CSS – Cascading Style Sheets

CSS stands for Cascading Style Sheets
CSS (Cascading Style Sheets) is a stylesheet language used to describe the presentation of a document written in HTML or XML.
CSS describes how elements should be rendered on screen, paper, in speech, or on other media.
It controls the layout colors, fonts and other visual aspects of Multiple Web Pages all at ones

How many ways to insert CSS

There are three primary ways to insert CSS into an HTML document:

1. **Inline CSS**
2. **Internal (Embedded) CSS**
3. **External CSS**

1. Inline CSS

Inline CSS is used to apply a unique style to a single HTML element. The style attribute is added directly to the HTML tag.

Example
<h1 style="color: blue;">Hello, World!</h1>

2. Internal (Embedded) CSS

Internal CSS is used to define styles for a single HTML page. The CSS rules are placed within the <style> tag inside the <head> section of the HTML document.

Example
```
<!DOCTYPE html>
<html lang="en">
<head>
   <title>Internal CSS Example</title>
   <style>

     h1 {
        color: blue;
        text-align: center;
     }
     }
   </style>
</head>
<body>
   <h1>Hello, World!</h1>
</body>
</html>
```

3. External CSS

External CSS is used to apply styles to multiple HTML pages. The CSS rules are defined in a separate .css file, which is linked to the HTML document using the <link> tag.

Example

styles.css
```
h1 {
    color: blue;
    text-align: center;
}
```

index.html
```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>External CSS Example</title>
    <link rel="stylesheet" href="styles.css">
</head>
<body>
    <h1>Hello, World!</h1>
    <p>This is a paragraph.</p>
</body>
</html>
```

Summary

- **Inline CSS** is best for quick, specific styles applied to individual elements.
- **Internal CSS** is useful for styling a single page with multiple elements.
- **External CSS** is ideal for applying consistent styles across multiple pages, promoting reusability and maintainability of your CSS code.

By using these methods, you can efficiently manage and apply styles to your HTML documents.

Basic Structure of a CSS Rule

A CSS rule consists of a selector and a declaration block.

Selector

The selector points to the HTML element you want to style.

Declaration Block

The declaration block contains one or more declarations separated by semicolons. Each declaration includes a CSS property name and a value, separated by a colon.

Example
```
selector {
    property: value;
    property: value;
}
```

The CSS element Selector

The element selector selects HTML elements based on the element name.

Example: Here, all <p> elements on the page will be center-aligned, with a red text color:
p {
  text-align: center;
  color: red;
}

The CSS id Selector

The id selector uses the id attribute of an HTML element to select a specific element.

The id of an element is unique within a page, so the id selector is used to select one unique element!

To select an element with a specific id, write a hash (#) character, followed by the id of the element.
The CSS rule below will be applied to the HTML element with id="para1":
#para1 {
  text-align: center;
  color: red;
}

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.
Example
In this example all HTML elements with class="center" will be red and center-aligned:
.center {
  text-align: center;
  color: red;
}

The CSS Universal Selector

The universal selector (*) selects all HTML elements on the page.
Example
The CSS rule below will affect every HTML element on the page:

```
* {
  text-align: center;
  color: blue;
}
```

The CSS Grouping Selector

The grouping selector selects all the HTML elements with the same style definitions.

It will be better to group the selectors, to minimize the code.

To group selectors, separate each selector with a comma.
```
h1, h2, p {
  text-align: center;
  color: red;
}
```

CSS Comments

Comments are used to explain the code, and may help when you edit the source code at a later date.

Comments are ignored by browsers.

A CSS comment is placed inside the <style> element, and starts with /* and ends with */:
```
/* This is a single-line comment */
p {
  color: red;
}
```