description

The goal of this hospital management system is to design a well-structured database to efficiently manage the diverse aspects of patient care, medical appointments, staff distribution across departments, and financial transactions.

**Patients** are characterized by their unique identifier (ID), first name, last name, date of birth, gender, phone number, and email. These patients are distributed among various hospital **departments,** creating a relationship between the patient entity and the department entity.

**Appointments**, a crucial aspect of patient-doctor interactions, are scheduled for visits. Each appointment is associated with a specific **doctor**, marked by their unique attributes such as ID, name, last name, birthday, gender, phone number, and email. The appointment entity includes details like the date and time of the visit, as well as status, forming a connection between patients and doctors.

The hospital's organizational structure includes **staff members** who are distributed across different departments. These staff members have unique identifiers (ID) along with their names, last names, emails, and phone numbers. The staff entity is linked to the department entity, reflecting the distribution of employees in various sections of the hospital.

To manage the financial aspects of the hospital, a **Finance Services Unit** is established. This unit is intricately connected to patients, doctors, and employees through foreign keys, creating a comprehensive financial record. Financial transactions, including details like transaction ID, date, amount, and a brief description, link to specific patients seeking medical services, doctors providing care, and staff members contributing to the hospital's operations.

This database design emphasizes the relationships between patients, doctors, staff, and financial transactions, facilitating the management of healthcare services, appointments, staff distribution, and financial records within the hospital. It promotes data integrity, ensures efficient information retrieval, and supports the overall organization and functioning of the healthcare facility.

The entities and their attributes are :

Patient:

* PatientID (Primary Key)
* FirstName
* LastName
* Date Of Birth
* Gender
* Contact Number
* email

Doctor:

* DoctorID (Primary Key)
* FirstName
* LastName
* DepartmentID(Foreign Key referencing Department)
* Contact Number
* Email

Appointment:

* AppointmentID (Primary Key)
* PatientID (Foreign Key referencing Patient)
* DoctorID (Foreign Key referencing Doctor)
* Department ID
* Appointment Date
* StartTime
* Status (e.g., Scheduled, Completed, Canceled)

Department:

* DepartmentID (Primary Key)
* Department Name
* Description

Staff:

* StaffID (Primary Key)
* FirstName
* LastName
* DepartmentID (Foreign Key referencing Department)
* Position
* Contact Number
* Email

Financial services Unit:

* TransactionID (Primary Key)
* PatientID (Foreign Key referencing Patient)
* DoctorID (Foreign Key referencing Doctor)
* StaffID (Foreign Key referencing Staff)
* Transaction Date
* Amount
* Description