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# Learning Material: Basic Structure and Elements of HTML

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## 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

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## 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
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## 2. Paragraphs

Used for regular text.

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

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## 3. Line Breaks and Horizontal Lines

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

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## 4. Images

```

```

- `src` = location of the image
  - `alt` = description (important for accessibility)
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## 5. Links

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

- `href` = destination URL
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# 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>
```

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## 3. Divisions (<div>)

Used as containers for grouping content.

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

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## 4. Span (<span>)

Used for styling small pieces of text.

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

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# 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>
```

```
</ul>



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

</body>
</html>
```

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## 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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