**Hospital Databases**

This document provides an overview of the database schema, including the tables, columns, and relationships between primary keys and foreign keys.

**Tables**

**1. Medical\_record**

**Description**

This table stores the medical records of patients.

**Columns**

* **record\_id** (int, primary key): Unique identifier for each medical record.
* **appointment\_id** (int, foreign key): Reference to the appointment\_id in the Appointment table.
* **insurance\_id** (int, foreign key): Reference to the insurance\_id in the Insurance table.
* **patient\_name** (varchar(250)): Name of the patient.
* **date\_of\_birth** (Date): Date of birth of the patient.
* **address** (varchar(250)): Address of the patient.
* **emergency\_contact** (int): Phone number of the emergency contact.
* **emergency\_contact\_name** (varchar(250)): Name of the emergency contact.

**Foreign Key Relationships**

* **appointment\_id**: References appointment\_id in the Appointment table. This creates a relationship where each medical record is linked to a specific appointment.
* **insurance\_id**: References insurance\_id in the Insurance table. This creates a relationship where each medical record is linked to a specific insurance record.

**2. Appointment**

**Description**

This table stores information about patient appointments.

**Columns**

* **appointment\_id** (int, primary key): Unique identifier for each appointment.
* **appointment\_date** (Date): Date of the appointment.
* **doctor\_name** (varchar(250)): Name of the doctor.
* **specialization** (varchar(250)): Specialization of the doctor.
* **diagnosis** (text): Diagnosis information.
* **medication** (text): Medication information.

**3. Insurance**

**Description**

This table stores insurance information related to patients.

**Columns**

* **insurance\_id** (int, primary key): Unique identifier for each insurance record.
* **insurance\_provider** (varchar(250)): Name of the insurance provider.
* **policy\_number** (varchar(250)): Policy number of the insurance.
* **insurance\_company** (varchar(250)): Name of the insurance company.

**Relationships**

**Primary Key and Foreign Key Relationships**

1. **Medical\_record**
   * Primary Key: record\_id
   * Foreign Key: appointment\_id references Appointment(appointment\_id)
   * Foreign Key: insurance\_id references Insurance(insurance\_id)
2. **Appointment**
   * Primary Key: appointment\_id
3. **Insurance**
   * Primary Key: insurance\_id

**Relationship Summary**

* The Medical\_record table is the central table with primary key record\_id and links to both Appointment and Insurance tables using foreign keys appointment\_id and insurance\_id, respectively.
  + This establishes a one-to-one or many-to-one relationship between Medical\_record and Appointment (one medical record is linked to one appointment).
  + Similarly, it establishes a one-to-one or many-to-one relationship between Medical\_record and Insurance (one medical record is linked to one insurance record).
* The Appointment table stores information about patient appointments and has appointment\_id as the primary key.
* The Insurance table stores insurance details and has insurance\_id as the primary key.