***CSS Introduction***

* CSS stands for Cascading Style Sheets
* CSS describes how HTML elements are displayed on screen, paper or in other media.
* CSS saves a lot of work. It can control the layout of multiple web pages all at once.
* External stylesheets are stored in CSS files.

*Why use CSS?*

CSS is used to define styles for our web pages, including the design, layout and variations in display for different devices and screen sizes.

*CSS solved a big problem:*

HTML was never intended to contain tags for formatting a web page HTML was created to describe the content of a web page, like:

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

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

When tags like <font> and color attributes were added to the HTML 3.2 specification, it started a nightmare for web developers. Development of large websites, where fonts and color information were added to every single page, became a long and expensive process. To solve this problem, the World Wide Web Consortium (W3C) created CSS.

CSS removed the style formatting from the HTML page.

*CSS Saves a lot of Work:* The style definitions are normally saved in external .css files. With an external stylesheet file, you can change the look and feel of an entire website by changing just one file.

How to add CSS?

There are three ways to add CSS to our HTML page:

1. Inline CSS <tag style=”css” />
2. Internal CSS <style>css</style>
3. External Stylesheet <link href=”style.css”/>

Inline CSS is useful, when we need to add styling only for a single element on the web page.

Internal CSS is useful when we are adding styles to a single page website or only for one web page.

External CSS is the most crucial and is used frequently, as it supports styling for multi-page websites. We can use a single CSS file that can be embedded into multiple HTML documents to provide styling.

Examples of all three ways to add CSS is:

index.html

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>CSS</title>

    <link rel="stylesheet" href="style.css">

    <style>

        p{

            background-color: blueviolet;  /\* internal css \*/

        }

    </style>

</head>

<body>

    <h1 style="background-color: burlywood;"> <!-- inline CSS -->

        hello inline css

    </h1>

    <p>

        hello internal css.

    </p>

    <div>

        hello external css

    </div>

</body>

</html>

style.css

div{

    background-color: brown;

}

Output:



***CSS Selectors***

CSS Selectors are used to “find” or select the HTML elements you want to style. There are 5 types of selectors:

1. Element/Type selector
2. Class Selector
3. Id selector
4. Attribute Selector
5. Universal selector

Element/Type Selector: The CSS type/element selector matches elements by node name. in other words, it selects all elements of the given type within a document.

Class Selector: The CSS class selector matches elements based on the contents of their class attribute.

Id Selector: The CSS id selector matches elements based on the contents of their id attribute.

Attribute Selector: The CSS attribute selector matches elements based on the element having a given attribute explicitly set, with options for defining an attribute value or substring value match.

Universal Selector: The CSS universal selector matches elements of any type.

We need to achieve the following:

A close-up of a text

Description automatically generated

Index.html

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>CSS</title>

    <link rel="stylesheet" href="style.css">

</head>

<body>

    <!-- selectors example -->

    <h1>CSS Selectors</h1>

    <h2>Applying CSS to Different Parts of HTML</h2>

    <!-- TODO 1: Set the CSS for all paragraph tags to "color: red" -->

    <p class="note">1. The element selector targets elements based on their HTML tag name.</p>

    <ol>

        <!-- TODO 2: Set the CSS for all elements with a class of "note" to "font-size: 20px" -->

        <li class="note" value="2">Class selectors target elements based on the value of the class attribute.</li>

        <!-- TODO 3: Set the CSS for the element with an id of "id-selector-demo" to "color: green" -->

        <li class="note" id="id-selector-demo" value="3">ID selectors target elements based on the value of the id

        attribute.</li>

        <!-- TODO 4: Set the CSS for the li elements that have the "value" attribute set to "4" to have "color: blue" -->

        <li class="note" value="4">Attribute selectors target elements based on their attributes and values.</li>

        <!-- TODO 5: Set all elements to have "text-align: center" -->

        <li class="note" value="5">The universal selector targets all elements.</li>

    </ol>

</body>

</html>

Style.css

ol {

    margin-left: -40px;

    margin-top: -20px;

    list-style-position: inside;

  }

/\* TODO 1: Set the CSS for all paragraph tags to "color: red" \*/

p{

    color: red;

}

/\* TODO 2: Set the CSS for all elements with a class of "note" to "font-size: 20px" \*/

.note{

    font-size: 20px;

}

/\* TODO 3: Set the CSS for the element with an id of "id-selector-demo" to "color: green" \*/

#id-selector-demo{

    color: green;

}

/\* TODO 4: Set the CSS for the li elements that have the "value" attribute set to "4" to have "color: blue" \*/

li[value="4"]{

    color: blue;

}

/\* TODO 5: Set all elements to have "text-align: center" \*/

\*{

    text-align: center;

}

Project: Color Vocab Website