**TP1 HTML: Tags**

**First-Level Tags**

These tags are essential to start coding a web page in HTML. They indicate to web browsers that the content is HTML and separate the head from the body of the page.

* <html> – </html>: Main tag for all web pages.
* <head> – </head>: Page header.
* <body> – </body>: Page body.

**Header Tags**

These tags are placed inside the <head> section. A closing tag is formed by adding a slash (/) before the tag name, e.g., <head> (opening tag) and </head> (closing tag). Some tags are self-closing, such as the <img> tag.

* <link />: Links to a stylesheet.
* <meta />: Page metadata (charset, keywords). Also includes the meta description tag, which is useful for SEO, although Google’s algorithm does not directly interpret it.
* <script> – </script>: JavaScript code.
* <style> – </style>: CSS code.
* <title> – </title>: Page title. This tag is crucial for SEO.

**Text Structuring Tags**

These tags allow for structuring text, images, or menus within the page.

* <abbr> – </abbr>: Abbreviation.
* <blockquote> – </blockquote>: Long quotation.
* <q> – </q>: Short quotation.
* <cite> – </cite>: Title of a work or event.
* <sub> – </sub>: Subscript.
* <sup> – </sup>: Superscript.
* <h1> – <h6>: Headings of different levels.
* <img />: Image (uses src for the image URL and alt for alternative text).
* <mark> – </mark>: Highlights text.
* <strong> – </strong>: Bold text.
* <em> – </em>: Italic text.
* <figure> – </figure>: Figure (image, code, etc.).
* <figcaption> – </figcaption>: Figure description.
* <audio> – </audio>: Audio element.
* <video> – </video>: Video element.
* <source> – </source>: Defines a format for <audio> and <video> elements.
* <a> – </a>: Hyperlink (href attribute specifies the URL).
* <br />: Line break.
* <p> – </p>: Paragraph.
* <hr />: Horizontal separator.
* <address> – </address>: Contact address.
* <del> – </del>: Deleted text.
* <ins> – </ins>: Inserted text.
* <dfn> – </dfn>: Definition.
* <kbd> – </kbd>: Keyboard input.
* <progress> – </progress>: Progress bar.
* <time> – </time>: Date or time.
* <pre> – </pre>: Preformatted text (typically used for code).

**List Tags**

These tags allow the creation of ordered or unordered lists.

* <ul> – </ul>: Unordered list (bulleted).
* <ol> – </ol>: Ordered list (numbered).
* <li> – </li>: List item.
* <dl> – </dl>: Definition list.
* <dt> – </dt>: Definition term.

**Table Tags**

These tags create structured tables with rows and columns.

* <table> – </table>: Table.
* <caption> – </caption>: Table title.
* <tr> – </tr>: Table row.
* <th> – </th>: Header cell.
* <td> – </td>: Data cell.
* <thead> – </thead>: Table header section.
* <tbody> – </tbody>: Table body section.
* <tfoot> – </tfoot>: Table footer section.

**Form Tags**

These tags are used to create forms, such as contact forms.

* <form> – </form>: Defines a form (method: specifies the submission method, action: specifies the destination page after submission).
* <fieldset> – </fieldset>: Groups form elements.
* <legend> – </legend>: Title for a form group.
* <label> – </label>: Label for a form element.
* <input />: Input field (type attribute defines the field type).
* <textarea> – </textarea>: Multi-line input field (rows and cols define size).
* <select> – </select>: Dropdown list.
* <option> – </option>: Option in a dropdown list.
* <optgroup> – </optgroup>: Group of options in a dropdown list.

**Sectioning Tags**

These tags define the structure of a website.

* <header> – </header>: Page header.
* <nav> – </nav>: Main navigation links.
* <footer> – </footer>: Page footer.
* <section> – </section>: Section of a page.
* <article> – </article>: Standalone content (e.g., blog post).
* <aside> – </aside>: Additional information (e.g., sidebar).

**Generic Tags**

There are two generic tags: one inline and one block-level. These tags have no semantic meaning.

* <span> – </span>: Inline element.
  + Allows elements to be positioned next to each other.
  + Cannot be resized using width or height.
  + Respects left and right margins but not top and bottom margins.
* <div> – </div>: Block-level element.
  + Forces a line break.
  + Does not allow elements to be positioned next to it.
  + Can be resized using width and height.
  + Respects all margins.

**Attributes for Generic Tags**

These attributes enhance the usefulness of generic tags:

* **class**: Specifies a CSS class to apply.
* **id**: Unique identifier for the tag (useful for linking, CSS styling, and JavaScript interactions).
* **style**: Applies inline CSS styles (but using an external stylesheet is recommended for easier maintenance).

Test each tag to see the actual result. Tags form the **skeleton** of HTML. Without them, the web page will collapse. Always close your tags properly!

Soon, you'll become proficient in web development with HTML. The next step is mastering **CSS** to style your HTML files as you like.

**Final Tip:** Always **indent** your code properly to keep it organized and readable.