

Day 5 - Week 7 Report: Conditional Styling & Component Libraries (Tailwind, Bootstrap)

Internship Program - ProSensia

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Topics Covered

1. Conditional Styling in React

- Applied dynamic styles based on component state or props.
- Techniques explored:
 - **Ternary operators** inside className.
 - **Template literals** for combining multiple styles conditionally.
 - Conditional **inline styles** using object syntax.
- Real-world use case: Toggle dark/light theme, error highlighting, active state buttons.

2. Component Libraries Overview

- Learned benefits of using **CSS utility and component libraries** to boost development speed and maintain UI consistency.

3. Tailwind CSS

- Utility-first CSS framework.
- Used to:
 - Apply quick styling directly in className.
 - Build responsive layouts without writing custom CSS.
- Key advantages:
 - Highly customizable
 - Reduces CSS file size
 - Promotes design consistency

4. Bootstrap

- Popular CSS framework with ready-to-use components.
 - Used for:
 - Building layouts with grid system
 - Quickly implementing forms, buttons, modals, etc.
 - Includes built-in **JavaScript-powered** components.
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Key Learnings

- How conditional styling can improve **UX interactivity** and **accessibility**.
 - Tailwind is ideal for **custom UIs**, while Bootstrap is faster for **standardized layouts**.
 - Combining logic with design can lead to more **responsive** and **dynamic** interfaces.
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Practical Implementation

- Built a toggleable theme switcher using React + Tailwind.
- Created a Bootstrap card layout with conditionally styled alerts based on user actions.