

Project Design Phase

Problem – Solution Fit Template

Date	8 Feb 2026
Project Name	Docspot: seamless appointment booking for health
Team ID	LTVIP2026TMIDS89460

1. Problem

Booking doctor appointments is still inefficient, fragmented, and time-consuming for patients.

Doctors struggle with unstructured scheduling and manual confirmations.

There is no unified system that enables real-time booking, approval workflows, and role-based management in one streamlined platform.

2. Solution

DocSpot is a full-stack web platform that connects patients, doctors, and admins in a structured digital ecosystem.

It enables real-time appointment booking, approval-based doctor onboarding, and automated status tracking.

The system ensures seamless communication, transparent scheduling, and secure role-based access control.

3. Unique Value Proposition

- Role-based architecture with controlled doctor approval before platform access.

- Complete appointment lifecycle management (pending → approved → rejected → completed).
- Scalable MERN stack implementation with structured RBAC and production-ready API design.

4. Target Users

- Patient: Patients to get appointment
- Doctors: Skilled Doctors
- Admins: Platform moderators

5. Benefits

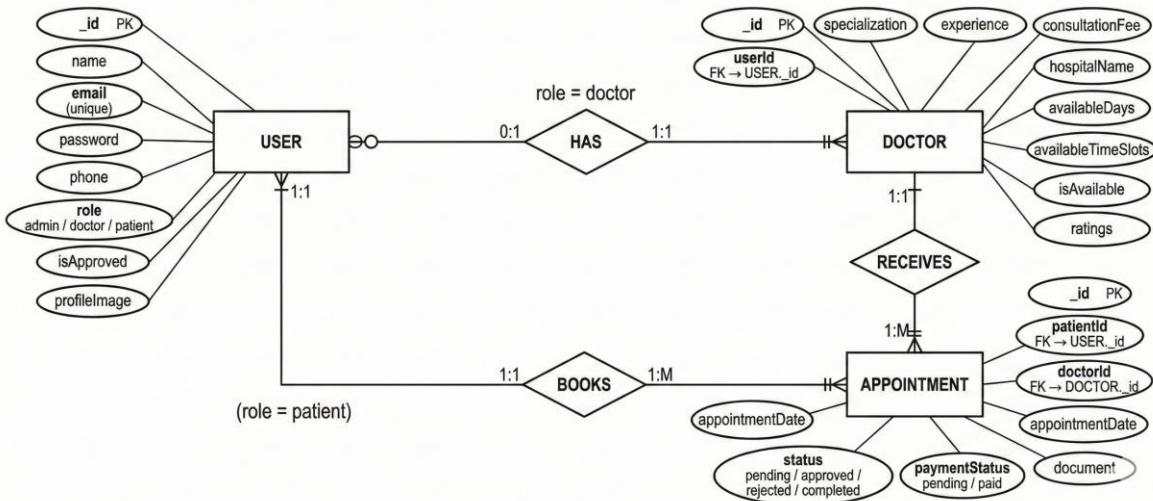
- Reduces rental fraud
- Enables quick property discovery
- Simplifies rental workflow from inquiry to move-in

Entity-Relationship (ER) Diagram

This diagram shows how major entities interact in the DocSpot system:

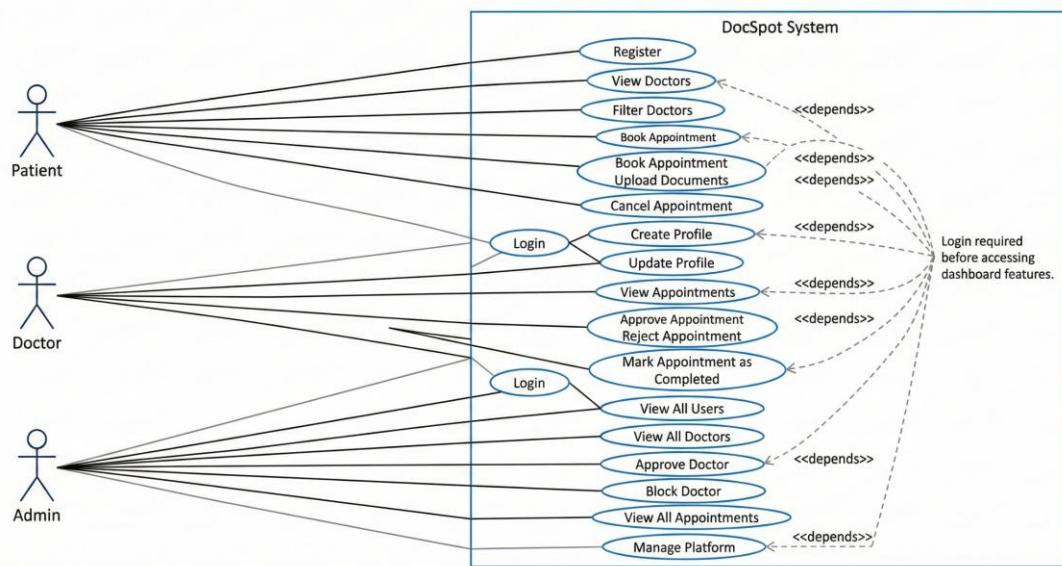
DocSpot ER Diagram – Database Design

Healthcare Doctor Appointment Booking System



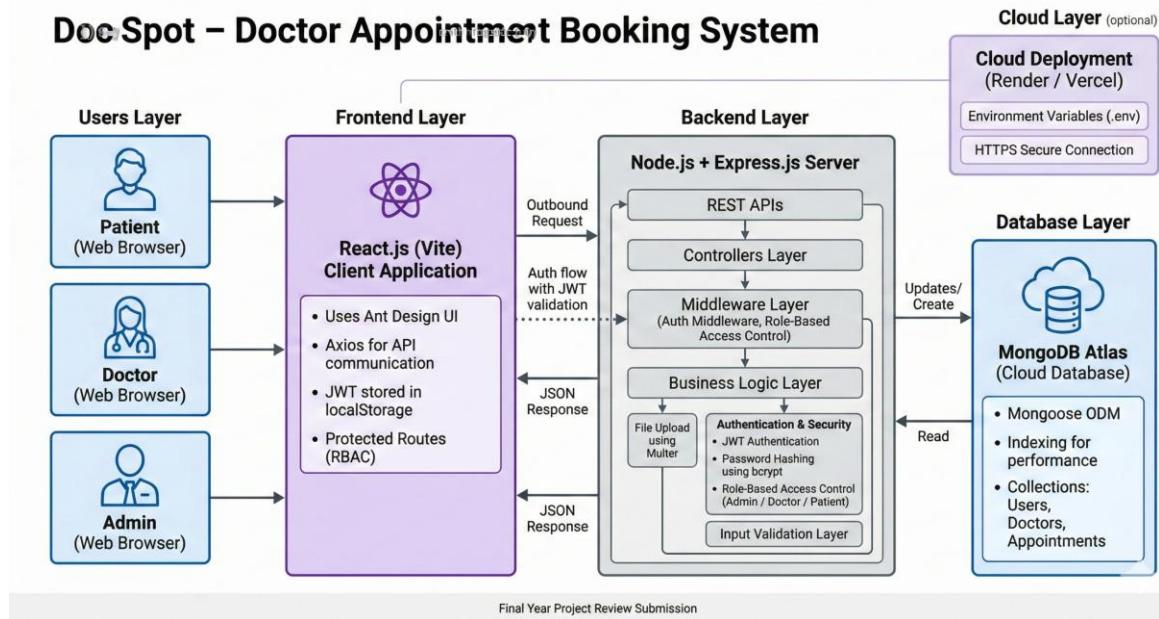
Use Case Diagram

DocSpot Use Case Diagram



System Architecture

Below is the system architecture diagram representing the MERN stack used in HouseHunt:



- **Frontend:** Built with React.js and styled using Material UI and Bootstrap for a responsive user experience.
- **Backend:** Uses Node.js and Express.js to handle routing, APIs, and business logic.
- **Database:** MongoDB for storing users, properties, and booking data.
- **Communication:** Axios facilitates frontend-backend RESTful API communication.