

# Hospital Patient Monitoring System

## Background

Since managing tons of patient information is a very tough but crucial task for the hospital. A good patient management system is essential for all the patients and employees of the hospital. This database system will play a very important role in providing quality healthcare services and enhancing the overall patient experience.

## Mission Statement/Objectives

Our mission is to develop a Hospital Patient Monitoring System that could record all the information related to patients and enhance hospital operations. The primary objectives of this system are as follows:

**Patient Records Management:** Maintain detailed records of all patients, including their personal information, medical history, and treatment plans.

**Patient Admissions and Discharge:** Streamline the admission and discharge processes for patients. Keep track of admission dates, discharge dates, and relevant documentation.

**Billing and Payments:** Generate and manage patient bills, process payments, and track outstanding balances. Provide patients with clear and transparent billing information.

**Appointment Scheduling:** Allow patients to schedule appointments with doctors or departments, helping in efficient resource allocation.

**Patient Classification:** Categorize patients into different subtypes, such as "InTreatingPatient" and "DischargedPatient," to track their current status and treatment history.

**Doctor-Patient Assignment:** Assign patients to specific doctors based on their health conditions and treatment requirements.

**Nurse Assignment:** Assign nurses to patients and track their responsibilities in assisting patients with care and medication.

**Medical Equipment Management:** Track the availability, usage, and maintenance schedules of medical machines and equipment to ensure they are in good working condition for patient care.

**Medicine Inventory:** Manage the inventory of medicines, track prescriptions, and monitor medication administration to patients.

**Medical Reports:** Store and retrieve medical reports, test results, and diagnostic images for reference and sharing among healthcare providers.

**Hospital Specializations:** Maintain information about the hospital's specialization areas (e.g., Neurology, Cardiology) to facilitate patient referrals and departmental coordination.

**Pharmacy Integration:** Integrate with the hospital's pharmacy to ensure timely availability of prescribed medications and manage billing for medications.

**Department Management:** Manage hospital departments, allocate resources, and track department-specific data, such as patient flow and treatment success rates.

**Visitor Logs:** Maintain visitor records, including visitor names, visiting hours, and reasons for visits. Ensure the security and safety of patients and hospital facilities.

Our Hospital Patient Management Database System aims to not only record patient information but also streamline hospital operations. Furthermore, we hope this system could enhance the overall patient experience by managing patient data and hospital resources efficiently. By focusing on patient-centric features and data accuracy, the system will contribute to the delivery of high-quality healthcare services.