

Overview

Cascading Style Sheets (**CSS**) is a language used on the Internet to style web pages. While HTML describes the structure of a web page, CSS determines text alignment, the size of various elements, the color of various elements, and how HTML elements appear as a window is resized, amongst other things. There are also several different ways of incorporating CSS into a web page.

Key Terms

- CSS
- attribute-value
- ID
- class

The Style Attribute

CSS can be included directly into HTML using the style HTML attribute in any HTML tag. CSS takes the format of **attribute-value** pairs, where each CSS attribute is followed by a colon, followed by its value (multiple attribute-value pairs can be separated by semicolons). In the example here, we've included CSS directly in this `<p>` tag. The CSS attribute `font-size` is set to **28px**. As a result, when the HTML is displayed in a web browser, the paragraph will appear in 28-point font.

```
<p style="font-size:28px;">
  This is a paragraph.
</p>
```

Note that there is a distinction between HTML attributes and CSS attributes. **style** is the name of an HTML attribute, while **font-size** is an example of a CSS attribute. There are many different CSS tags. Common ones for styling text include: **color**, which sets the color of the text; **text-align**, which sets the text alignment (centered or left-aligned, for example); and **font**, which sets the font for the text.

The Style Tag

```
<!DOCTYPE html>
<html>
  <head>
    <title>Page</title>
    <style>
      p
      {
        font-size: 28px;
      }
    </style>
  </head>
  <body>
    <p>This is a paragraph.</p>
  </body>
</html>
```

CSS can also be located inside of a **style** element, usually located in the head section of an HTML document. Within the **style** tags, we first need to specify what the styling should apply to. This could be the name of a type of element (e.g. `p`), or it could be an ID or class of an HTML element. When determining whether to use an ID or a class, you can think of how we use the words in an everyday context. An **ID** is typically unique to a user so it should be used to style only one element. A **class** meanwhile is a group of students so it should be used to style multiple elements that have something in common. To apply styling to an ID, the ID should be referenced with a `#` symbol followed by its name. To apply styling to a class, the ID should be referenced with a `.` followed by the name of that class.

After specifying what their styling should apply to, CSS attribute-value pairs can be included within curly braces, separated by semicolons. In the example at left, the CSS specifies that all `p` elements should have font size **28**. Styling CSS in this manner can be advantageous if the styling applies to multiple different HTML elements, since then we don't repeat the same CSS.

Factored CSS

A third way to style with CSS is to store all the CSS in an entirely separate file. If the all of the CSS that would be inside of `<style>` tags is stored in a document (typically one that ends with `.css`), then that file can just be imported into an HTML document. We can do this by including a `<link>` tag in the head element of the HTML document. For instance, by including a line like `<link href="style.css" rel="stylesheet" />`, we can add an external CSS document to the HTML document and know that the appropriate styling will appear.

By putting all of the overlapping CSS code into one file, we remove unneeded repetition and redundancy from our HTML files. We also make changing the styling of multiple HTML documents more efficient since we would only need to update the one CSS document and then those HTML documents would be automatically re-styled. In these ways, factoring out CSS into a separate document can be particularly advantageous when dealing with multiple different HTML documents that use the same styling.