

Saylani Mass IT Training

Doctor's Appointment System Hackathon Task

This document serves as a comprehensive guide for hackathon project focused on developing a Doctor's Appointment System. The project involves creating a platform that streamlines the process of scheduling and managing doctor's appointments, enhancing the patient experience and optimizing healthcare services. The system will be built using Next.js (Web) React Native (Mobile) for the frontend and MongoDB as the backend database.

Key Features:

1. Appointment Management

- Implement features to manage appointments efficiently:
 - Allow patients to view available slots based on the doctor's schedule.
 - Enable patients to book/cancel appointments.
 - Provide reminders for upcoming appointments to both doctors and patients.

2. User Interface

- Design a user-friendly interface for both doctors and patients:
 - Doctor Interface:
 - Display schedules and manage appointment slots.
 - · View patient details and medical history.
 - Patient Interface:
 - Browse available doctors and their schedules.
 - Book, reschedule, or cancel appointments easily.

Technology Stack

• Frontend: Next.js or React Native

• Database: MongoDB

Collections and Documents

Database Schema

- Doctors:
 - Attributes: Name, Specialization, Contact Information, Schedule, etc.
- Patients:
 - Attributes: Name, Contact Details, Medical History, etc.
- Appointments:
 - Record appointments scheduled between doctors and patients.
 - Attributes: Doctor ID, Patient ID, Appointment Date & Time, Notes, etc.



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- doctors (collection)

- doctorld 1 (document)
- name: "Dr. John Doe"
- specialization: "Cardiologist"
- contactInfo: "contact@example.com"
- schedule (subcollection)
- slotId 1 (document)
- startTime: Timestamp
- endTime: Timestamp
- available: true/false
- slotId_2 ...
- ... other doctor details

- patients (collection)

- patientId_1 (document)
 - name: "Alice Smith"
- contactDetails: "alice@example.com"
- medicalHistory: "Previous surgery in 2018"
- ... other patient details

- appointments (collection)

- appointmentId_1 (document)
- doctorId: "doctorId 1"
- patientId: "patientId 1"
- dateTime: Timestamp
- notes: "Follow up appointment"
- ... other appointment details