Step 4: Premium UI Design & Form Validation
Software Engineering Project (Sprint 4)

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1 Introduction

A functional application is only successful if users enjoy interacting with it. In Sprint 4, we focus on **User Experience (UX)** and **Visual Design**.

2 Glassmorphism & Modern Aesthetics

Our prototype uses a "Glassmorphism" effect combined with a deep dark mode. Key elements include:

- **Semi-transparent backgrounds** with blur filters.
- **Vibrant gradients** for headers and primary buttons.
- **Subtle transitions** (hover effects) to make the UI feel "alive".

3 Form Validation

Never trust user input. Validation must happen at two levels:

1. **Frontend:** Immediate feedback using HTML5 attributes (`required`, `pattern`) or custom React logic.
2. **Backend:** Using Jakarta Bean Validation (`@NotBlank`, `@Size`) to ensure data integrity in the database.

> **UX Best Practice: Visual Feedback**
>
> When a user clicks "Add Project", the button should change state (e.g., disable or show a spinner) to indicate the process is active. Once finished, clear the form fields to prepare for the next entry.

4 Interactive Components

We used **Lucide-React** for high-quality SVG icons. Icons should be used strategically:

- `CheckCircle` for completed projects.
- `Trash2` for destructive actions (Delete).
- `PlusCircle` for primary creation actions.

5 Exercise

1. Implement a confirmation modal (or a simple `window.confirm`) before deleting a project.

2. Add a "Search" bar that filters the project list by name using a simple `.filter()` on the projects array.