

## **Module 3 – Frontend – CSS and CSS3**

### **CSS Selectors & Styling**

#### **1. What is a CSS selector?**

A CSS selector is used to target and style specific HTML elements.

##### **Examples:**

Element Selector: Targets all elements of a type.

##### **CSS**

```
h1{  
    color: blue;  
}
```

Class Selector: Targets elements with a specific class.

##### **CSS**

```
.button{  
    background-color: green;  
}
```

ID Selector: Targets an element with a specific ID.

##### **CSS**

```
#header{  
    font-size: 24px;  
}
```

#### **2. What is CSS specificity?**

CSS specificity determines which rule is applied when multiple rules target the same element.

##### **Order of importance:**

- Inline styles (highest).
- ID selectors.
- Class, attribute, and pseudo-class selectors.
- Element selectors (lowest).

**Example:** If both a class and ID target the same element, the ID takes priority.

### 3. What is the difference between internal, external, and inline CSS?

**Internal CSS:** Written in the `<style>` tag within the `<head>` of an HTML file.

Advantage: Easy to manage for a single page.

Disadvantage: Not reusable across pages.

html

```
<style>
  body {
    background-color: yellow;
  }
</style>
```

**External CSS:** Written in a separate `.css` file linked to the HTML.

Advantage: Reusable and keeps HTML cleaner.

Disadvantage: Requires additional HTTP requests.

html

```
<link rel="stylesheet" href="styles.css">
```

**Inline CSS:** Added directly to an element using the `style` attribute.

Advantage: Useful for quick changes.

Disadvantage: Difficult to maintain for large projects.

html

```
<div style="color: red;">Hello</div>
```