

Report phase2 project Data Base

**DATA BASE SYSTEM, COMP333**

Prepared by:

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The name of the pharmacy is Grand Pharm ,Address:Ramallah & Al-Bireh,the contact number is (022955031)and the email is [info@grandpharm.ps](mailto:info@grandpharm.ps).The Grand Pharm Network was established in 1997 in Ramallah to provide distinguished pharmaceutical service through qualified pharmacists who ensure the service of our Palestinian citizen.

The pharmacy has 6 branches distributed in Ramallah and Al-Bireh, and the branches are:

1- Al-Bireh - Al-Quds Street / opposite Al-Hisbah.

2- Ramallah - Al-Irsal Street - Umayyah Building .

3- Ramallah - Al-Ma’arada Street - Tannous Building .

4- Ramallah - Samaan Daoud Street - next to Walid Al-Nazer Hospital .

5- Al-Bireh - Al-Shorfa - Al-Quds Street.

6- Al-Bireh - Al-Balou’ - Plaza Mall.

# 1. Entity-Relationship Diagram (ERD)

## **1.1 Entities:**

**Medicines:**

Attributes: MedID (PK), Name, Manufacturer, ExpiryDate, UnitPrice, QuantityInStock.

**Suppliers:**

Attributes: SupplierID (PK), Name, ContactPerson, ContactNumber.

**Customers:**

Attributes: CustomerID (PK), FirstName, LastName, Address, ContactNumber, Email.

**Prescriptions:**

Attributes: PrescriptionID (PK), CustomerID (FK), DoctorName, IssueDate.

**PrescribedMedicines:**

Attributes: PrescriptionID (FK), MedID (FK), Quantity .

**Sales:**

Attributes: SaleID (PK), CustomerID (FK), SaleDate, TotalAmount.

**SoldMedicines:**

Attributes: SaleID (FK), MedID (FK), Quantity, UnitPrice.

**Inventory:**

Attributes: InventoryID (PK), MedID (FK), PurchaseDate, PurchasePrice, QuantityReceived.

**SuppliedMedicines:**

Attributes: SupplierID (FK), MedID (FK).

## **1.2 Relationships:**

**Medicines - PrescribedMedicines:** (One-to-Many)

A medicine can be prescribed in multiple prescriptions, but each prescription is associated with one medicine.

**Medicines - SoldMedicines:** (One-to-Many)

A medicine can be sold in multiple sales transactions, but each sale is associated with one medicine.

**Medicines - Inventory:** (One-to-One)

Each medicine is associated with one inventory record.

**Suppliers - SuppliedMedicines: (**One-to-Many)

A supplier can supply multiple medicines, but each supplied medicine is associated with one supplier.

**Customers - Prescriptions:** (One-to-Many)

A customer can have multiple prescriptions, but each prescription is associated with one customer.

**Prescriptions - PrescribedMedicines:** (One-to-Many)

A prescription can include multiple prescribed medicines, but each prescribed medicine is associated with one prescription.

**Customers - Sales:** (One-to-Many)

A customer can make multiple sales, but each sale is associated with one customer.

**Sales - SoldMedicines:** (One-to-Many)

A sale can include multiple sold medicines, but each sold medicine is associated with one sale.

# **2. Technology Stack:**

Database Management System (DBMS): MySQL

Programming Language: Java

# **3. Conclusion:**

This Preliminary Design Document outlines the entities, relationships, and attributes in the pharmacy database project. The ERD serves as a visual representation of the database structure, providing a foundation for the subsequent phases of development.

