TRAINING REPORT (TR-102)

DAY: -2 (11 JUNE 2024)

INTRODUCTION TO HTML TAGS

HTML tags are like keywords which defines that how web browser will format and display the content with the help of tags web browser can distinguish between **HTML** content and simple content.

HTML tags contain main three parts: -

1. Opening Tag
2. Content
3. Closing Tag

The closing tag is similar to the opening tag but includes a forward slash before the tag name. An HTML tag is a special keyword enclosed in angle brackets (< >) that defines how a portion of an HTML document should be displayed or functioned. HTML tags can include attributes that provide additional information about the element.

An HTML file must have some essential tags so that the web browser can differentiate between simple text and HTML text. You can use as many tags as you want as per your code requirement.

- All HTML tags must be en-closed within < > these brackets.
- Every tag in HTML performs different tasks.
- If you have used an open tag <tag>, then you must use a close tag </tag> (except some tags)

Syntax: - <tag> content </tag>

Anatomy of an HTML Tag

1. **Opening Tag**: Indicates the beginning of an element. It consists of the tag name enclosed in angle brackets.

    ➢ Example: <h1>

2. **Closing Tag**: Indicates the end of an element. It consists of a forward slash followed by the tag name, enclosed in angle brackets.

    ➢ Example: </h1>

3. **Content**: The text or other elements that are enclosed between the opening and closing tags.

    ➢ Example: Welcome to My Website

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4. **Attributes**: Provide additional information about an element. They are included within the opening tag and consist of a name-value pair.

   ➢ Example: Click Here

      • href="https://www.example.com" is an attribute of the <a> tag.

Self-Closing Tags

Some HTML tags do not have a closing tag because they do not enclose content. These are called self-closing tags and include a slash before the closing angle bracket.

   • Example:

Un-Paired Tags

Some HTML tags do not have the closing tag.

   ➢ Example: <br>, <hr>

HTML tags can be categorized based on their functionality and the role they play in structuring and formatting a web document. Here are the main types of HTML tags:

Structural Tags

These tags define the overall structure of an HTML document.

   • <!DOCTYPE html>: Defines the document type and version of HTML.
   • <html>: Encloses the entire HTML document.
   • <head>: Contains meta-information about the document, such as its title and links to scripts and stylesheets.
   • <body>: Contains the content of the document.

Head Tags

These tags are used within the <head> section to include metadata and links to resources.

   • <title>: Sets the title of the document.
   • <meta>: Provides metadata such as character set, author, and description.
   • <link>: Links to external resources like stylesheets.
   • <style>: Contains internal CSS styles.
   • <script>: Contains or links to JavaScript code.

Text Formatting Tags

These tags format and structure text content.

   • <p>: Defines a paragraph.

- <h1> to <h6>: Define headings, with <h1> being the highest level.
-
: Inserts a line break.
- <hr>: Inserts a horizontal rule.
- <strong>: Defines strong (bold) text.
- <em>: Defines emphasized (italic) text.
- <blockquote>: Defines a block quotation.
- <pre>: Defines preformatted text.

Link and Media Tags

These tags are used to embed links and media content.

- <a>: Defines a hyperlink.
- <img>: Embeds an image.
- <audio>: Embeds audio content.
- <video>: Embeds video content.
- <source>: Specifies multiple media resources for media elements (<audio> and <video>).
- <iframe>: Embeds another HTML page within the current page.

List Tags

These tags create lists of items.

- : Defines an unordered list.
- : Defines an ordered list.
- : Defines a list item.
- <dl>: Defines a description list.
- <dt>: Defines a term in a description list.
- <dd>: Defines a description of a term in a description list.

Table Tags

These tags create and format tables.

- <table>: Defines a table.
- <tr>: Defines a table row.
- <td>: Defines a table cell.
- <th>: Defines a table header cell.
- <caption>: Defines a table caption.
- <thead>: Groups header content in a table.
- <tbody>: Groups body content in a table.
- <tfoot>: Groups footer content in a table.

Form Tags

These tags create and handle user input forms.

- <form>: Creates an HTML form for user input.

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- <input>: Defines an input field.
- <textarea>: Defines a multi-line text input field.
- <button>: Defines a clickable button.
- <select>: Creates a drop-down list.
- <option>: Defines an option in a drop-down list.
- <label>: Defines a label for an <input> element.

Semantic Tags

These tags provide meaning to the structure and content of the document.

- <header>: Defines a header for a document or section.
- <nav>: Defines a set of navigation links.
- <main>: Specifies the main content of a document.
- <section>: Defines a section in a document.
- <article>: Defines an independent, self-contained piece of content.
- <footer>: Defines a footer for a document or section.
- <aside>: Defines content aside from the main content.
- <figure>: Specifies content, like illustrations, diagrams, photos, code listings, etc.
- <figcaption>: Defines a caption for a <figure> element.

Miscellaneous Tags

These tags are used for various other purposes.

- <div>: Defines a division or section, used for grouping and styling purposes.
- <span>: Used for grouping inline elements.
- <script>: Embeds or refers to a script within the document.
- <noscript>: Defines an alternative content for users who do not support or have disabled scripts.

Comments

With the help of this tag, we can add comments in the HTML. After commenting on the elements, the browser does not render it. Also, these comments parts are notdisplayed on the web page. But these commented codes are available in thesource code.

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