Project Submission on Pharmaceutical Management System

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**Roll: 05-003-20**

**Project: Pharmaceutical Management System**

A database for a pharmaceutical management system with ER diagram and requiring steps-

# STEP 01 and 02: Identifying the Entities and the Attributes and Primary key for each Entity required.

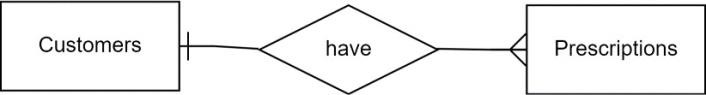
1. Customers (**customer\_id**, name, email, phone\_number, address, date\_of\_birth, gender, profession, medical\_history)
2. Suppliers (**supplier\_id**, name, contact\_person, phone, email, address, license\_number)
3. Medications (**medication\_id**, name, description, barcode, batch\_number, unit\_price, expiry\_date)
4. Prescriptions (**prescription\_id,** prescription\_date**,** doctor\_name**,** doctor\_contact**,** notes)
5. Prescription\_Items (**prescription\_item\_id**, dosage, quantity, instructions)
6. Sales (**sale\_id**, sale\_date, total\_amount, payment\_method)
7. Employees (**employee\_id**, name, email, phone, address, position, salary, hire\_date)
8. Shift\_Schedules (**shift\_id**, shift\_name, start\_time, end\_time)
9. Store\_branches (**branch\_id**, address, phone\_number, duration)
10. Purchases (**purchase\_id**, quantity, cost\_price)
11. Expenses (**expense\_id**, expense\_date, amount, description, category)

# Step 03 and 04: Identifying the relationship between entities and cardinality ratio and participation needed

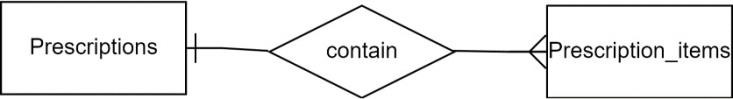
1. **Suppliers -**provide**-Medications**

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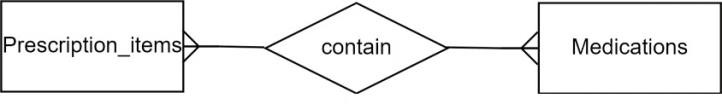
1. **Customers** -have- **Prescriptions**

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1. **Prescription -**contain- **Prescription\_items**

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1. **Prescription\_items -**contain- **Medications**

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1. **Sales -**belong to- **Customers**

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1. **Shift\_schedules -**assigned to- **Employees**

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1. **Store\_branches -**allocated to- **Employees**

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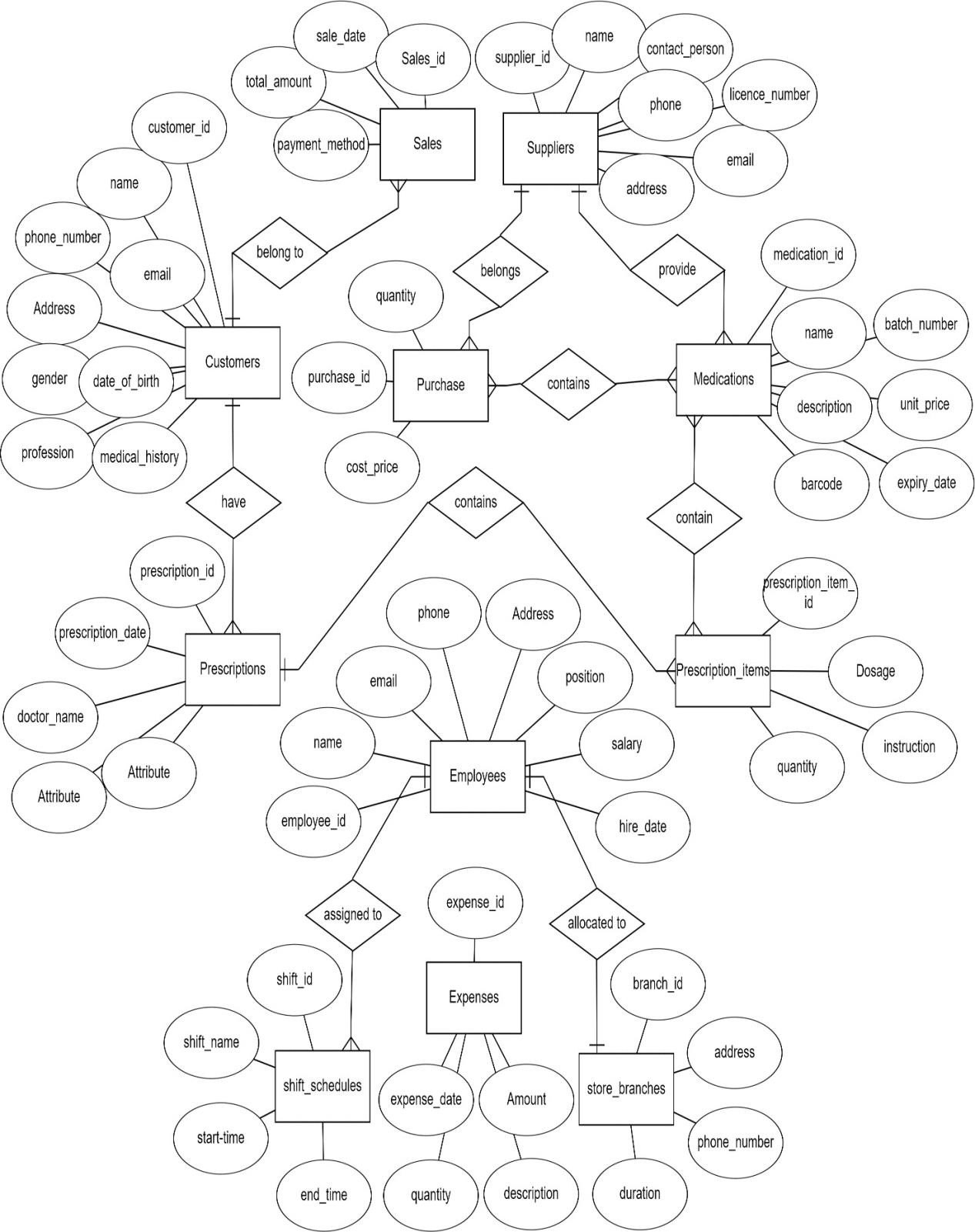
1. **Purchase -**belongs to- **Suppliers**

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1. **Purchase -**contains- **Medications**

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# Step 05: Drawing the Entity- Relationship Diagram (ERD)

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**Reduction to Database Schema**

1. Customers (**customer\_id**, name, email, phone\_number, address, date\_of\_birth, gender, profession, medical\_history)
2. Suppliers (**supplier\_id**, name, contact\_person, phone, email, address, license\_number)
3. Medications (**medication\_id**, supplier\_id, name, description, barcode, batch\_number, unit\_price, expiry\_date)
4. Prescriptions (**prescription\_id,** customer\_id**,** prescription\_date**,** doctor\_name**,** doctor\_contact**,** notes)
5. Prescription\_Items (**prescription\_item\_id**, prescription\_id, medication\_id, dosage, quantity, instructions)
6. Sales (**sale\_id**, customer\_id, sale\_date, total\_amount, payment\_method)
7. Employees (**employee\_id**, name, email, phone, address, position, salary, hire\_date)
8. Shift\_Schedules (**shift\_id**, employee\_id, shift\_name, start\_time, end\_time)
9. Store\_branches (**branch\_id**, employee\_id, address, phone\_number, duration)
10. Purchases (**purchase\_id**, supplier\_id, medication\_id, quantity, cost\_price)
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