**CSS Assignment**

1. **Explain the difference between inline, internal, and external CSS**

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| **Inline-CSS** | **Internal-CSS** | **External-CSS** |
| It is used within HTML tag using the style attribute. | It is used within <head> section of HTML document. | It is used in a separate .css file. |
| Affects a single element or a group of elements. | Affects multiple elements within the same HTML element. | Affects multiple HTML documents or an entire website. |
| Not reusable. Styles need to be repeated for each element. | Can be reused on multiple elements within the same HTML document | Can be reused on multiple HTML documents or an entire website. |
| Inline styles increase the HTML file size, which can affect the page load time. | Internal styles are part of the HTML file, which increases the file size. | External styles are in a separate file, which reduces the HTML file size and can be cached for faster page loads. |

1. **Describe CSS selectors and list the types of selectors (e.g., element, class, id).**

**Tag Selectors (Type Selectors):**

These selectors target all HTML elements of a specific type. For example, p selects all paragraph elements, and h1 selects all level-one heading elements.

**Class Selectors:**

These selectors target elements with a specific class attribute. They are denoted by a period (.) followed by the class name. For example, .my-class selects all elements with the class "my-class".

**ID Selectors:**

These selectors target a single HTML element with a specific id attribute. They are denoted by a hash symbol (#) followed by the id name. For example, #my-id selects the element with the id "my-id".

**Universal Selector:**

The asterisk \* is used to select all elements on the page.

**Group 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.

**3) Describe css box model and it's components.**

**CSS Box Model:**

The CSS box model is a fundamental concept in web design and layout that describes how HTML elements are rendered and spaced on a webpage. Every element on a webpage is considered as a rectangular box, and the box model defines the structure of that box.

**Components of the CSS Box Model:**

**1. Content:**

This is the innermost part of the box, where the text and images appear.

It takes up space based on the element's width and height.

**2. Padding**

Padding is the space between the content and the border.

It creates space inside the box, but around the content.

Padding is transparent and can be set using the padding property (e.g., padding: 10px).

**3. Border**

The border wraps around the padding (if any) and the content.

You can style it using properties like border-width, border-style, and border-color.

**4. Margin**

Margin is the outermost layer of the box and creates space outside the element.

It separates the element from other elements on the page.

It is also transparent and can collapse with margins of adjacent elements (margin collapsing).