

HTML

Basic Document Structure

```
<!DOCTYPE html> <!-- Defines the document type -->

<html>

<head>

  <title>My Page</title> <!-- Sets the page title -->

</head>

<body>

  <h1>Welcome to My Website</h1> <!-- Main heading -->

  <p>This is a sample paragraph.</p> <!-- Paragraph -->

</body>

</html>
```

List

Unordered:

```
<ul>
  <li>Item 1</li>
  <li>Item 2</li>
  <li>Item 3</li>
</ul>
```

Ordered:

```
<ol>
  <li>First Item</li>
  <li>Second Item</li>
  <li>Third Item</li>
</ol>
```

Links

```
<a href="https://www.google.com" target="_blank">Visit Google</a> <!-- Hyperlink with new tab -->
```

Images

```
 <!-- Image with alt text -->
```

Forms:

```
<form action="/submit" method="post">

  <label for="name">Name:</label>

  <input type="text" id="name" name="name" placeholder="Enter your name" required>

  <!-- Input field with placeholder -->

  <button type="submit">Submit</button> <!-- Submit button -->

</form>
```

Table

<table border="1">

<!-- <table>: Defines the table element --> **<!-- border="1":** Adds a border around the table for visibility -->

<thead> **<!-- <thead>:** Defines the header section of the table -->

<tr> **<!-- <tr>:** Defines a table row -->

<th>Name</th> **<!-- <th>:** Table header cell, typically bold and centered -->

<th>Age</th> **<!--** Another header cell -->

</tr>

</thead>

<tbody> **<!-- <tbody>:** Contains the body/content of the table -->

<tr> **<!-- <tr>:** Defines a row in the table -->

<td>Alice</td> **<!-- <td>:** Table data cell; contains data for this row -->

<td>25</td> **<!--** Another data cell -->

</tr>

<tr> **<!--** Another row -->

<td>Bob</td> **<!--** Data cell containing the name "Bob" -->

<td>30</td> **<!--** Data cell containing the age "30" -->

</tr>

</tbody>

</table>

Media

Audio

<audio controls>

<source src="audio.mp3" type="audio/mpeg">

Your browser does not support the audio element.

</audio>

Video

<video controls width="320">

<source src="video.mp4" type="video/mp4">

Your browser does not support the video element.

</video>

SEMANTICS TAGS

1. <HEADER>

- **Definition:** Represents the introductory content or a group of navigational links for a section.
- **Example:**

```
<header>
<h1>Welcome to My Website</h1>
<nav>
<a href="#home">Home</a>
<a href="#about">About</a>
<a href="#contact">Contact</a>
</nav>
</header>
```

2. <NAV>

- **Definition:** Represents a block of navigation links.
- **Example:**

```
<nav>
  <a href="#section1">Section 1</a>
  <a href="#section2">Section 2</a>
  <a href="#section3">Section 3</a>
</nav>
```

3. <MAIN>

- **Definition:** Represents the dominant content of the document. There should be only one <main> element per page.
- **Example:**

```
<main>
  <h2>Main Content</h2>
  <p>This is the primary content of the page.</p>
</main>
```

4. <SECTION>

- **Definition:** Defines a thematic grouping of content, typically with a heading.
- **Example:**

```
<section>
  <h2>About Us</h2>
  <p>We are a company dedicated to excellence.</p>
</section>
```

SEMANTICS TAGS

5. <article>

- **Definition:** Represents a self-contained, independent piece of content (e.g., blog post, news article).
- **Example:**

```
<article>
  <h2>Blog Post Title</h2>
  <p>This is a detailed blog post.</p>
  <p>More content here...</p>
</article>
```

6. <ASIDE>

- **Definition:** Represents content indirectly related to the main content, like a sidebar or advertisements.
- **Example:**

```
<aside>
  <h2>Related Articles</h2>
  <ul>
    <li><a href="#">Article 1</a></li>
    <li><a href="#">Article 2</a></li>
  </ul>
</aside>
```

7. <FOOTER>

- **Definition:** Represents the footer of a section or page, typically containing copyright info or links.
- **Example:**

```
<footer>
  <p>&copy; 2025 My Website</p>
  <a href="/privacy">Privacy Policy</a>
</footer>
```

8. <FIGURE> AND <FIGCAPTION>

- **Definition:** Represents self-contained content like images with a caption

```
<figure>
  
  <figcaption>A beautiful scenic view.</figcaption>
</figure>
```