



Introduction

■ Overview/Specifications

Overview:

Vookapp is a high-performance web application designed to digitize library operations, focusing on real-time availability and user engagement.

Specifications:

Frontend: Built with React.js for a dynamic, single-page application experience.

Backend: Powered by Node.js and Express.js to handle API requests and business logic.

Data: Utilizes structured JSON for lightweight and fast data exchange.



Motivation

- **Digitization of Manual Workflows:** The primary drive was to eliminate the high error rates and physical storage requirements associated with traditional ledger-based library tracking.
- **Real-Time Resource Accessibility:** You aimed to provide users with an "anywhere, anytime" portal to check book availability, reducing the "Round Trip Time" (RTT) it takes for a student to find and secure a resource.
- **Centralized Data Management:** By using a structured JSON-based system, you wanted to ensure that all book metadata—from authors to circulation status—is stored in a single, queryable source of truth.
- **User Engagement through Notifications:** A key motivation was to bridge the communication gap between the library and the borrower by implementing an automated notification system for due dates and new arrivals.
- **Scalable Architecture for Modern Libraries:** You sought to build a system using the React-Node.js stack that could easily scale from a small personal collection to a departmental library without requiring a complete rewrite of the codebase.
- **Professional Identity and Skill Mastery:** This project served as a platform to master full-stack deployment on Netlify and establish a professional portfolio under the signature **PriyanshuBejJVM**.