

CHAPTER 4: TEXT FORMATTING

Basic text formatting

Bold (or) and italic (<i> or) text:

- and elements are used to make text bold.
- <i> and elements are used to make text italic.
- While and <i> are purely for visual styling, and are semantic elements that convey additional importance or emphasis.
- Example: <p>This is important text, and this is emphasized.</p>

Underlined (<u>) and strike-through (<s> or) text:

- <u> element is used to underline text.
- <s> or elements are used to strike through text, typically indicating deleted or outdated content.
- Example: <p>This text is <u>underlined</u>, and this text is struck through.</p>

Subscript (<sub>) and superscript (<sup>):

- <sub> element is used for subscript text, which is typically smaller and positioned below the baseline.
- <sup> element is used for superscript text, which is typically smaller and positioned above the baseline.
- These elements are commonly used in mathematical or scientific notations.
- Example: <p>This is the chemical formula for water: H₂O, and 2³ = 8.</p>

Formatting text with semantic elements

 and for emphasizing text:

- element is used to convey strong importance, emphasis, or urgency.
- element is used to convey stress emphasis or semantic emphasis.
- These elements are preferred over and <i> for better semantics and accessibility.

<code> for representing code snippets:

- The <code> element is used to represent a fragment of computer code.
- It typically applies monospace font styling to the enclosed text.
- Example: <p>To create a function in JavaScript, use the keyword <code>function</code>.</p>

<pre> for preserving whitespace and formatting:

- The <pre> element is used to display preformatted text, preserving whitespace (spaces, tabs, and line breaks) and formatting.
- Text within <pre> is typically displayed using a monospace font.
- It is useful for displaying code snippets or examples with indentation and line breaks intact.
- Example:

<pre>

```
function greet(name) {  
  console.log("Hello, " + name + "!");  
}
```

</pre>

Character entities

Introduction to character entities:

- Character entities are used to include special characters or symbols that are not part of the standard character set or keyboard.
- They are represented by a combination of an ampersand (&), an entity name or number, and a semicolon (;).

Common character entities:

- < for less than (<)
- > for greater than (>)
- & for ampersand (&)
- " for double quotes (")
- ' for single quotes (')
- for a non-breaking space

Using character entities for special characters:

- Character entities are useful when you need to include special characters or symbols that have specific meanings in HTML, such as angle brackets (<>) or ampersands (&).
- Example: <p>The HTML element for a paragraph is <p>.</p>

Styling text with CSS

Introduction to CSS and its role in text formatting:

- CSS (Cascading Style Sheets) is a language used for styling and controlling the presentation of web pages.
- CSS allows you to define styles for various HTML elements, including text formatting.

Basic CSS properties for text:

- **color:** Sets the text color.
- **font-family:** Specifies the font family for the text.
- **font-size:** Sets the size of the text.
- **font-weight:** Controls the boldness of the text.
- **font-style:** Sets the text style to normal, italic, or oblique.
- **text-decoration:** Applies decorations like underline, overline, or line-through.
- **text-align:** Aligns the text horizontally (left, right, center, or justify).

Inline styles vs. internal and external stylesheets:

- **Inline styles:** CSS styles applied directly to an HTML element using the style attribute.
- **Internal stylesheet:** CSS styles defined within the <style> element in the <head> section of the HTML document.
- **External stylesheet:** CSS styles stored in a separate .css file and linked to the HTML document using the <link> element.

Student challenge:

- Create a document with various text formatting examples, using both HTML elements and CSS styles.
- Experiment with bold, italic, underlined, strike-through, subscript, and superscript text using the appropriate HTML elements.
- Use semantic elements like , , <code>, and <pre> to format text with specific meanings.
- Include character entities to display special characters or symbols.
- Apply CSS styles to format text properties like color, font family, font size, and text alignment.

Practical example:

- Format a poem or code snippet using appropriate text formatting elements and styles.
- Use and elements to emphasize specific words or phrases in the poem.
- Utilize the <pre> element to preserve the formatting and indentation of the code snippet.
- Apply CSS styles to change the font family, font size, and text color of the content.
- Include character entities to display any special characters or symbols within the content.

Summary:

- HTML provides various elements for basic text formatting, such as , <i>, <u>, <s>, <sub>, and <sup>.
- Semantic elements like , , <code>, and <pre> offer better accessibility and meaning for text formatting.
- Character entities are used to include special characters or symbols that are not part of the standard character set.

- CSS plays a crucial role in text formatting, allowing control over properties like color, font family, font size, and text alignment.
- Combining HTML elements and CSS styles enables you to create visually appealing and semantically meaningful text formatting on web pages.