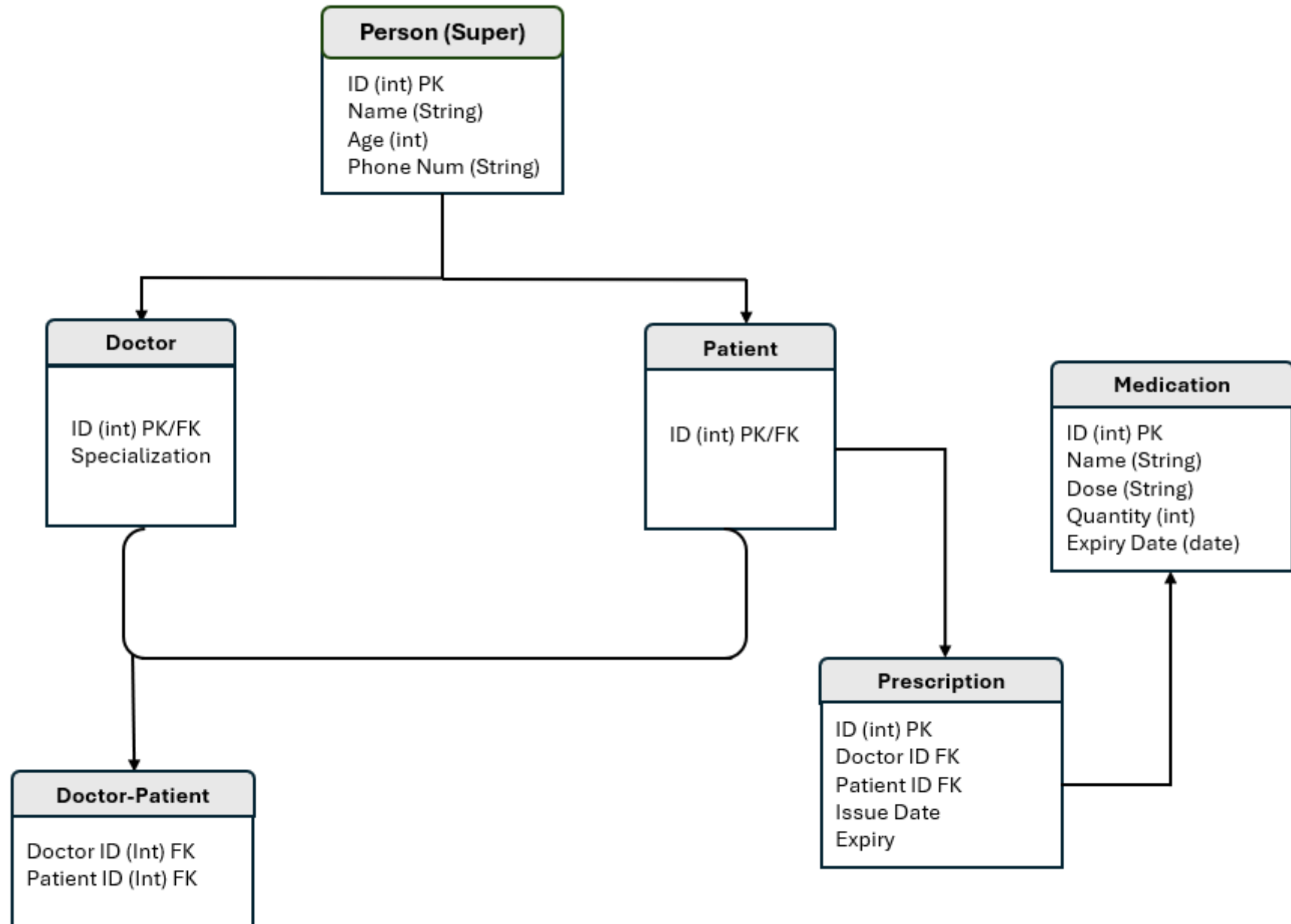


ERD



UML

Person Class

Person
<ul style="list-style-type: none">- Id: int- lastName: String- firstName: String- age: int- phone: String
<ul style="list-style-type: none">+ Person (String, String, String, String, int)+ getId(): int+ getLastName(): String+ setLastName(String)+ getFirstName(): String+ setFirstName(String): void+ getBirthDate(): LocalDate+ getPhoneNumber(): String+ setPhoneNumber(String): void+ calculateAge(LocalDate): int+ toString(): String

Patient Class

Patient
- medication: List<Medication> - prescription: List<Prescription>
+ addMedication():void + removeMedication():void + addPrescription():void + removePrescription():void + toString(): String

Doctor Class

Doctor
<ul style="list-style-type: none">- specialization: String- assignedPatients: List<Prescription>
<ul style="list-style-type: none">+ addPatient():void+ removePatient():void+ getPatients(): List<Patient>+ getNumberOfPatient():int+ removePrescription():void+ toString(): String

Medication Class

Medication

- Id: int
- name: String
- dose: String
- stockQuantity: int
- expiryDate: LocalDate

- + getId(): int
- + Doctor (Doctor)
- + getSpecialization(): String
- + setSpecialization(String): void
- + canAcceptPatients(): boolean
- + setIsAcceptingPatients(boolean): void
- + getPatient(Patient): void
- + addPatient(Patient): void
- + removePatient(Patient): void
- + clearPatient(): void
- + getNumberOfPatients(): int
- + getPatientList(): List<String>
- + toString(): String

Prescription Class

Prescription

- idCounter: int
- id: int
- doctor: Doctor
- patient: Patient
- medication: Medication
- issueDate: LocalDate
- expiryDate: LocalDate

- + Prescription(Doctor, Patient, Medication, String)
- + getId(): int
- + getDoctor():
- + getPatients():
- + getMedication():
- + getInstructions():
- + setInstructions(String): void
- + getPrescriptionDate(): LocalDate
- + getPrescriptionExpiry(): LocalDate
- + isExpired():
- + toString(): String

Medication Tracking System

- patients: List []
- doctors: List[]
- medication: Medication
- issueDate: LocalDate
- expiryDate: LocalDate

- +searchPatient(name: String): Patient
- + searchDoctor(name: String): Doctor
- + SearchMedication(name: String): Medication
- + addPatient(p: Patient): void
- + getDoctor(d: Doctor): void
- + addMedication(m: Medication): void
- + deletePatient(id: int) void
- + deleteDoctor(id: int) void
- + deleteMedication(id: int) void
- + editPatient(p: Patient): void
- + editDoctor(d: Doctor): void
- +editMedication(m: Medication): void
- +acceptingPrescription(prescriptionId: int, doctor: Doctor, patient: Patient, medication: Medication): Void
- + generateReport(): void
- + printPrscriptionsByDoctor(doc: Doctor): void
- +restockingMedication(id: int, quantity: int): void
- + toString(): String