

# Project Overview

The Healthcare Analytics System is designed to manage and analyse data within a healthcare facility, providing a comprehensive view of patient care, doctor performance, billing, and staff management. This system integrates various aspects of healthcare data to facilitate better decision-making, streamline operations, and improve patient outcomes.

## Tables and Their Functionalities

### Patients Table

Stores information about patients including their personal details, contact information, and status.

### Doctors Table

Contains details about doctors, their specialties, and contact information.

### Appointments Table

Tracks appointments between patients and doctors, including appointment dates and statuses.

### MedicalRecords Table

Records medical information about patients, including diagnoses, treatments, and the date of the record.

### Prescriptions Table

Maintains details about prescriptions issued to patients, including medication details and dosage.

### Billing Table

Manages billing information for patients, tracking amounts, billing dates, and payment statuses.

### Departments Table

Organizes information about different departments in the healthcare facility and their head doctors.

### HospitalStaff Table

Contains details about the hospital staff, their positions, and the departments they belong to.

## Functionality Overview

### Patient Management

Track and manage patient details including personal information, contact details, and status.

### Doctor Management

Maintain records of doctors, their specialties, and contact information.

### Appointments Scheduling and Tracking

Schedule, track, and update appointment details.

### Medical Records Maintenance

Document diagnoses, treatments, and other medical records for patients.

### Prescription Management

Manage and track prescriptions issued to patients, including medication details and dosage instructions.

### Billing and Payment Tracking

Handle billing processes, track payment statuses, and manage financial records.

### Department and Staff Management

Organize and manage information about various departments and their head doctors. Track hospital staff details, their positions, and departmental associations.

## Conclusion

The Healthcare Analytics System provides a robust framework for managing various aspects of healthcare data, enabling healthcare providers to deliver better patient care and streamline their operations. By integrating patient management, doctor performance tracking, appointment scheduling, medical record maintenance, prescription management, billing, and staff organization, this system offers a comprehensive solution for healthcare analytics.