Hospital Management System

A. List of Processes

1. Patient Management

   - Register Patient

   - Update Patient Profile

   - View Medical History

2. Appointment & Scheduling

   - Book Appointment

   - Cancel Appointment

   - Assign Doctor

3. Medical Records & Diagnosis

   - View Patient Records

   - Diagnose Patient

   - Prescribe Medicine

   - Request Lab Tests

   - View Lab Reports

4. Billing & Payment

   - Generate Invoice

   - Process Payment

   - Manage Insurance

5. Pharmacy Management

   - View Prescriptions

   - Dispense Medicines

   - Update Medicine Inventory

6. Laboratory & Reports

   - Conduct Lab Tests

   - Generate Reports

   - Send Reports to Doctor

7. Admin & User Management

   - Manage Users

   - Manage Doctors & Staff

   - Monitor System

B. List of Tables (Database Design)

1. Patients - Stores patient details (ID, name, age, contact, etc.)

2. Appointments - Stores appointment details (date, doctor, patient)

3. Doctors - Stores doctor details (ID, specialization, schedule)

4. MedicalRecords - Stores patient medical history

5. Prescriptions - Stores prescribed medicines by doctors

6. Payments - Stores payment records (bills, invoices, insurance)

7. Pharmacy - Stores medicine inventory details

8. LabReports - Stores lab test results and reports

9. Users - Stores login credentials of doctors, admin, staff

C. List of External Entities

1. Patient - Registers, books appointments, views medical records

2. Doctor - Diagnoses, prescribes medicines, checks reports

3. Receptionist - Manages appointments, patient registration

4. Admin - Manages system users, hospital data

5. Pharmacist - Dispenses medicines, updates inventory

6. Lab Technician - Conducts tests, generates reports

7. Insurance Company - Processes patient medical insurance

8. Payment Gateway - Handles online payments

9. Government Health Database - Sends hospital records, compliance data