Understanding HTML Tags and Structuring an HTML Page

Introduction to HTML:

HTML (HyperText Markup Language) is the standard language for creating web pages. It uses a series of elements (or tags) to structure and display content on the web.

Basic HTML Structure:

A simple HTML document consists of several key components:

<!DOCTYPE html>

<html>

<head>

  <title>Page Title</title>

</head>

<body>

  <h1>Heading</h1>

  <p>This is a paragraph.</p>

</body>

</html>

Key HTML Tags:

1. **<!DOCTYPE html>**
   - This declaration defines the document type and HTML version. It should be the first line in an HTML document.
2. **<html>**
   - The root element of an HTML page. All other HTML elements are contained within this tag.
3. **<head>**
   - Contains meta-information about the HTML document, such as its title and links to stylesheets or scripts.
4. **<title>**
   - Sets the title of the web page, which is displayed in the browser's title bar or tab.
5. **<body>**
   - Contains the content of the HTML document, such as text, images, and other media.

Common HTML Tags:

1. **Headings**
   - `<h1>` to `<h6>` tags are used to define HTML headings, with `<h1>` being the highest level and `<h6>` the lowest.
2. **Paragraphs**
   - `<p>` tag is used for creating paragraphs.
3. **Links**
   - `<a>` tag is used to create hyperlinks. Example: `<a href="https://www.example.com">This is a link</a>`.
4. **Images**
   - `<img>` tag is used to embed images. Example: `<img src="image.jpg" alt="Description of image">`.
5. **Lists**
   - `<ul>` for unordered lists (bulleted).
   - `<ol>` for ordered lists (numbered).
   - `<li>` for list items within `<ul>` or `<ol>`.
6. **Tables**
   - `<table>` tag is used to create tables.
   - `<tr>` for table rows.
   - `<td>` for table data (cells).
   - `<th>` for table headers.
7. **Forms**
   - `<form>` tag is used to create forms for user input.
   - `<input>`, `<textarea>`, `<button>`, `<select>`, and `<option>` are common form elements.

HTML Attributes:

Attributes provide additional information about HTML elements. They are always included in the opening tag and typically come in name/value pairs like `name="value"`.

- **id**: Defines a unique id for an element.
- **class**: Defines one or more class names for an element.
- **src**: Specifies the source file for media elements like images.
- **href**: Specifies the URL for links