Project on Pharmaceutical Management System

EDGE BU CSE Digital Skills Training

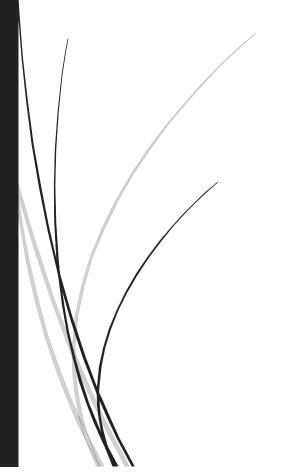[Database course]

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Project: Pharmaceutical Management System

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

<mark>STEP 01 and 02:</mark> **Identifying the Entities and the Attributes and Primary key for each Entity required.**
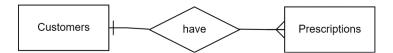
1. Customers (**customer_id**, name, email, phone_number, address, date_of_birth, gender, profession, medical_history)

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)

<mark>Step 03 and 04:</mark> **Identifying the relationship between entities and cardinality ratio and participation needed**

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

2. **Customers** -have- **Prescriptions**

| Customers |---||<---| have |>---| Prescriptions |

3. **Prescription** -contain- **Prescription_items**

| Prescriptions |---||---| contain |>---|<| Prescription_items |

4. **Prescription_items** -contain- **Medications**
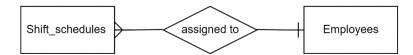
| Prescription_items |>---| contain |>---|<| Medications |

5. **Sales** -belong to- **Customers**
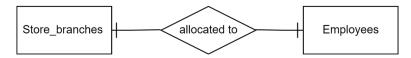
| Sales |>---| belong to |---||---| Customers |

6. **Shift_schedules** -assigned to- **Employees**

| Shift_schedules |>---| assigned to |---||---| Employees |

7. **Store_branches** -allocated to- **Employees**

| Store_branches |---||---| allocated to |---||---| Employees |
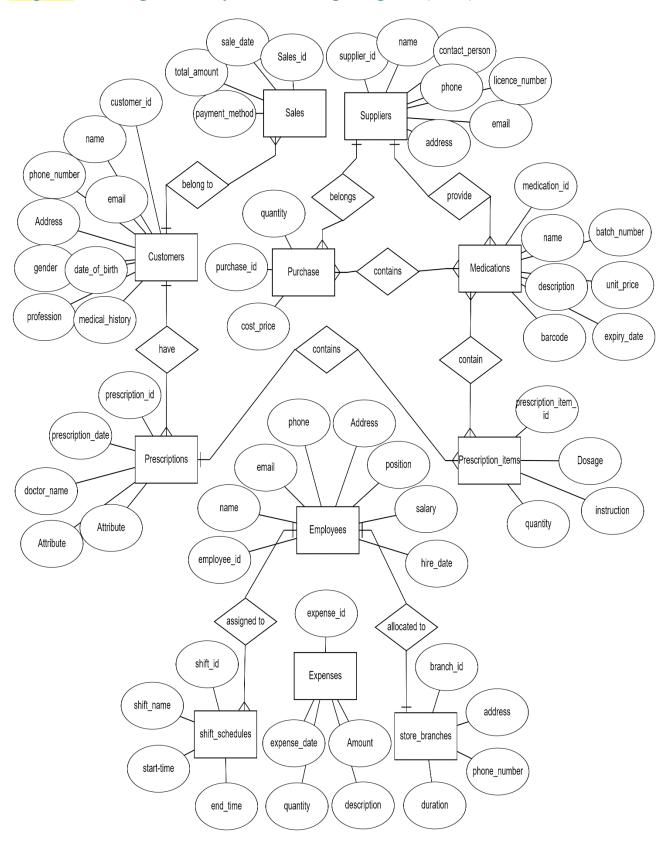
8. **Purchase** -belongs to- **Suppliers**

| Purchase |>---| belong to |---||---| Suppliers |

9. **Purchase** -contains- **Medications**

| Purchase |>---| contains |>---|<| Medications |

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)

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