**MODULE – 3 : Mern Stack – CSS and CSS 3**

**CSS Selectors & Styling:**

Theory Assignment:

1. What is a CSS selector? Provide examples of element, class, and ID selectors.

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A CSS selector is a pattern used to select specific elements in an HTML document and apply styles to them. Selectors allow developers to target HTML elements based on attributes such as element type, class, or ID.

1. Element Selector :

* Target all element of a specific type.

P {

Color:blue;

}

This will target all the paragraph tag.

1. Class selector :

* Target elements with class attribute.

.name {

Color:blue;

}

This will target tag with “name” class.

1. ID selector :

🡪Target element with ID attribute.

#name{

Color:blue; }

This will target tag with “name” ID.

1. Explain the concept of CSS specificity. How do conflicts between multiple styles get resolved?

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CSS specificity determines which styles are applied when multiple rules target the same element. It is calculated based on the types of selectors used in a rule.

Specificity Hierarchy:

1. Inline styles (e.g., style="color: red;") have the highest specificity.
2. ID selectors (#id) are highly specific.
3. Class selectors (.class), attributes (e.g., [type="text"]), and pseudo-classes (e.g., :hover) have medium specificity.
4. Element selectors (e.g., div, p) and pseudo-elements (e.g., ::before) have the lowest specificity.
5. Universal selector (\*), inherited styles, and browser defaults have the least specificity.

Rules with higher specificity take precedence. If specificity is the same, the rule defined later in the stylesheet is applied.

1. What is the difference between internal, external, and inline CSS? Discuss the advantages and disadvantages of each approach.