Training Day 6

Day 6 – 30th June 2025

CSS Selectors, Classes, and IDs

Detailed Description:

Today’s session deepened my understanding of **CSS** by introducing **selectors**, **classes**, and **IDs** — the essential tools that allow web designers to target specific HTML elements and apply custom styles efficiently.
The instructor explained that mastering selectors is key to writing clean and efficient CSS.

◆ 1. Introduction to CSS Selectors

A **CSS selector** is a pattern used to select the HTML elements we want to style.
We explored different types of selectors and how they can be used to control various parts of a webpage.

Types of CSS Selectors Learned:

Type	Example	Description
Universal Selector	* { }	Selects all elements on a page
Element Selector	p { }	Selects all <p> elements
Class Selector	.classname { }	Selects elements with a specific class
ID Selector	#idname { }	Selects a single element with a specific ID
Group Selector	h1, h2, p { }	Applies same style to multiple tags

Type	Example	Description
Descendant Selector	div p { }	Selects <p> elements inside a <div>

We also learned that **selectors** can be combined to create **more specific styling rules** for better layout control.

◆ 2. Working with Classes

A **class** in CSS is used when we want to apply the same style to multiple elements.
It is defined in HTML using the class attribute and referenced in CSS with a period (.).

Example Practiced:

```
<!DOCTYPE html>
<html>
<head>
  <style>
    .highlight {
      background-color: lightyellow;
      color: darkgreen;
      padding: 10px;
      border-radius: 5px;
    }
  </style>
</head>
<body>
  <h2 class="highlight">Welcome to CSS Classes</h2>
  <p class="highlight">This text is styled using a class selector.</p>
</body>
</html>
```

Here, both the heading and paragraph share the same .highlight class and have identical styles.
This demonstrated how **classes promote reusability and consistency** in design.

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3. Working with IDs

An **ID** is used to style a **unique element** on a webpage.
It is defined using the id attribute in HTML and referenced in CSS with a hash symbol (#).

Example Practiced:

```
<!DOCTYPE html>
<html>
<head>
  <style>
    #main-title {
      color: darkblue;
```

```
   text-align: center;

   text-transform: uppercase;

  }

 </style>

</head>

<body>

 <h1 id="main-title">My Web Designing Journey</h1>

</body>

</html>
```

The instructor emphasized that IDs are **unique** — meaning no two elements on the same page should have the same ID.
They are especially useful when specific styling or JavaScript functionality is needed for one unique element.

◆ 4. Difference Between Class and ID

Aspect	**Class**	**ID**
Symbol Used	. (dot)	# (hash)
Uniqueness	Can be used multiple times	Must be unique on a page
Purpose	Grouping elements for shared styles	Styling or identifying a specific element
Priority	Lower specificity	Higher specificity

We also learned about **CSS specificity**, where **IDs have more weight** than classes or element selectors. This means if multiple styles conflict, the one with higher specificity will be applied.

◆ 5. Grouping and Nesting Selectors

The instructor showed how to **group selectors** to apply the same styles to multiple elements, and how to **nest selectors** to target elements inside a specific parent.

Example:

```
h1, h2, p {
  font-family: Arial, sans-serif;
  color: #333;
}

div p {
  color: darkred;
}
```

This allowed me to see how efficiently CSS can control multiple elements at once, reducing redundancy in code.

Learning Outcomes:

- Understood the concept and types of CSS selectors.

- Learned the use and syntax of class (.classname) and ID (#idname) selectors.
- Differentiated between classes and IDs based on usage and specificity.
- Practiced grouping and nested selectors for advanced styling control.
- Realized the importance of selector hierarchy in efficient CSS design.