Requirement Analysis

Technology Stack

Frontend: React.js, Vite, Tailwind CSS

Backend: Node.js, Express.js

Database: MongoDB

Other Tools: REST API, dotenv, middleware, controllers, ESLint, Vite

Solution Requirements

Functional Requirements:

- User registration and login

- View running movies and their details

- Select preferred showtimes and available seats

- Book/cancel movie tickets

- Admin functionalities for managing movies (optional)

Non-Functional Requirements:

- Responsive and user-friendly UI

- Secure login system

- Fast loading via Vite bundling

- Scalable backend API

- Real-time seat availability

Data Flow Overview

1. Frontend collects input → sends API request to Backend

2. Backend receives request → processes using routes & controllers

3. Backend interacts with MongoDB → fetches/saves data

4. Backend returns response → Frontend displays result to user

User Stories

- As a user, I want to register/login to book movie tickets.

- As a user, I want to view available movies and showtimes.

- As a user, I want to book or cancel my tickets easily.

- As an admin, I want to add, update, or remove movies (optional).