Styles and Cascading Style Sheets

In this lesson, we will learn about styles and CSS.
Let's begin!

Chapter overview

In the previous chapters, you learned about establishing the structure of your web pages with **HTML** and using the **JavaScript** programming language to manipulate the page structure to create interactive pages that respond to user events.

In many sample programs, you already used **Cascading Style Sheets** to set up the appearance of pages, including typography, colors, layout, and so on.

In the early days of HTML styling was part of the markup language. A number of HTML tags existed only for the sole purpose of providing style for parts of the web page such as font type, color, alignment, margins, paddings, etc. This structural approach resulted in verbose web pages where structural elements were mingled with styling elements.

Where a certain set of style attributes were used in many different parts of a page, it meant redundancy: the HTML markup snippets that specified a particular style had to be repeated for every structural part where the style should have been applied. This approach not only increased the size of web pages but also made them more laborious to maintain.

The idea of **Cascading Style Sheets (CSS)** is more than 20 years old, and the first specification (CSS level 1) became an official W3C recommendation in December of 1996.

As the specification evolved, CSS level 2 and CSS level 2.1 were published. The newest available specification, CSS3, which is used mostly with HTML5, is divided into several separate specs called modules. Today, there are more than sixty modules, and each has its own status as different groups work on them.

Similar to **CSS3**, the specification of **CSS4** is divided into modules. A few of them extend CSS3 modules, but there are ones that define entirely new features and functionality.

In this chapter, you will learn the fundamentals of using CSS with your web pages. This chapter covers only the most important things and does not treat every nitty-gritty detail, but provides the basics you can begin styling your web pages with.

Styles and style sheets

The HTML5 markup does not contain any elements for the sole purpose of setting up the visual style of a certain part of the page.

Instead, you can use either the style or the class attributes of any HTML

instead, you can use either the style or the class attributes of any HTML element to describe its appearance, as shown in Listing 9-1.

Listing 9-1: The style and class attributes

```
<!DOCTYPE html>
<html>
<head>
  <title>The style and class attributes</title>
  <style>
    body {
      font-family: Verdana, Arial, sans-serif;
    }

    .blue {
      color: blue;
    }
  </style>
</head>
<body>
  <h1 class="blue">
    Set to blue by its class attribute
  </h1>
  <p style="font-family: monospace">
    This paragraph is displayed with monospace
    characters due to its <strong>style</strong>
    attribute.
  </p>
</body>
</html>
```
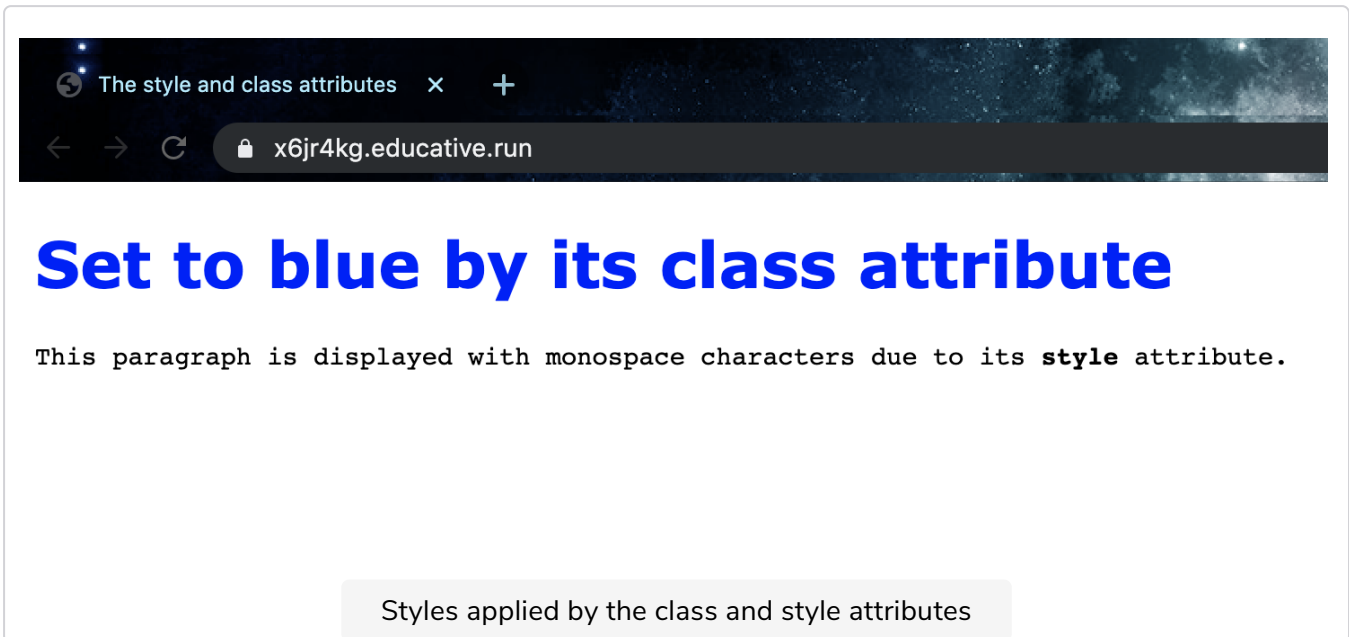
The `<h1>` tag uses the class attribute to set up its style. The attribute's value is blue, and so the .blue style defined in the `<style>` node under `<head>` is applied, thus the heading's color is set to blue.

The subsequent `<p>` tag sets the style attribute to display the tag with a monospace font.

The `<body>` tag's style is set implicitly; although neither the class nor the style attribute is set, the body rule that is specified within `<style>` is automatically applied by the rendering engine, this is how CSS works by its specification.

The font family of the page is set to Verdana or Arial if there's no Verdana, and finally a browser-chosen sans-serif font if neither Verdana nor Arial is found.

The result of the markup in Listing 9-1 is shown in below:

Browser window showing:

Set to blue by its class attribute

`This paragraph is displayed with monospace characters due to its **style** attribute.`

Styles applied by the class and style attributes

Actually, both `<h1>` and `<p>` apply two styles for their contents: the first is the font family setting coming from the body rule, and the second is the blue color for `<h1>` (set by the .blue rule), and the monospace font for `<p>` (as specified by the style attribute).

```
<head>
  <title>The style and class attributes</title>
  <link href="Theme/mystyle.css" rel="stylesheet" />
</head>
```

In the *next lesson*, we shall see how to style page elements using CSS.

See you there! :)