

CSS stands for Cascading Style Sheets.

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

The name Cascading comes from the specified priority scheme to determine which style rule applies if more than one rule matches a particular element. This cascading priority scheme is predictable.

The Cascade is an algorithm that defines how to combine property values originating from different sources. It lies at the core of CSS, as emphasized by the name: Cascading Style Sheets.

* Here element will execute by where the style will appear, means the most recent one will be chosen by going down each file and execute.

Types of CSS: There are 3 ways to write CSS in our document.

① Inline: Inline CSS contains the CSS property in the body section attached with element is known as inline CSS. This kind of style is specified within an HTML tag using the style attribute.

Ex:

```
<P style="color: blue; font-size: 30px; font-style: italic;"> H1 </P>
```


Internal or Embedded CSS: This can be used when a single HTML Document must be styled uniquely. The CSS rule set should be within the HTML file in the head section

i.e. the CSS is embedded within the HTML file.

```
ex:- <style>
      .main {
        text-align: center;
      }
      H1 {
        color: red;
      }
    </style>
```

External CSS: External CSS contains separate CSS file which contains only style property with the help of tag attributes.

(For example class, id, heading... etc).

```
ex:- body {
      background-color: blue;
    }
    .main { text-align: center;
    }
```


CSS Syntax:-

A CSS rule consists of a selector and declaration block.

Selector Declaration

↓

h1 { Color: blue; font-size: 12px; }

↑ ↑

property value

Here,

The Selector points to the HTML element you want to style.

The declaration block contains one or more declaration ~~of~~ separated by semiColons.

Each declaration includes a CSS property name and a value, separated by a colon.

Multiple CSS declaration are separated with semicolons, and declaration blocks are surrounded by curly braces.

ex¹

P. 5

color: red;

text-align: center;

7.

CSS Selectors:

A CSS selector selects the HTML element(s) you want to style.

We can divide CSS selector into five categories:

- Simple Selector (select elements based on name, id, class)
- Combinator Selector (select elements based on a specific relationship between them).
- Pseudo-Class Selector (select elements based on a certain state)
- Pseudo-elements Selector (select and style a part of an element)
- Attribute Selector (select elements based on an attribute or attribute value).

The CSS element selector.

The element selector selects HTML elements based on the element name.

Example: Here, all `<p>` element on the page will be center-aligned, with a blue text color.


```
p {  
    text-align: center;  
    color: red;  
}
```

The CSS id selector

The id selector uses the id attribute of an HTML element to select a specific element.

The id of an element is unique with a page, so the id selector is used to select one unique element.

To select an element with a specified id, write a hash (#) character, followed by the id of the element.

ex:-

```
<style>
```

```
    #dhiman {
```

```
        text-align: center;
```

```
        color: blue;
```

```
    }
```

```
</style>
```

```
<body>
```

```
    <p id="dhiman"> Hi </p>
```


The CSS class selector

The class selector select HTML elements with a specific class attribute.

To select elements with a specific class, write a period (.) character, followed by class name.

Example: <style>

· Center {

text-align: center;

}

</style>

<body>

<h1 class="center"> Red and
center-aligned heading </h1>

</body>

Note: Class name can't start with number.

The CSS Universal Selector.

The universal selector (*) selects all HTML elements on the page.

example:

* {

text-align: center;

color: red;

The CSS Grouping Selector:

The grouping selector selects all the HTML elements with the same style definition.

To group selector, separate each selector with a comma.

example:

`h1, h2, p {`

`text-align: center;`

`color: red;`

`}`

How to link External CSS:

With external CSS, we can change the look of an entire website by changing just one file!

Each HTML page must include a reference to the external style sheet file inside the `<link>` element, inside the head section.

ex:-

`<head>`

`<link rel="stylesheet" href="style.css">`

Note: Do not add a space between the property value and the unit (such as `margin-left: 20 px`).
The correct way is: `margin-left: 20px;`

Cascading Order:

What style will be used when there is more than one style specified for an HTML element?

All the styles in a page will "cascade" into a new "virtual" style sheet by the following rules, where number one has the highest priority.

1. Inline style.
2. External and internal style sheets (in the head section).
3. Browser default.

So, inline style has the highest priority, and will override external and internal styles and browser defaults.

CSS Comment:

Comments are not displayed in the browser.

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.

A CSS comment is placed inside the `<style>` element.

and start with /* and ends with */:

Example:

```
/* This is a single line comment */
```

```
P {
```

```
    color: lime;
```

```
}
```

```
/* This is  
a multi-line  
comment */
```

```
P {
```

```
    color: red;
```

```
}
```