

<!-- ! div And span Tag -->

<div> Tag (Block-Level Element)

- The `<div>` tag is a block-level container used to group elements together for styling and layout purposes. It doesn't inherently have any meaning or style.

- Characteristics:

- Block-level element: Occupies the full width available.
- Can contain any HTML elements such as text, images, other divs, forms, etc.
- Useful for dividing a webpage into sections.

- Usage:

- Ideal for creating large structural sections like headers, footers, content areas, and navigation menus.
- Helps in applying CSS styles and JavaScript functionality to groups of elements.

 Tag (Inline-Level Element)

- The `` tag is an inline-level container used to group text or other inline elements. Like `<div>`, it has no default styling or meaning but is useful for applying specific styles to inline content.

- Characteristics:

- Inline-level element: Occupies only the space it needs (doesn't start on a new line).
- Cannot contain block-level elements (like `<div>`, `<h1>`, etc.).
- Mainly used for styling a specific part of the text or inline elements.

- Usage:

- Ideal for applying styles or JavaScript to a small portion of text or elements within a larger block of content.
- Commonly used within paragraphs (`<p>`) to style or modify part of the text.

When to Use:

- **Use `<div>`:** When you need to group large sections of content or create page layout structures.
- **Use ``:** When you want to apply styles or modify small parts of inline content without affecting the overall layout.

<!-- ! semantic tags -->

- Definition:

Semantic tags are HTML elements that clearly describe their meaning both to the browser and to developers.

Unlike non-semantic tags (`<div>`, ``), semantic tags provide meaning to the content enclosed within them.

- **Purpose:** The primary purpose of semantic tags is to improve the structure, readability, and accessibility of web pages, making it easier for search engines, screen readers, and developers to understand the layout and content.

Common Semantic Tags

1. <header>

- **Definition:** Represents the introductory section or a group of navigation links in a webpage.

- **Usage:** Typically contains logo, site name, and navigation elements.

- **Example:**

```
<header>
  <h1>My Website</h1>
  <nav>
    <a href="#">Home</a>
    <a href="#">About</a>
    <a href="#">Contact</a>
  </nav>
</header>
```

2. <nav>

- **Definition:** Represents a section of the page that links to other pages or to parts within the same page.

- **Usage:** Usually used for navigation bars or menus.

- **Example:**

```
<nav>
  <ul>
    <li><a href="#">Home</a></li>
    <li><a href="#">Services</a></li>
    <li><a href="#">Contact</a></li>
  </ul>
</nav>
```

3. `<main>`

- **Definition:** Represents the main content of the webpage that is unique to the document, excluding headers, footers, and sidebars.
- **Usage:** Used for the central content of the webpage.
- **Example:**

```
<main>
  <h2>Welcome to Our Website</h2>
  <p>This is the primary content of the page.</p>
</main>
```

4. `<article>`

- **Definition:** Represents an independent piece of content that could be independently distributed or reused, such as blog posts, news articles, or user comments.
- **Usage:** Used for self-contained, reusable content.
- **Example:**

```
<article>
  <h3>Blog Post Title</h3>
  <p>This is a blog post description.</p>
</article>
```

5. `<section>`

- **Definition:** Represents a generic section of a document or application. Used to group related content together.
- **Usage:** Used for thematic grouping of content.
- **Example:**

```
<section>
  <h2>Our Services</h2>
  <p>We provide high-quality services to our customers.</p>
</section>
```

6. `<aside>`

- **Definition:** Represents content that is tangentially related to the content around it, such as sidebars or pull quotes.
- **Usage:** Typically used for supplementary content.
- **Example:**

```
<aside>
  <h4>Related Articles</h4>
  <p>Check out these articles for more information.</p>
</aside>
```

7. `<footer>`

- **Definition:** Represents the footer of a section or page, typically containing copyright information, links to privacy policies, or contact details.

- **Usage:** Found at the bottom of the page or section.

- **Example:**

```
<footer>
  <p>&copy; 2024 My Website. All rights reserved.</p>
</footer>
```

8. `<figure>`

- **Definition:** Represents self-contained content, like images, diagrams, or illustrations, along with their caption.

- **Usage:** Used for media elements with captions.

- **Example:**

```
<figure>
  
  <figcaption>Beautiful mountain scenery at sunrise.</figcaption>
</figure>
```

9. `<figcaption>`

- **Definition:** Used to define a caption for a `<figure>` element.

- **Usage:** Describes or gives context to the content within the `<figure>`.

- **Example:** (See the example for `<figure>` above)

10. `<mark>`

- **Definition:** Represents text that has been highlighted for reference purposes.

- **Usage:** Used to emphasize or highlight parts of the text.

- **Example:**

```
<p>The most <mark>important</mark> part of this paragraph is marked.</p>
```

11. <details>

- **Definition:** The <details> tag is used to create a collapsible section that users can open and close to reveal or hide additional information.
- **Purpose:** Provides a way to display optional or hidden information, which can be toggled by the user.
- **Behavior:** By default, the content inside the <details> tag is hidden, but it can be revealed when the user clicks on it.

- **Syntax:**

```
<details>
  <summary>Click to view more details</summary>
  <p>This is additional information that can be toggled.</p>
</details>
```

12. <summary>

- **Definition:** The <summary> tag is used inside the <details> tag to provide a heading or summary of the content that can be toggled.
- **Purpose:** Acts as a label or title that is clickable, and clicking on it reveals or hides the associated content.
- **Behavior:** It is always visible and is used to control the visibility of the rest of the content within the <details> tag.

- **Syntax:**

```
<details>
  <summary>Click here for details</summary>
  <p>Hidden content goes here.</p>
</details>
```