# Training Day 18 Report

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### Topic: CSS Box Model – Layout and Spacing Control

Day 18 focused on understanding and applying the CSS box model—a foundational principle that governs how every HTML element is sized and spaced. Mastering this concept is key to achieving structured, responsive designs.

#### **Key Areas Covered**

#### 1. Box Model Components

- Content: The actual text or media inside the element.
- Padding: Space around content, inside the border.
- Border: The outline surrounding the padding and content.
- Margin: Space outside the border that separates elements.

# 2. Visual Understanding

- Used browser DevTools to inspect and visualize box boundaries.
- Compared default vs custom spacing and noticed layout shifts.
- Studied collapsing margins and overlapping issues.

# 3. Practical Styling Properties

- Set padding and margins with pixel, em, and percentage units.
- Applied borders with different styles: solid, dotted, dashed.
- Used box-sizing: border-box for cleaner layout control.

# 4. Real-World Design Scenarios

- Designed card-style containers with balanced spacing.
- Created testimonials section with uniform padding and outer margins.
- Avoided layout breaks using consistent box-sizing across elements.

### Hands-On Practice

Styled a basic portfolio layout:

- Header and sections spaced using margin and padding rules.
- Each section styled with box shadows and border effects.
- Debugged overlapping layout using browser inspect mode.

### **Key Takeaways**

- Every visible element is a box, and spacing defines its behavior.
- Mastering the box model prevents layout bugs and improves alignment.
- Consistent use of box-sizing and padding creates clean visual structure.
- Spacing isn't decoration—it's a design strategy.