

HTML - CSS



Roadmap



Cascading Style Sheets (CSS)

- **CSS** stands for **Cascading Style Sheets**
- Styles define **how to display** HTML elements
 - Example (inside an element): `<p style="color: blue; margin-left: 20px"> This is a paragraph </p>`
- Styles were added to HTML 4.0 to solve the problem of mixed content and presentation instructions in one file
- Styles are normally stored in external CSS **Style Sheets**
- External Style Sheets can save you a lot of work
 - You can define a style for each HTML element and apply it to as many Web pages



CSS Syntax

➤ The CSS syntax is made up of three parts:

- `selector {property: value}`
- **Example:** `p {font-family: "sans serif"}`

put quotes if
the value is
multiple words

➤ `selector` = tags, classes and ids

➤ `property` = attribute you want to style

➤ `value` = the value you want to assign

➤ Assign more properties simultaneously:

```
p {text-align: center; color:black; font-family=arial;}
```

➤ Assign the same property to more tags:

```
h1,h2,h3,h4,h5,h6 {color: green}
```

The CSS element Selector

- selects HTML elements based on the element name

```
<!DOCTYPE html>
<html>
<head>
<style>
p {
  text-align: left;
  color: red;
}
</style>
</head>
<body>

<p>Every paragraph will be affected by the style.</p>
<p>Me too!</p>
<p>And me!</p>

</body>
</html>
```

Every paragraph will be affected by the style.

Me too!

And me!

<https://www.w3schools.com/css/default.asp>

The CSS id Selector

- uses the id attribute of an HTML element to select a specific element
- unique within a page
- To select an element with a specific id, write a hash (#) character, followed by the id of the element.

```
<!DOCTYPE html>
<html>
<head>
<style>
#para1 {
  text-align: left;
  color: red;
}
</style>
</head>
<body>

<p id="para1">Hello World!</p>
<p>This paragraph is not affected by the style.</p>

</body>
</html>
```

Hello World!

This paragraph is not affected by the style.

The CSS class Selector

- The class selector selects HTML elements with a specific class attribute.
- To select elements with a specific class, write a period (.) character, followed by the class name

```
<!DOCTYPE html>
<html>
<head>
<style>
.center {
  text-align: center;
  color: red;
}
</style>
</head>
<body>

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

</body>
</html>
```

Red and center-aligned heading

Red and center-aligned paragraph.

<https://www.w3schools.com/css/default.asp>

How to Add CSS to HTML

- When a browser reads a style sheet, it will format the document according to it
- There are three ways of inserting a style sheet:

- **External Style Sheet**

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

- **Internal Style Sheet**

```
<head>  
  <style type="text/css">  
    body {background-color: red} p {margin-left: 20px}  
  </style>  
</head>
```

- **Inline Styles**

```
<p style="color: red; margin-left: 20px">This is a paragraph </p>
```



External CSS

- You 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.
- An external style sheet can be written in any text editor
 - ✓ must be saved with a .css extension
 - ✓ should not contain any HTML tags

External CSS - example

<https://www.w3schools.com/css/default.asp>

"mystyle.css"

```
body {  
    background-color: lightblue;  
}  
  
h1 {  
    color: navy;  
    margin-left: 20px;  
}
```

External CSS - example

```
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" href="mystyle.css">
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

This is a heading

This is a paragraph.

"mystyle.css"

```
body {
  background-color: lightblue;
}

h1 {
  color: navy;
  margin-left: 20px;
}
```

<https://www.w3schools.com/css/default.asp>

Internal CSS

- used if one single HTML page has a unique style
- defined inside the <style> element, inside the head section.

```
<!DOCTYPE html>
<html>
<head>
<style>
body {
  background-color: linen;
}

h1 {
  color: maroon;
  margin-left: 40px;
}
</style>
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

This is a heading

This is a paragraph.

Internal CSS
- example

<https://www.w3schools.com/css/default.asp>

Inline CSS

- used to apply a unique style for a single element
- add the style attribute to the relevant element

Inline CSS - example

```
<!DOCTYPE html>
<html>
<body>

<h1 style="color:blue;text-align:left;">This is a
heading</h1>
<p style="color:red;">This is a paragraph.</p>

</body>
</html>
```

This is a heading

This is a paragraph.

Cascading Order

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

➤ All the styles will "**cascade**" into a new "**virtual**" style sheet by the following rules, where number four has the highest priority:

1. **Browser** default

2. **External** style sheet

3. **Internal** style sheet (inside the <head> tag)

4. **Inline** style (inside an HTML element)

When we have both external and internal styles for the same element, the last one in the code takes precedence

➤ Example: an **inline** style (inside an HTML element) will override a style declared inside the <head> tag (**internal**).



More CSS Examples

<https://www.w3schools.com/css/default.asp>

