Chapter 1: - The Web's Skeleton ✎

1. The Role of HTML in Web Development

HTML (HyperText Markup Language) provides the basic structure of a webpage. It defines how content is organized and displayed in a browser, acting as the foundation for web development.

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2. Basic HTML Tags

a. Structural Tags

- `<html>`: The root element that wraps all HTML content.
- `<head>`: Contains metadata (e.g., title, character set, styles, scripts) for the document.
- `<body>`: Contains the content of the webpage that is visible to users.

b. Layout Tags

- `<header>`: Represents introductory content, often including navigation.
- `<footer>`: Contains information like copyrights, links, or contact details.

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3. Text Elements

a. Headings and Paragraphs

- `<h1>`: Main heading (largest and most important).
- `<p>`: Paragraph of text.

b. Links and Lists

- `<a href="URL">`: Hyperlink to another page or resource.
- `<ul>`: Unordered list (bulleted).
- `<ol>`: Ordered list (numbered).
- `<li>`: List item (used inside `<ul>` or `<ol>`).

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4. Structuring Content with Semantic Tags

- `<section>`: Defines a thematic grouping of content.
- `<article>`: Represents independent, self-contained content (e.g., blog post, news article).
- `<nav>`: Contains navigation links.

- `<main>`: Represents the main content of the webpage, excluding repeated elements like headers or footers.
- `<aside>`: Represents content tangentially related to the main content, such as sidebars or advertisements.

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5. Key Concepts

a. Elements

An HTML element consists of a start tag, content, and an end tag.
Example: `<p>This is a paragraph.</p>`

b. Tags

Tags are used to create HTML elements. They are enclosed in angle brackets (`<` `>`).

c. Nesting

HTML elements can be placed inside one another. Proper nesting is crucial to avoid errors.
Example:

```
<ul>

 <li>Item 1</li>

<li>Item 2</li>

</ul>
```

d. Attributes

Attributes provide additional information about elements.
Example: `<a href="https://example.com">Visit Example</a>`

e. Semantic HTML

Semantic tags convey meaning and improve accessibility and SEO. They help both developers and browsers understand the structure and purpose of content.

Would you like detailed examples or exercises for practice? 😊