An advanced booking and medical data management application

Medical Appointment Management System

Project Overview

- The Medical Appointment Management System helps patients book appointments easily, track estimated wait times, and improves healthcare facility efficiency.

Technologies Used

- - Backend: Django (Django Rest Framework - DRF)
- - Frontend: React
- - Database: MySQL

Key Features

- Role-based access for Practitioners, Nurses, and Assistants

- Medical data management (General medical history, visit notes)

- Appointment booking, scheduling, and wait time tracking

- Prescription management with PDF export and email sending

User Roles

- Practitioner: Views medical data, schedules appointments, and issues prescriptions

- Nurse: Views medical data and schedules appointments

- Assistant: Adds patient info and books appointments, but cannot access medical records

- Patient: Books and tracks appointments

Database Structure (Draft Schema)

- USERS (PRACTITIONER, NURSE, ASSISTANT, PATIENT)

- APPOINTMENTS (PATIENT, DOCTOR, DATE, STATUS)

- MEDICAL RECORDS (HISTORY, VISIT NOTES, PRACTITIONER)

- PRESCRIPTIONS (PATIENT, MEDICATIONS, PRACTITIONER, PDF EXPORT)

Development Plan

1. Set up Django backend with MySQL

2. Build database models and API endpoints

3. Develop React frontend with user authentication

4. Implement role-based access control

5. Develop appointment booking and medical data management features

6. Add prescription management (PDF export, email sending)