Training TR-102 Day 2 Report

The second day of the training focused on introducing CSS along with its basic syntax and some tasks related to that.

Introduction to CSS

CSS (Cascading Style Sheets) is a stylesheet language used to describe the presentation of a document written in HTML or XML. It is used to control the layout of web pages, including design, colors, fonts, and spacing, by applying styles to HTML elements.

- CSS can be applied to HTML documents in three ways: inline, internal, and external. Each method has its own use cases and advantages.

1. **Inline CSS:**

   Inline CSS is used to apply styles directly to HTML elements using the 'style' attribute. This method is useful for quick, specific styling but can make the HTML code cluttered if overused.

   - Advantages:
   - o   Quick and easy for small, specific changes.

   - Disadvantages:
   - o   Can lead to repetitive code and cluttered HTML.
   - o   Harder to maintain and update.

2. **Internal CSS:**

Internal CSS is defined within a '<style>' tag in the '<head>' section of the HTML document. This method is useful for styling a single document and keeps the CSS centralized within the HTML file.

  - **Advantages:**

  o Keeps styles centralized within the HTML document.

  o Useful for styling a single page.

  - **Disadvantages:**

  o Not reusable across multiple documents.

  o Can still clutter the HTML document if styles are extensive.

3. **External CSS:**

External CSS involves linking an external '.css' file to the HTML document. This method is ideal for styling multiple pages, promoting reusability and maintaining a clean separation of content and style.

  - **Advantages:**

  o Promotes reusability and separation of concerns.

  o Easier to maintain and update styles for multiple pages.

  - **Disadvantages:**

  o Requires an additional HTTP request to load the CSS file.

  o External file management might add complexity.

Choosing the appropriate CSS method depends on the specific needs of your project. For small, single-page websites, inline or internal CSS might be sufficient. For larger, multi-page websites, external CSS is typically the best choice for maintaining consistent styles across all pages.

• Therefore, we will use external CSS in the training.

- Concepts of CSS taught and implemented in tasks:

  o **Basic syntax:** Covered class and id which form the fundamental structure and elements of CSS used to create web pages.

  o **Class:** Utilized the "class" attribute in HTML and the corresponding CSS selector ".className" to apply styles to multiple elements with the same class.

  o **Id:** Utilized the "id" attribute in HTML and the corresponding CSS selector "#idName" to apply styles to a single unique element.

  o **Container:** Implemented a container element, typically using a "<div>" tag with a class or id, to ensure the website's content remains centered and within a fixed width even when the page is zoomed out.

- **Class vs Id:**

Feature	Class	Id
Selector Syntax	.className	#idName
Purpose	Used for styling multiple elements with the same style rules	Used for styling a single unique element
Reusability	Can be reused on multiple elements	Must be unique within a page
HTML Attribute	class="example"	id="example"
Specificity	Lower specificity	Higher specificity
Common Usage	Apply shared styles to groups of elements	Apply specific styles to a single element

- **Why can an id only be used once, but a class can be used multiple times?**

An id can only be used once in a document because it is meant to uniquely identify a single element, ensuring that the styles and behaviors associated with that id are applied to only one specific element. This uniqueness is important for targeting specific elements with precision, especially in JavaScript and CSS. In contrast, a class can be used multiple times because it is designed to apply the same styles and behaviors to multiple elements, allowing for consistent

styling and behavior across different parts of a webpage. This flexibility makes classes ideal for reusing styles across multiple elements.

Conclusion

The second day of training provided a thorough introduction to CSS, covering basic syntax and practical applications. Participants learned about inline, internal, and external CSS, with an emphasis on using external CSS for larger websites. Key concepts included using class and id selectors for styling elements and implementing container elements for consistent layouts. The session also highlighted the differences between class and id selectors and their specific uses. With these foundational skills, participants are well-prepared to create well-structured and visually appealing web pages.