

## HTML Elements Detailed Description

### Basic Structure

#### <!DOCTYPE html>

Declares the document type and version of HTML.

Example: <!DOCTYPE html>

#### <html>

Root element of an HTML document. Contains all other HTML elements.

Example: <html>...</html>

#### <head>

Contains meta-information about the HTML document. Includes elements like <title>, <meta>, <link>, <style>, and <script>.

Example: <head>...</head>

#### <title>

Sets the title of the HTML document. Appears in the browser's title bar or tab.

Example: <title>Page Title</title>

#### <body>

Contains the content of the HTML document.

Example: <body>...</body>

### Text Elements

#### <h1> to <h6>

Defines HTML headings. <h1> is the highest (most important) level, and <h6> is the lowest.

Example: <h1>Heading 1</h1>

#### <p>

Defines a paragraph.

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

#### <br>

Inserts a line break. Self-closing tag.

Example: Line 1<br>Line 2

### <hr>

Inserts a horizontal rule (line). Self-closing tag.

Example: <hr>

### <strong> and <b>

Makes text bold. <strong> also indicates that the text is important.

Example: <strong>Important Text</strong>

### <em> and <i>

Italicizes text. <em> also indicates emphasis.

Example: <em>Emphasized Text</em>

## Lists

### <ul>

Defines an unordered (bulleted) list.

Example: <ul>...</ul>

### <ol>

Defines an ordered (numbered) list.

Example: <ol>...</ol>

### <li>

Defines a list item. Used within <ul> or <ol>.

Example: <li>List Item</li>

## Links and Images

### <a>

Defines a hyperlink. The href attribute specifies the URL.

Example: <a href="https://example.com">Link</a>

### <img>

Embeds an image. The src attribute specifies the image source. The alt attribute provides alternative text. Self-closing tag.

Example: 

## Forms and Input

### <form>

Defines an HTML form for user input.

Example: <form>...</form>

### <input>

Defines an input field. The type attribute specifies the type of input (e.g., text, password, submit). Self-closing tag.

Example: <input type="text">

### <label>

Defines a label for an <input> element.

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

### <textarea>

Defines a multi-line text input control.

Example: <textarea>...</textarea>

### <button>

Defines a clickable button.

Example: <button>Click Me</button>

## Table Elements

### <table>

Defines a table.

Example: <table>...</table>

### <tr>

Defines a table row.

Example: <tr>...</tr>

### <td>

Defines a table cell.

Example: <td>Cell</td>

### <th>

Defines a table header cell.

Example: <th>Header</th>

## Semantic Elements

### <header>

Defines a header for a document or section.

Example: <header>...</header>

### <footer>

Defines a footer for a document or section.

Example: <footer>...</footer>

### <article>

Defines an independent, self-contained piece of content.

Example: <article>...</article>

### <section>

Defines a section of a document.

Example: <section>...</section>

### <nav>

Defines navigation links.

Example: <nav>...</nav>

### <aside>

Defines content aside from the main content.

Example: <aside>...</aside>

### <main>

Defines the main content of a document.

Example: <main>...</main>

## Media Elements

### <audio>

Embeds audio content.

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

### <video>

Embeds video content.

Example: <video controls> <source src="video.mp4" type="video/mp4"> </video>

### **<source>**

Defines multiple media resources for <audio> and <video>.

Example: <source src="media.mp4" type="video/mp4">

## **Meta-information**

### **<meta>**

Provides metadata about the HTML document. Commonly used attributes: charset, name, content. Self-closing tag.

Example: <meta charset="UTF-8">

### **<link>**

Defines the relationship between the current document and an external resource. Commonly used to link stylesheets. Self-closing tag.

Example: <link rel="stylesheet" href="styles.css">

### **<style>**

Embeds CSS styles.

Example: <style>...</style>

### **<script>**

Embeds or references JavaScript.

Example: <script src="script.js"></script>

## **Interactive Elements**

### **<details>**

Defines additional details that the user can view or hide.

Example: <details> <summary>More Info</summary>...</details>

### **<summary>**

Defines a visible heading for a <details> element.

Example: <summary>More Info</summary>