HOSPITAL MANAGEMENT SYSTEM

Patients: This entity represents individuals who receive medical services at the hospital. It includes essential data such as a unique identifier for each patient, their personal details such as name, age, and gender, as well as contact information to ensure effective communication.

Doctors: This entity comprises medical professionals who provide healthcare services at the hospital. It stores relevant information about each doctor, including their unique identification, full name, area of expertise, and contact details for coordination purposes.

Departments: This entity represents the various specialized units within the hospital that cater to specific medical needs. It holds essential data about each department, including a unique identifier, the department's name for identification, and a brief description outlining the department's responsibilities and services.

Appointments: This entity is responsible for managing scheduled medical appointments between patients and doctors. It holds vital information, such as a unique identifier for each appointment, references to the patient and the doctor involved, and the appointment date and time to ensure proper coordination and organization of medical consultations.

Medications: This entity encompasses a catalog of prescribed drugs available at the hospital. It contains essential details about each medication, including a unique identifier, the medication's name for identification, dosage information, and instructions for proper usage to facilitate safe and accurate medication management.

Prescriptions: This entity maintains records of prescribed medications for patients. It includes critical information, such as a unique identifier for each prescription, references to the patient and the doctor involved, the prescription date, and details of the prescribed medication. This helps in tracking patient medication history and ensures appropriate follow-up.

Tests: This entity encompasses a list of various medical examinations offered at the hospital. It includes key information, such as a unique identifier for each test, the test's name for identification, a description of the test's purpose, and the associated cost. This enables medical staff to request and perform necessary tests efficiently.

Test_Results: This entity stores the results of medical tests performed on patients. It contains critical details, such as a unique identifier for each test result, references to the test and the patient involved, the date when the test result was obtained, and a comprehensive report with the outcome. This aids in monitoring patient health and making informed medical decisions.

Rooms: This entity represents the various types of rooms available within the hospital. It includes essential data such as a unique identifier for each room, the room type for categorization, and the current availability of number of beds status. This facilitates efficient room management and patient allocation.

Wards: This entity represents the various types of wards available within the hospital. It includes essential data such as a unique identifier for each ward, the ward type for categorization, and the current availability of beds status. This facilitates efficient ward management and patient allocation.

Beds: This entity represents the various types of beds available within a ward in the hospital. It includes essential data such as a unique identifier for each bed, the bed type for categorization, and the current availability of beds status. This facilitates efficient bed and ward management and patient allocation.

Admissions: This entity tracks patient admission to hospital rooms. It includes important information, such as a unique identifier for each admission record, references to the patient being admitted, the admission date, the discharge date when the patient leaves the room, and the assigned room during their stay. This aids in organizing patient care and ensuring smooth hospital operations.

Nurses: This entity represents the nursing staff responsible for providing patient care and medical assistance at the hospital. It includes essential details about each nurse, such as a unique identifier, their full name, the department they are assigned to, and contact information for effective communication and coordination.

Surgeries: This entity manages the records of surgical procedures performed at the hospital. It holds critical information, such as a unique identifier for each surgery, the surgery's name, a description of the procedure, the date of the surgery, and references to the patient and the doctor involved. This enables efficient scheduling and tracking of surgical operations.

Inpatient_Medications: This entity tracks medications administered to patients who are admitted to the hospital. It includes important details, such as a unique identifier for each medication administration, references to the patient and the admission record, the medication being administered, the prescribed dosage, and administration times. This ensures accurate medication management during the patient's hospital stay.

Billing: This entity manages the billing records for services provided to patients at the hospital. It includes critical information, such as a unique identifier for each bill, references to the patient involved, the billing date, and the total amount due. This facilitates accurate and timely billing processes.

Payments: This entity stores information about payments made by patients to settle their medical bills. It includes essential details, such as a unique identifier for each payment, references to the bill being paid, the payment date, and the amount paid. This aids in tracking financial transactions and maintaining payment records.

Shifts: This entity represents the different shifts assigned to nurses for providing continuous patient care. It includes important information, such as a unique identifier for each shift, the shift type (e.g., morning, afternoon, night), the shift's start and end time, and references to the nurse assigned to the shift. This ensures appropriate nursing coverage around the clock.

Birth_Records: This entity maintains records of births that occur within the hospital. It includes vital information, such as a unique identifier for each birth record, the names of both parents, the baby's name, the birth date, and references to the doctor present during the delivery. This facilitates the proper documentation of childbirths.

Ambulance: This entity represents the hospital's ambulance services, including details of each ambulance available for emergency medical transportation. It contains essential information, such as a unique identifier for each ambulance, the ambulance number, the type of ambulance (e.g., Advanced Life Support, Basic Life Support), and the current availability status. This aids in efficient ambulance dispatch and management.

Medical_Equipment: This entity manages information about medical equipment used within the hospital. It includes critical details, such as a unique identifier for each equipment, the equipment's name, the equipment type (e.g., diagnostic, therapeutic), the quantity available, and references to the department responsible for the equipment's use. This facilitates efficient equipment tracking and maintenance.

Lab_Technicians: This entity represents laboratory technicians responsible for conducting medical tests and analyzing samples. It includes important information, such as a unique identifier for each technician, their full name, the department they work in, and contact information for effective communication and coordination.

Blood_repository: This entity manages the hospital's blood bank, containing information about various blood types and their available quantities. It includes details such as a unique identifier for each blood entry, the blood type (e.g., A+, B-, O+), and the quantity available for each blood type. This facilitates proper blood inventory management and timely availability for patients in need of blood transfusions.

Blood_Donors: This entity maintains records of blood donors who voluntarily contribute blood to the hospital's blood bank. It includes essential details, such as a unique identifier for each donor, the donor's name, blood type, and contact information. This aids in maintaining a pool of potential donors for blood emergencies.

Blood_Transfusions: This entity records instances of blood transfusions performed on patients. It contains critical information, such as a unique identifier for each transfusion record, references to the patient receiving the transfusion, the date of the transfusion, the blood type used, and the quantity used. This ensures accurate tracking of blood transfusion procedures.

Ambulance_Calls: This entity tracks emergency calls received for ambulance services. It includes important details such as a unique identifier for each call, references to the patient in need of emergency transportation, the date and time of the call, the reason for the call, and the ambulance dispatched for the service. This facilitates efficient management of emergency responses.

Imaging_Reports: This entity stores reports generated from medical imaging procedures, such as X-rays or MRI scans. It includes essential information, such as a unique identifier for each report, references to the patient and the imaging test involved, the date of the report, and detailed findings from the imaging procedure. This aids in accurate record-keeping and diagnosis.

Hospital_Staff: This entity represents the diverse staff members working at the hospital. It includes critical details about each staff member, such as a unique identifier, their full name, job designation, and contact information. This facilitates effective communication and staff management.

Medical_Procedures: This entity contains information about various medical procedures performed at the hospital. It includes essential details such as a unique identifier for each procedure, the procedure's name, a description of the procedure, and references to the department responsible for performing the procedure. This aids in efficiently scheduling and conducting medical interventions.

Salary_group: This entity manages salary information for hospital staff. It includes important details such as a unique identifier for each salary group, the salary amount, and the increments. This enables accurate salary disbursement and financial record-keeping.

Discharge_Summary: This entity contains summaries of patient discharges from the hospital. It includes critical information, such as a unique identifier for each summary, references to the patient being discharged, the discharge date, the reason for discharge, and a summary of the patient's treatment and progress during their hospital stay. This aids in providing comprehensive post-discharge information.

Medical_Emergencies: This entity tracks medical emergencies occurring within the hospital premises. It includes important details, such as a unique identifier for each emergency record, the date and time of the emergency, the patient involved, a brief description of the emergency situation, and the medical staff attending to the emergency. This facilitates efficient emergency response and documentation.

Additional Requirements

- **The detailed profile of doctor**
- **The payment of total bill by 5 to 10 installments.**