Patient Database System for a Doctor's Office

Background

This project addresses the need for a patient database system in a doctor's office. By focusing on core entities—patients, conditions, and allergies—the system aims to provide quick access to individual patient details while also offering broader insights into the health trends within the patient population. This system is designed to improve patient care, optimize record management, and assist doctors in decision-making.

Application Requirements

1. **Patient Information Management:**
   - Maintain comprehensive patient records with attributes such as:
     i. Unique Patient Identification Number (PIN)
     ii. First name, last name, and middle name
     iii. Date of birth, gender, phone, and address
2. **Conditions Management:**
   - Track medical conditions with attributes such as:
     i. Condition name and description
3. **Allergies Management:**
   - Maintain allergy data with attributes such as:
     i. Allergy name
4. **Relationships:**
   - Patients and Conditions: Captured through a patient_conditions table with:
     i. Composite primary key: PIN, Condition Name
     ii. Additional attributes: Date of diagnosis
   - Patients and Allergies: Captured through a patient_allergies table with:
     i. Composite primary key: PIN, Allergy Name
     ii. Additional attribute: Last updated

Sample Queries

Fetch a patient's information based on different search results, fetch all patients, list all patients' allergies, list all patients' conditions, etc.

ER Model