

Cascading Style Sheets-CSS

Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML or XML. CSS handles the look and feel part of a web page, it prescribes colors, fonts, spacing, and much more.

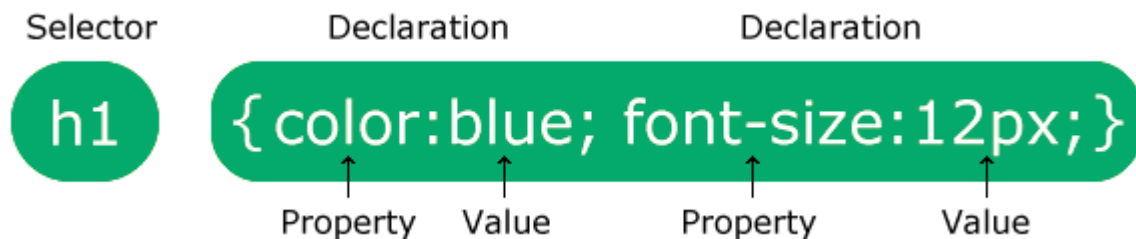
Advantages of Using CSS

The biggest advantage of CSS is that it allows the separation of style and layout from the content of the document.

- CSS Save Lots of Time — CSS gives lots of flexibility to set the style properties of an element. You can write CSS once; and then the same code can be applied to the groups of HTML elements, and can also be reused in multiple HTML pages.
- Easy maintenance – To make a global change, simply change the style, and all elements in all the web pages will be updated automatically.
- Pages Load Faster — CSS enables multiple pages to share the formatting information, which reduces complexity and repetition in the structural contents of the documents. It significantly reduces the file transfer size, which results in a faster page loading.

CSS Syntax

A CSS rule consists of a selector and a declaration block.



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

The declaration block contains one or more declarations separated by semicolons.

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

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

Example

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

```
p { font-size: 18px; text-transform: uppercase; }
```

A css file consists of one or more style rules.Each rule starts with a selector.A selector specifies an HTML element(s) and then applies style properties to them.

Types of CSS

There are three types of CSS . There are three ways to insert CSS in HTML documents.

- Inline CSS
- Internal or Embedded CSS
- External CSS

Inline css

Inline styles are CSS declarations that affect a single HTML element, contained within a style attribute. You can use style attribute of any HTML element to define style rules. These rules will be applied to that element only. Here is the generic syntax:

```
<element style="...style rules...">
```

Example:

```
<h1 style="color: blue;background-color: yellow;border: 1px solid black;">
```

Hello World!

```
</h1>
```

```
<h1>Inline css not applied</h1>
```

```
<p style="color:red;">This is my first CSS  
example</p>
```

```
<P>without inline</P>
```

Internal or Embedded CSS

Internal styling is defined in the `<head>` section of an html page, using a `<style>` element.

Example:

```
<style>
```

```
body {
```

```
    background-color: linen;
```

```
}
```

```
h1 {
```

```
    color: maroon;
```

```
    margin-left: 40px;
```

```
}
```

```
p {
```

```
    color: green;
```

```
}
```

```
</style>
```

```
<body>
```

```
<h1>This is a heading</h1>
```

```
<p>This is a paragraph.</p>
```

```
</body>
```

External CSS

External styles are defined in an external css file, and then linked to in the <head> section of an html page.

mystyle.css

```
p{
```

```
    margin-left:10px;color: green ;
```

```
}
```

```
body{
```

```
    background-color: pink;
```

```
}
```

```
h1{
```

```
    color: blue;background-color: yellow;border: 1px solid  
black;
```

```
}
```

In html file

```
<link rel="stylesheet" type="text/css"
href="mystyle.css"/>
```

```
<body>
```

```
  <h1> This is Heading.....</h1>
```

```
  <p>Paragrah here.....</p>
```

```
</body>
```

CSS Selectors

1.Element Selector

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

Example

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

Here, all <p> elements on the page will be center-aligned, with a red text color:

2. 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 within a page, so the id selector is used to select one unique element!

An ID selector is a name preceded by a **hash character** (“#”)

Example:

```
<html>
<head>
<style>
#para1{
    text-align: center;
    color: red;
}
</style> </head>
<body>
<p id="para1">Hello World!</p>
<p>This paragraph is not affected by the style.</p>
</body>
</html>
```

3.class selector

The class selector starts with a period (.) followed by a class name. class selector can be applied to several elements(group of elements) on a single page.

Example:

```
<html>
```

```
<head>
```

```
<style>
```

```
.cen{
```

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

```
    color: red;
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

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

```
<p class="cen">Red and center-aligned paragraph.</p>
```

```
<p>without class selector paragraph.</p>
```

```
</body>
```

```
</html>
```


4.Universal Selector

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

Example:

```
<!DOCTYPE html>

<html>

<head>

<style>

* {

    color: blue;

    font-size: 20px;

}

</style>

</head>

<body>

<h2>Heading,,,,,</h2>

<p>This is Paragraph.</p>

<h1>Heading H1 tag!</h1>


</body>

</html>
```

5.Group Selector

The group selector is used to select all the elements with the same style definitions.

Grouping selector is used to minimize the code.

Commas are used to separate each selector in grouping.

To group selectors, separate each selector with a comma.

```
h1,h2,p {  
    text-align: center;  
    color: blue;  
}
```