

Full Stack Development with MERN

DocSpot: Seamless Appointment Booking for Health

1. Introduction

DocSpot is a MERN Stack doctor appointment booking system allowing patients to book online appointments easily.

1.1 Purpose

The purpose is to eliminate manual hospital booking and provide real-time scheduling.

2. Ideation Phase

2.1 Problem Statement

Manual hospital bookings cause delays and frustration for both patients and doctors.

2.2 Empathy Map Canvas

- Patients: Frustrated with waiting times.
- Doctors: Difficulty managing schedules.
- Admin: Needs streamlined control.

2.3 Brainstorming

- Real-time booking
- Doctor approval
- Role-based access

3. Requirement Analysis

3.1 Customer Journey Map

Registration -> Login -> Browse Doctors -> Book -> Manage Appointment

3.2 Solution Requirements

- User registration
- Doctor approval
- Appointment management

3.3 Technology Stack

- Frontend: React
- Backend: Node.js/Express
- Database: MongoDB

4. Project Design

4.1 Problem Solution Fit

Provides digital, real-time doctor booking.

4.2 Proposed Solution

A role-based web application for users, doctors, and admin.

4.3 Solution Architecture

Frontend -> Backend API -> MongoDB

5. Project Planning & Scheduling

Week	Task
1	Requirements
2	UI Design
3	Frontend
4	Backend
5	Testing
6	Submission

6. Functional and Performance Testing

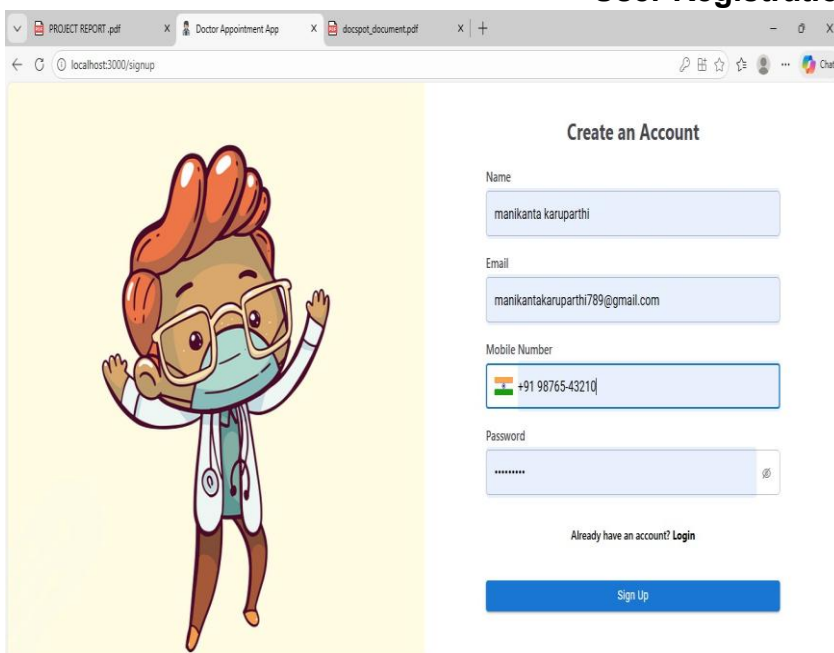
Performance Testing Tools: Postman, Browser Dev Tools

API Response Time: Less than 150ms

Database Query Time: Optimized

7. Results

User Registration



PROJECT REPORT.pdf x Doctor Appointment App x docspot_document.pdf x +

localhost:3000/signup

Create an Account

Name
manikanta karuparthi

Email
manikantakaruparthi789@gmail.com

Mobile Number
+91 98765-43210

Password

Already have an account? [Login](#)

[Sign Up](#)

Login

WELCOME TO BOOK A DOCTOR

Login

Email

manikantakarupathi789@gmail.com

Password

New here? Create a new account

Login

Booking Form

BOOK A DOCTOR

chinni

Profile Details

Owner

Admin

chinni

099565 78678

Created At: 06/27/2023, 3:11 PM

Doctor List

BOOK A DOCTOR

manikanta karupathi

Available Doctors

Select Doctor to add Appointments

Dr. yaswanth (cardio)	Dr. manikanta karupathi (nueero)	Dr. Devi (General)
Phone Number: 094402 42999	Phone Number: 098765 43210	Phone Number: 063021 03444
Address: abc123	Address: cba321	Address: bca124
Fee Per Visit: 500	Fee Per Visit: 300	Fee Per Visit: 500
Timings: 6:00 AM to 12:01 AM	Timings: 7:00 AM to 10:00 PM	Timings: 8:00 AM to 10:00 PM

8. Advantages & Disadvantages

Advantages:

- Real-time booking
- Scalable
- Simple UI

Disadvantages:

- No payment gateway- Basic UI design

9. Conclusion

DocSpot provides an efficient online doctor appointment booking system connecting patients, doctors, and admins.

10. Future Scope

- JWT Authentication
- Payment gateway
- Cloud Deployment
- Mobile App
- SMS/Email Notifications