

Topic : Hospital Management System

Team No : 1

Team Member Names:

Sujal Anil Dusane

Priyanka Basavaraj Bhadrappanavar

Joevita Faustina Doss Felix Anthony Raj

Vindhya Vasini Kaku

Yung-Rou Ko

Business Problem Statement

Efficient hospital appointment management is essential for both patients and healthcare providers. Traditional appointment scheduling methods are prone to inefficiencies such as double bookings, long wait times, and scheduling conflicts. Additionally, managing doctor availability, patient records, and emergency cases manually results in administrative burdens and delays in medical services.

The Hospital Appointment Management System aims to address these challenges by developing a database-driven solution that optimizes scheduling, reduces wait times, prioritizes urgent cases, and ensures secure access to patient data. This system will streamline hospital operations while improving patient satisfaction.

Mission Objectives

The database is made to meet the following main goals:

Easy Scheduling of Appointments

Depending on the doctor's availability, patients can make, change, and cancel appointments. The system lessens scheduling problems and avoids overbooking.

Management of Doctor Availability

Doctors are able to instantly adjust their availability. By avoiding duplicate bookings, the system ensures workload balance.

Managing Queues and Cutting Down on Wait Times

Giving emergency cases precedence over regular examinations. To improve the patient experience, estimated wait times are displayed.

Access Control Based on Roles

Patients have access to their past appointments. Physicians are solely able to control their own schedules. Admins have the ability to keep an eye on all appointments and change reservations as necessary.

Compliance & Data Security

Protect private patients and appointment data with encryption. Put in place stringent access control measures to safeguard private health data.