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Using ERD and used case diagram draw a hospital management system

This diagram represents a hospital management system that encompasses various roles and interactions within a healthcare institution.

Key Use Cases:

 * Patient Management:

   * Admission/Registration: New patients are registered with their personal information, medical history, and insurance details.

   * Appointment Scheduling: Patients can schedule appointments with doctors or specialists.

   * Medical Record Management: Medical records are created and maintained, including diagnosis, treatment plans, and medication prescriptions.

   * Billing and Insurance: Billing information is generated and processed, and insurance claims are filed.

 * Staff Management:

   * Staff Information: Staff members' personal and professional information is recorded.

   * Scheduling: Staff schedules are created and managed, including shifts and assignments.

   * Performance Management: Performance evaluations and feedback are provided.

   * Payroll and Benefits: Payroll processing and benefits administration are handled.

 * Department Management:

   * Departmental Information: Information about different departments within the hospital is

maintained.

   * Resource Allocation: Resources like equipment and staff are allocated to departments.

   * Performance Tracking: Department performance is monitored and evaluated.

Additional Use Cases:

 * Inventory Management: Tracking and managing medical supplies and equipment.

 * Laboratory Management: Processing and analyzing lab tests.

 * Pharmacy Management: Dispensing medications and managing drug inventory.

 * Reporting and Analytics: Generating reports on patient demographics, staff performance, and financial data.

Key Interactions:

 * Patient-Staff Interaction: Patients interact with various staff members, including doctors, nurses, and administrative staff.

 * Staff-Staff Interaction: Different staff members collaborate and communicate to provide patient care.

 * Staff-System Interaction: Staff members use the system to manage patient records, schedule appointments, and access other relevant information.

Additional Considerations:

 * Security and Privacy: The system needs to have robust security measures to protect patient data and confidential information.

 * Integration with Other Systems: The system may need to integrate with other healthcare systems, such as electronic health records (EHRs) and billing systems.

 * Scalability: The system should be able to handle a growing number of patients and staff members.

Hospital Management UML Diagram

Class Organization

Person

title: String
givenName:
String
middleName: String
familyName: String
/name: FullName
birthDate: Date
gender: Gender
/homeAddress: Address
phome: Phome

Hospital

name: String{id}
/address: Address
Phone: Phone

Department

Patient

id: String
^name: FullName
^gender: Gender
^birthDate: Date
/age: Integer
accepted: Date
sickness: History
prescription: String[*]
allergies: String[*]
specialRwqš: String[*]

Staff

joined: Date
education:
String[*]
certification:
String[*]
languages:
String[*]

**Operations
Staff**

**Aministrative
Staff**

**Technical
Staff**

Doctor

specialty: String[*]
locations: String[*]

Nurse

**Front Desk
Staff**

Technician

Technologist

Receptionist

**Surgical
Technologist**

Surgeon