

# Pharmacy Store

**SIDHANT KR AGRAWAL(2021495) || PARAS DHIMAN(2021482)**

## **Relationship Schema:**

Patient = (PatientID, Fname, Mname, Lname, Street, City, Zip Code, State, Country, DOB, type CN, Contact No., Gender, Email, Age)

Doctors = (DoctorID, Fname, Mname, Lname, type CN, Contact No., Email)

Prescription = (PrescriptionID, DoctorID, PatientID, Dosage, No\_Of\_Days, StartDate, EndDate, Date)

Medicine = (MedicineID, Name, price)

Pharmacist = (PharmacistID, Name, typeCN, contactNo., Email, yearOfGraduation, Field of Study, branch ID)

Suppliers = (SupplierID, Name, TypeCN, Contact No., Email, Address )

Appointment = (AppointmentID, PatientID, DoctorID, Date, Time, Reason)

Orders = (OrderID, PatientID, MedicineID, PharmacistID, Quantity, Date, Delivery Status)

Payments = (PaymentID, OrderID, Amount, Payment Method, Date)

Branches = (BranchID, Location, Contact No., Email)

Stock = (StockID, MedicineID, BranchID, Quantity, Threshold, PharmacistID)

Policy Provider = (ProviderID, Name, Contact No., Email, Address, PatientID)

Medical History = (MedicalHistID, PatientID, Description)

### **Scope of Work:**

The system has several entities including Patients, Doctors, Prescriptions, Medicines, Pharmacists, Suppliers, Appointments, Orders, Payments, Branches, Policy Providers, and Medical Histories. Each of these entities has several attributes associated with it.

The Patients entity has attributes such as PatientID, Name (subattributes include First name, Middle name, Last name), Address (subattributes include Street, City, Zip Code, State, and Country), Date of Birth, Contact information (subattributes include Type of Contact Number, Contact Number, Gender, Email), and Age (which is a derived attribute from the Date of Birth attribute).

The Doctors entity has attributes such as DoctorID, Name (subattributes include First name, Middle name, Last name), Contact information (subattributes include Type of Contact Number and Contact Number), and Email. This entity is connected to the Specialization entity, which includes DoctorID and Description.

The Prescriptions entity includes PrescriptionID, DoctorID, PatientID, Dosage, Number of Days, Start Date, End Date, and Date. The Medicines entity has attributes such as MedicineID, Name, and Price. This entity is connected to the Composition entity, which includes MedicineID and Ingredient type.

The Pharmacists entity has attributes such as PharmacistID, Name, Contact information (subattributes include Type of Contact Number, Contact Number, and Email), Year of Graduation, Field of Study, and Branch ID. The Suppliers entity includes SupplierID, Name, Contact

information (subattributes include Type of Contact Number, Contact Number, and Email), and Address.

The Appointments entity includes AppointmentID, PatientID, DoctorID, Date, Time, and Reason. The Orders entity includes OrderID, PatientID, MedicineID, PharmacistID, Quantity, Date, and Delivery Status. The Payments entity includes PaymentID, OrderID, Amount, Payment Method, and Date.

The Branches entity includes BranchID, Location, Contact Number, and Email. The Stock entity includes StockID, MedicineID, BranchID, Quantity, Threshold, and PharmacistID. The Policy Provider entity includes ProviderID, Name, Contact information (subattributes include Contact Number and Email), Address, and PatientID. The Medical History entity includes MedicalHistID, PatientID, and Description.

The relationship between Prescriptions and Medicines is many-to-many, and it is stored in another table called Pres\_Medicine, which maps the two entities. The relationship between Medicines and Suppliers is also many-to-many, and it is stored in another table called Med\_Supp, which maps the two entities.

In summary, this is a comprehensive database design that captures various entities and their attributes, as well as the relationships between them.

## Stakeholders:

1. End-users: These are individuals who will be using the database, such as patients, doctors, pharmacists, suppliers, and policy providers. They will be interested in having access to relevant information stored in the database in an efficient and user-friendly manner.
2. Business owners: These are individuals or organizations who will be using the database for their business operations. They may have specific requirements for the data stored in the database and how it is used to support their operations.
3. Project Manager: This person is responsible for overseeing the entire project and ensuring that it is completed on time and within budget. They will be interested in ensuring that the database design meets the requirements of the stakeholders.
4. IT Department: This department will be responsible for the technical aspects of the project, such as database design, implementation, and maintenance. They will be interested in ensuring that the database is scalable, secure, and efficient.
5. Data Owners: These are individuals who own the data stored in the database. They will be interested in ensuring that the data is stored and used in an appropriate manner, and that their privacy is protected.
6. Regulators: These are government agencies or organizations that regulate the use of personal and sensitive information. They will be interested in ensuring that the database complies with relevant laws and regulations regarding data privacy and protection.

## Functional Requirements

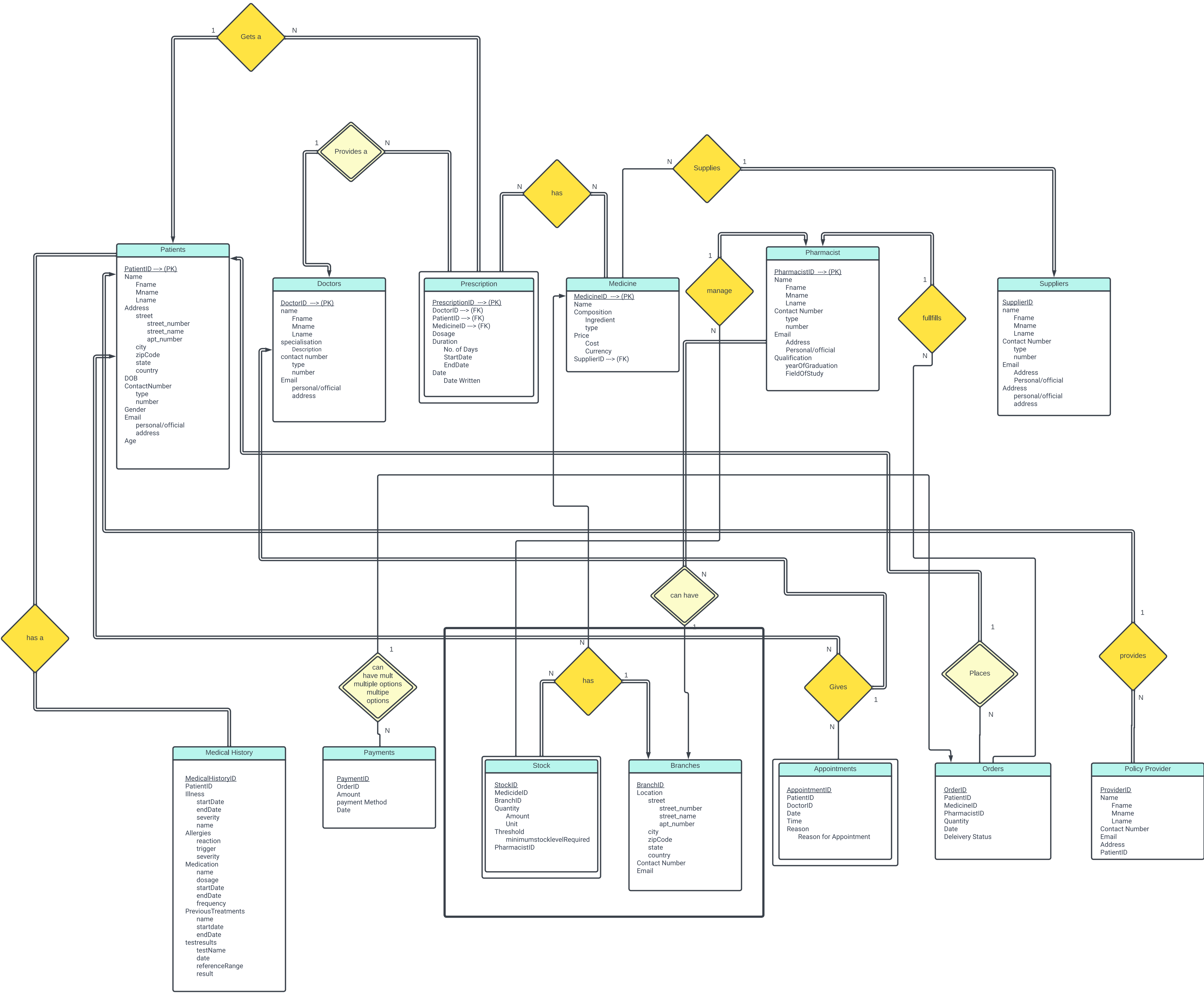
The application will provide a dynamic and interactive front-end driven by React.

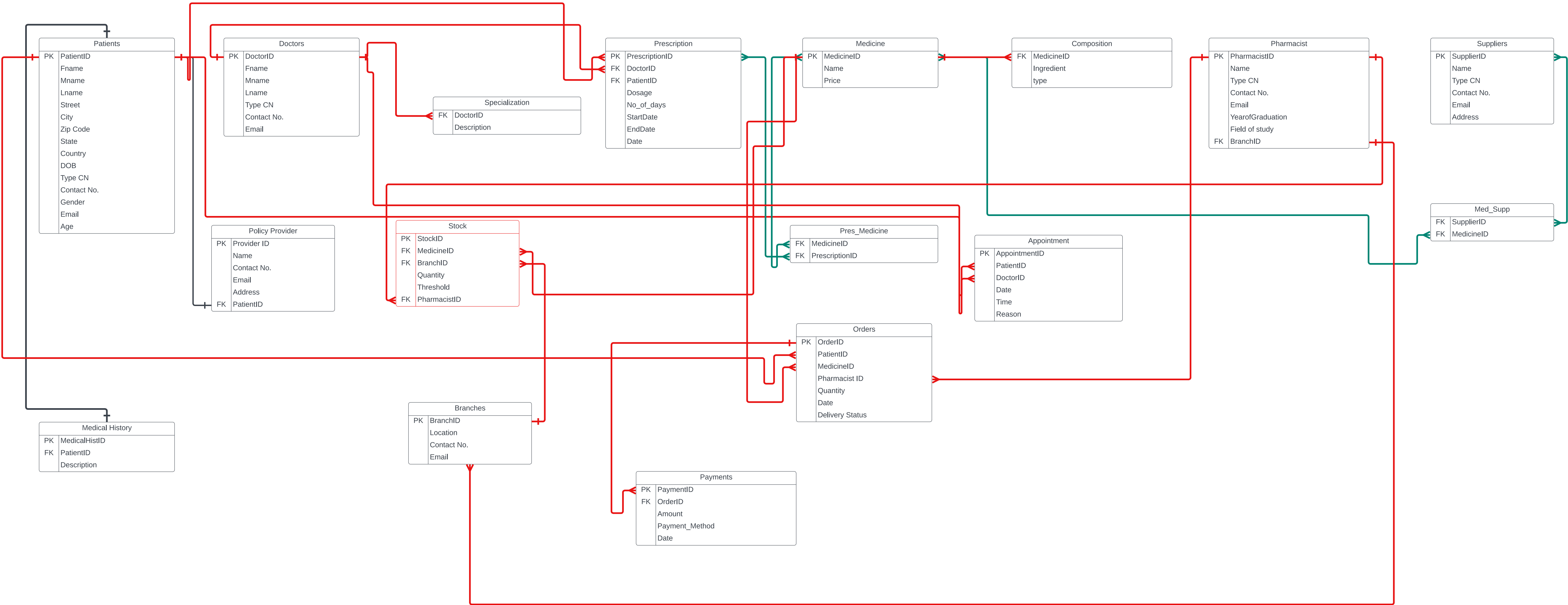
It would enable users to create and log in to an account, browse products, add items to their cart, and view order history.

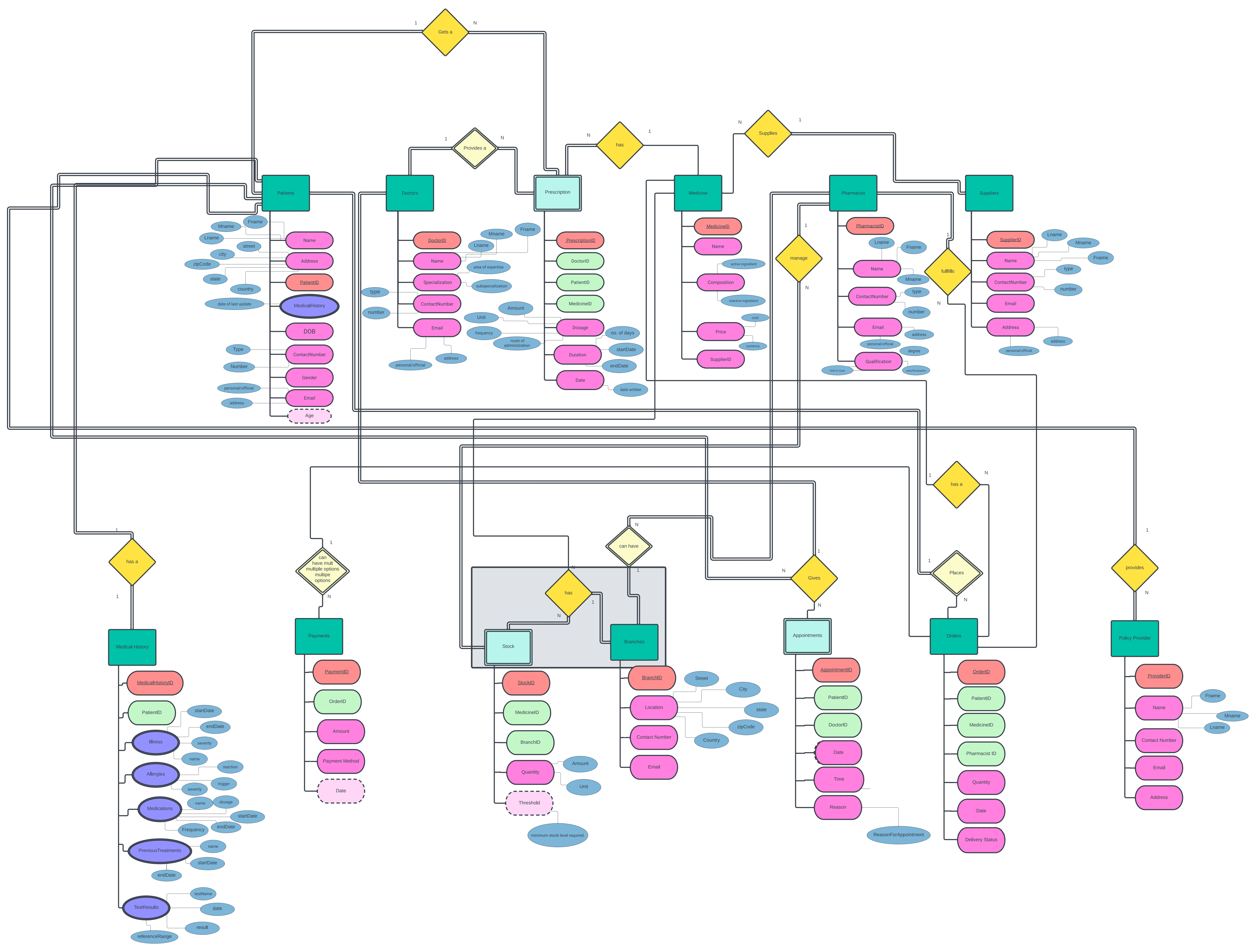
There will be a solid and efficient backend constructed using Django and

Python, with MySQL handling data storage and administration. The backend will interact with the database, which should :

- Securely store customer information and authenticate customer login attempts.
- able to retrieve and display product information
- create and manage cart
- process and validate payments
- Handle customer account updates









Nº 1

Policy Providers



Patient

1:N

Prescription

N:N

Medicine



Suppliers

Appointments

Orders

Medical History

Doctors

Pharmacist

Stock

Branches

Payments

Nº 1

Nº 1

Nº 1

Nº 1

1:N

1:N

1:N

1:N

1:N

1:N

1:N