

CSS Crash Course — Lesson Notes

What is CSS?

CSS (Cascading Style Sheets) controls the visual presentation of HTML elements — colors, fonts, spacing, layout, and responsiveness.

Core Concepts

Selectors & Properties

```
/* Element selector */
h1 { color: navy; font-size: 2rem; }

/* Class selector */
.card { background: #fff; border-radius: 8px; padding: 16px; }

/* ID selector */
#hero { height: 100vh; display: flex; align-items: center; }
```

The Box Model

Every element is a rectangular box with four layers:

Layer	Property	Description
Content	width, height	The actual content area
Padding	padding	Space between content and border
Border	border	Visible edge around padding
Margin	margin	Space outside the border

Tip: Use `box-sizing: border-box;` so padding and border are included in the element's total width.

Common Properties

- **Typography:** font-family, font-size, font-weight, line-height, text-align
- **Colors:** color, background-color, opacity
- **Spacing:** margin, padding, gap
- **Layout:** display, position, float, z-index

Responsive Design

```
@media (max-width: 768px) {  
  .container { flex-direction: column; padding: 1rem; }  
}
```

Key Takeaways

1. Use classes over IDs for reusable styles.
2. Master the box model — it's the foundation of all CSS layout.
3. Mobile-first design: start with small screens, then add breakpoints.
4. Use CSS custom properties (--variables) for maintainable themes.