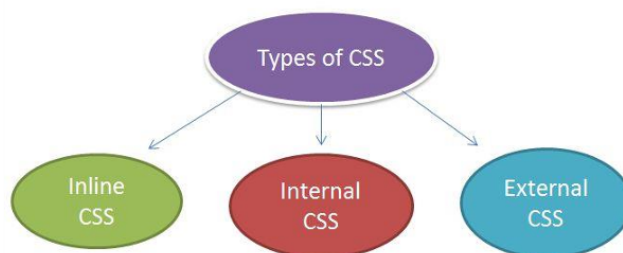
## 1. What is CSS

- CSS stands for Cascading Style Sheets
- CSS is the language we use to style an HTML document.
- CSS describes how HTML elements should be displayed

## 2 . Syntax of CSS

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

## 3 . What are the way to apply CSS / Different types of CSS



### a. **Inline CSS :**

Uses style attribute to write

Example : `<p style="color: red;">This is a red paragraph.</p>`

### b . **Internal CSS:**

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

Eg : `<style>`

```
p {  
    color: green;  
}  
</style>
```

#### c . **External CSS:**

Written in a separate .css file linked to the HTML document.

Eg : <link rel="stylesheet" href="styles.css">

## 4 . Different CSS Selectors

### ■ **Universal Selector ( \* ):**

Targets all elements.

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

### ■ **Element Selector:**

Elements specified by their tag name.

```
Eg : h1 {  
    font-size: 24px;  
}
```

### ■ **Class Selector ( . ) :**

Targets elements with a specific class attribute.

```
Eg : .class-name {  
    color: blue;  
}
```

### ■ **ID Selector ( # ) :**

Targets an element with a specific id attribute.

```
Eg : #id-name {  
  
    font-weight: bold;  
  
}
```

#### ■ **Attribute Selector:**

Targets elements with specific attributes.

```
Eg : [type="text"] {  
  
    border: 1px solid #ccc;  
  
}
```

#### ■ **Pseudo-classes:**

Target elements based on their state.

```
Eg : a:hover {  
  
    color: red;  
  
}
```

#### ■ **Pseudo-elements:**

Style specific parts of an element.

```
Eg : p::first-line {  
  
    font-weight: bold;  
  
}
```

## 5 . CSS Properties

### Text Properties:

- **color:** Text color.
- **font-size:** Size of the text.
- **font-family:** Font type.
- **text-align:** Alignment of text.
- **text-decoration:** Decoration of text (e.g., underline).
- **line-height:** Height of a line of text.

## Box Model:

- **Content:** The actual content of the box.
- **Padding:** Space between the content and the border.
- **Border:** The border surrounding the padding.
- **Margin:** Space outside the border.

## Background Properties:

- **background-color:** Background color.
- **background-image:** Background image.
- **background-repeat:** Repeat behavior of the background image.
- **background-size:** Size of the background image.

## Layout Properties:

- **display:** Defines how an element is displayed (e.g., block, inline, flex).
- **position:** Specifies the positioning method (e.g., static, relative, absolute, fixed).
- **top, right, bottom, left:** Offset positioning.
- **float:** Allows elements to float to the left or right.
- **clear:** Controls the behavior of elements after floating elements.

## 6 . Flexbox

Flexbox is a layout model designed to help you build flexible and responsive layouts.

### Container Properties:

- **display: flex;** Defines a flex container.
- **flex-direction:** Direction of the flex items (row, column).
- **justify-content:** Alignment along the main axis (e.g., center, space-between).
- **align-items:** Alignment along the cross axis (e.g., center, stretch).
- **flex-wrap:** Specifies if items should wrap (wrap, nowrap).

### Item Properties:

- **flex-grow:** Defines the ability for a flex item to grow relative to the rest.
- **flex-shrink:** Defines the ability for a flex item to shrink.
- **flex-basis:** Defines the initial size of a flex item.
- **align-self:** Allows the default alignment (or the one specified by align-items) to be overridden.

## 7 . Responsive Design

Responsive design ensures that web pages look good on all devices by using fluid grids, flexible images, and media queries.

## Media Queries:

Used to apply styles based on the device's characteristics.

Example :

```
@media (max-width: 600px) {  
  
  .container {  
  
    flex-direction: column;  
  
  }  
  
}
```