

# CSS Inclusion

<https://codescracker.com/css/css-inclusion.htm>

## Insert CSS in HTML Document

You can use a CSS style sheet with an [HTML](#) document by learning how to link the CSS code with the HTML document.

A CSS style sheet can be linked to an HTML document in a variety of ways, where each way has its own advantages and disadvantages.

There are the following **three ways** to apply **CSS style** to your HTML document.

- **The internal style sheet - Embedded CSS**
- **The external style sheet - External CSS**
- **The in-line style - Inline CSS**

---

## The Internal Style Sheet - Embedded CSS

The internal style sheet is written the **HEAD** element of the HTML document. This style is applied only to the documents in which it is defined and not referenced by any other Web document.

The syntax of internal style sheet is written as follows.

```
<STYLE type="text/css">  
    selector { property: value; }  
</STYLE>
```

In the above syntax contains the starting and the ending tags of the **STYLE** element. The **STYLE** element contains a type attribute with value **text/css**. The opening and the closing tags of the **STYLE** element embeds the style declaration. The declaration consists of a selector followed by a curly braces. The curly braces hold a property

followed by a colon, which is further followed by a value, and finally that value is followed by a semicolon.

The following code fragment shows a sample CSS document written using the internal style sheet.

```
<head>
<style type="text/css">
p { font-family: sans-serif; color:#c00; }
h1 { font-family: sans-serif; color:#f00; }
</style>
</head>
```

In the above code fragment, the style element is placed inside the HEAD element. The CSS statements are written within the style element. The two selectors are p and h1. The properties of the p element are font-family and color. The value of font-family is sans-serif and the value of color is #c00. Similarly, the properties of h1 element are font-family and color. The value of font-family is sans-serif and the value of color is #f00.

## Example

Here is an example shows how to use embedded CSS for applying styles to HTML elements.

```
<!DOCTYPE html>
<html>
<head>
    <title>Embedded CSS Example</title>
    <style>
        p
        {
            text-align: center;
            color: red;
        }
    </style>
</head>
<body>

<p>Hello Browser!</p>
<p>This is embedded CSS example.</p>

</body>
</html>
```

Here is the sample output produced by the above embedded CSS example code:



## Advantages and Disadvantages of Embedded CSS

The following are **the advantages** of using the internal style sheets.

- Affects only the page in which they are placed. If you are working on a large site and need to test styles before loading them on the site as a whole, internal style sheets can be a great tool as they allow you to test the styles on a single page.
- Allows you to change the style of the same HTML file in which you are working.

Internal style sheets have the following **disadvantages**.

- Affects only the page to which they are applied. If you want to use same styles in several documents, you need to repeat them for every page.
- Increases the page load time because the entire CSS file needs to be implemented first to apply CSS.



## The External Style Sheet - External CSS

The syntax to create an external style sheet is same as that of creating an internal style sheet. In case of internal style sheet, the CSS file is placed inside the HTML document; whereas, **in case of external style sheet, the CSS file is written outside the HTML document and the reference of the CSS file is placed in the HTML document.**

In an external style sheet, the style sheet rules are **saved into a text file with the .css extension**. Once you have a style sheet document, you can **link it with your Web pages** in the following two ways.

**(i) Linking** - Refers to the HTML LINK element, which is used to link a style sheet. **This element has the following three attributes**.

- rel
- type
- href

The rel attribute specifies what you are linking (style sheet in this case). The type specifies the MIME type for the browser, and the href attribute specifies the path of the .css file, as shown in the following code fragment.

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

In the above code fragment, the value of the rel attribute is set to stylesheet, value of the type attribute is set to text/css, and the value of the href attribute is set to test.css.

## Example

**An external style sheet is a separate text file with .css extension. You define all the Style rules within this text file and then you can include this file in any HTML document using <link> element.**

Open your text editor and type the following code into it.

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

Save the file as filename.css and close it.

Now this time type the below html code into your text editor like notepad for windows user.

```
<!DOCTYPE html>
<html>
<head>
  <title>External CSS Example</title>
  <link rel="stylesheet" href="full path of css file">
</head>
<body>

<p>Hello Browser</p>
<p>This is external CSS example.</p>

</body>
</html>
```

Open your file named **filename.css** into your web browser like google chrome, and copy the url (full path) of this file.

In the place of **full path of css file**, place the full path (copied from browser) of your css file (filename.css).

Now open the above html file, it will display the following output in the browser:



## Advantages and Disadvantages of External CSS

The following are the **advantages** of using the external style sheets.

- Allows you to control the look and feel of several documents in one go and do not need to define a specific style for every element.
- Allows you to easily group your styles in a more efficient way

External style sheets have the following **disadvantages**.

- Increases the download time as the entire CSS file has to be downloaded to apply the style to the HTML document. When the styles are less in number, applying external style sheet can make the document complicated.
- Displays the Web page only after the entire style sheets is loaded.
- -----

## The Inline Style - Inline CSS

The inline style properties are written in a single line separated by semicolons. These properties are **placed inside the style attribute of the HTML element**, on which you want to apply the style.

```
<p style="background:#ccc; color:#fff; border:1px solid black;">
```

In the above code fragment, the p element is styled.

### Example

Let's look at the following example that shows how to use Inline CSS to style HTML elements:

```
<!DOCTYPE html>
<html>
<head>
  <title>Inline CSS Example</title>
</head>
<body>

<p style="text-align:center;color:red">Hello Browser</p>
<p>This is inline CSS example.</p>

</body>
</html>
```

Below is the sample output produced by the above inline CSS example code:



## Advantages and Disadvantages of Inline CSS

The following are the **advantages** of applying inline style in an HTML document.

- Provides highest precedence over internal and external style sheets. Therefore, if you want some styles to be compulsorily applied, use the inline style.
- Provides an easy and quick approach to add a style sheet in a Web page. You do not need to create a whole new document (as with external style sheets) or edit a new element in the head of your document (as with internal style sheets) to add an inline style.

Inline styles have the following **disadvantages**.

- Makes a document difficult to maintain and increases the download time. Inline styles must be applied to every element on which you want to apply a style. Therefore, if you want all your headings to have the font-family Arial, you have to add an inline style to each heading element in your document.
- Does not allow to style pseudo-elements, which are used to add special effects to the selectors. For example, in external and internal style sheets, you can provide different styles or colors to differentiate between active, visited, or non-visited links.