

HTML Meta Tags and Layout Tags

This document explains the concepts of HTML meta tags and layout tags, their roles in web development.

Meta Tags

Meta tags provide metadata about an HTML document. Metadata is information that describes the document itself, but it's not displayed on the webpage. Search engines, browsers, and other web services use this information to understand the content and functionality of the page.

- **Characteristics:**

- Placed within the <head> section of the HTML document.
- Can be used multiple times with different attributes.
- Defined using the <meta> tag followed by attributes like name and content.

- **Examples of Meta Tags:**

- **Character Encoding:** <meta charset="UTF-8"> - specifies the character encoding used in the document.
- **Description:** <meta name="description" content="A brief description of the webpage"> - provides a summary of the page content for search engines and social media previews.
- **Keywords:** <meta name="keywords" content="keyword1, keyword2, ..."> - helps search engines identify relevant keywords for the page content (though less emphasized nowadays).
- **Viewport:** <meta name="viewport" content="width=device-width, initial-scale=1.0"> - controls how the webpage scales on different devices for responsive design.

meta charset & meta name="viewport" both are used in front end

Layout Tags & Some elements to create an effective website

Layout tags define the structure and organization of content on a webpage. These tags create a framework for how elements like text, images, and forms are arranged.

- **Common Layout Tags:**

- **<header>**: Defines the top section of the page, often containing the website logo, navigation menu, and other introductory elements.
- **<nav>**: Creates a navigation section, typically containing links to other pages on the website.
- **<section>**: Represents a grouping of content within the document. Can be used multiple times to structure different sections.
- **<footer>**: Contains information at the bottom of the page, such as copyright notices, contact information, or links to other resources.

- **Other Complementary Tags:**

- **Section/header/nav/etc.:** Define webpage structure and content areas (like header, navigation, main content).
- **Paragraph (<p>)** Creates a block of text with line breaks before and after.
- **Span ()** Groups inline content for styling without affecting layout.
- **Button (<button>)** Creates clickable buttons for user interaction (submit forms, trigger actions).
- **Unordered List ()** Defines an unordered list of items, often with bullet points.
- **Image ()** Embeds an image into the webpage, specifying the source URL.
- **Heading (<h1>-<h6>)** Defines headings of different sizes for structuring and hierarchy.

Q. What is the use of span tag?

The span tag in HTML is used for **inline styling** and **grouping inline content**. Here's a breakdown of its key uses:

- **Inline Styling:** You can apply styles (font color, weight, etc.) to a specific portion of text within a paragraph, heading, or other element without affecting the overall layout. This is useful for highlighting keywords or phrases.

- **Grouping Content:** While not defining a new section, `span` can group inline elements together. This might be helpful for targeting specific content with JavaScript or applying styles consistently to a group of elements.

EXAMPLE:

- statement: `<section> Akrita Is Going </section>`
 - Output: **Akrita Is Going**
- statement: `< section style = “color: pink;”> Akrita Is Going </section>`
 - Output: **Akrita Is Going**
- statement: `< section > Akrita Is Going < /section>`
 - Output: **Akrita Is Going.**