
Learning Material: Basic Structure and Elements of HTML

Introduction to HTML

What is HTML?

HTML (HyperText Markup Language) is the standard language used to create webpages. It tells the browser **what to display** and **how to organize the content** on a webpage.

HTML is made up of **elements** (also called tags) that define the structure of a webpage such as headings, paragraphs, images, links, and more.

Why HTML Matters

- It is the foundation of all websites.
- It organizes content into readable, structured sections.
- It works together with CSS (for design) and JavaScript (for interactivity).

Basic Concepts

- **Tags:** Words inside angle brackets, e.g., `<p>` or `<h1>`
 - **Elements:** Full structure including opening tag, content, closing tag
Example:
 - `<p>Hello!</p>`
 - **Attributes:** Additional information added to tags
Example:
 - ``
-

The Basic HTML Document Structure

Every HTML file starts with a standard skeleton.

HTML Boilerplate

```
<!DOCTYPE html>
<html>
<head>
  <title>My First Webpage</title>
</head>
<body>
  <h1>Welcome!</h1>
  <p>This is my webpage.</p>
</body>
</html>
```

Explanation of Each Part:

1. <!DOCTYPE html>

- Tells the browser that the document uses HTML5.

2. <html>

- The root element that wraps all page content.

3. <head>

- Contains information **about** the webpage, not displayed directly:
 - Title of the page
 - Metadata
 - CSS links
 - Scripts

4. <title>

- Text shown on the browser tab.

5. <body>

- Displays everything the user can see:
 - Text
 - Images
 - Buttons
 - Links

Essential HTML Elements

1. Headings

Used for titles and section labels.

```
<h1>Main Title</h1>
<h2>Subheading</h2>
<h3>Smaller Subheading</h3>
```

- `<h1>` is the largest
- `<h6>` is the smallest

2. Paragraphs

Used for regular text.

```
<p>This is a paragraph of text.</p>
```

3. Line Breaks and Horizontal Lines

```
<br>    <!-- Creates a line break -->
<hr>    <!-- Creates a horizontal line -->
```

4. Images

```

```

- `src` = location of the image
- `alt` = description (important for accessibility)

5. Links

```
<a href="https://example.com">Visit Website</a>
```

- `href` = destination URL

Lists, Divisions, and Containers

1. Unordered List (Bullet Points)

```
<ul>
  <li>Milk</li>
```

```
    <li>Bread</li>
    <li>Eggs</li>
</ul>
```

2. Ordered List (Numbered)

```
<ol>
  <li>First Step</li>
  <li>Second Step</li>
</ol>
```

3. Divisions (<div>)

Used as containers for grouping content.

```
<div>
  <h2>Section Title</h2>
  <p>Some content here.</p>
</div>
```

4. Span ()

Used for styling small pieces of text.

```
<p>This is <span>highlighted</span> text.</p>
```

Example Webpage & Summary

Complete Example Webpage

```
<!DOCTYPE html>
<html>
<head>
  <title>My Sample Page</title>
</head>
<body>

  <h1>Welcome to My Website</h1>
  <p>Hello! This is an example of a simple HTML page.</p>

  <h2>About Me</h2>
  <p>I love coding and learning new things.</p>

  <h2>My Hobbies</h2>
  <ul>
    <li>Reading</li>
    <li>Coding</li>
    <li>Drawing</li>
```

```
</ul>



<p>Visit my profile:
  <a href="https://example.com">Click Here</a>
</p>

</body>
</html>
```

Summary

- HTML is the structure of all webpages.
 - A complete HTML page contains `html`, `head`, and `body` sections.
 - Common elements include headings, paragraphs, lists, images, and links.
 - Divs and spans help organize and style content.
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