

CSS Styling Basics

(Concepts Only)

CSS (Cascading Style Sheets) is used to design and style web pages. It controls the appearance of HTML elements, such as colors, fonts, spacing, and layout.

What is CSS?

CSS is a styling language that allows you to modify how HTML elements look on a webpage. It helps separate content (HTML) from design (CSS), making websites more visually appealing and easier to maintain.

1. Text Styling

- ✚ CSS allows you to change text appearance, including:
- ✚ Font Family – Defines the typeface (e.g., Arial, Times New Roman).
- ✚ Font Size – Adjusts text size in pixels (px), points (pt), or percentages (%).
- ✚ Font Weight – Controls text thickness (e.g., normal, bold, lighter).
- ✚ Font Style – Makes text italic or oblique.
- ✚ Text Color – Changes the text color using names, HEX, RGB, or HSL values.
- ✚ Text Alignment – Aligns text left, center, right, or justified.
- ✚ Text Decoration – Adds underline, overline, line-through, etc.
- ✚ Letter Spacing & Word Spacing – Adjusts gaps between letters or words.
- ✚ Text Transformation – Converts text to uppercase, lowercase, or capitalize.

2. Borders & Outlines

- ✚ Border – Defines the thickness, style (solid, dashed, dotted), and color of an element's boundary.
- ✚ Outline – Similar to a border but does not affect layout size.

3. Margins & Padding (Spacing)

CSS controls spacing around elements using:

- ✚ Margin – Creates space outside an element.
- ✚ Padding – Creates space inside an element (between content and border).

4. Background Styling

You can change the appearance of the background for elements, including:

- ✚ Background Color – Adds color behind elements.
- ✚ Background Image – Sets an image as the background.
- ✚ Background Size & Position – Adjusts image size and placement.
- ✚ Background Repeat – Controls whether an image repeats.

5. Box Model (Layout Control)

CSS treats elements as rectangular boxes, with:

- ✚ Content – The actual text or image inside the box.
- ✚ Padding – Space between content and border.
- ✚ Border – The outline of the box.
- ✚ Margin – Space between the box and other elements.

6. Positioning & Display

CSS controls how elements are placed on a webpage:

- ✚ Display – Defines how an element appears (block, inline, none, flex, grid, etc.).
- ✚ Position – Determines an element's placement (static, relative, absolute, fixed, sticky).
- ✚ Z-Index – Controls which element appears on top when overlapping.

7. Animations & Transitions

CSS allows smooth effects and animations:

- ✚ Transitions – Create smooth changes for properties (e.g., hover effects).
- ✚ Animations – Define complex movement and styling changes over time.