Pharmacy Management System ER Diagram

The **pharmacy management system ER diagram** shows the relationships of the system's entities that build its **database design**. ER diagram describes the logical structure of the system's database or data storage. It is done by identifying the pharmacy management process entities, their properties, and the interactions between them.

The **pharmacy management system database design** is sketched out using **ER (entity-relationship) diagram**. This sketch becomes the actual basis of the system's data storage that will serve as data destination and source.

Pharmacy Management System Features

- **Pharmacy Management** - Pharmacy Management is the main feature of this system wherein ER diagram contains the basic details needed for managing medical records and inventory. This basic information was composed of medicine records, sales, counts, and inventories. This will also monitor or check the customers' info and purchasing or order status.
- **Customer Management** - This feature plays a big role in the system because this gather and manages the important information of the customer. This information was used to track their orders and purchasing records and other important matters regarding the system to assure that the services were given properly.
- **Manage Medicines** - The medicine management will be done by the admin to track the activities and sales of the pharmacy. This will also monitor the performance of the pharmacy as well as their basis for inventories.
- **Manage Medicines Inventories** - Its feature will manage and monitor the inventories of the medicines as well as their sales for a given period of time. The activity of this will include the monitoring of the purchased medicine, type of medicine, and their prize.

What is an ER Diagram?

In DBMS, the **ER Diagram of pharmacy management system** is also known as the system's **database design**. It is the graphical depiction of relationships between all the entities involved in the system. Its major components are Entities, Attributes, and Relationships.

To build and troubleshoot relational databases, the **pharmacy system ER Diagram** is used. It works best with DFD (Data Flow Diagram), which is responsible for data movement. Developing the **database design for pharmacy management system** would be much easier with the help of ER diagram.

Importance of ER Diagram

The **importance of ER diagram for pharmacy management system** is to help in modeling its data storage or database. It is the basis of the project's database foundation for

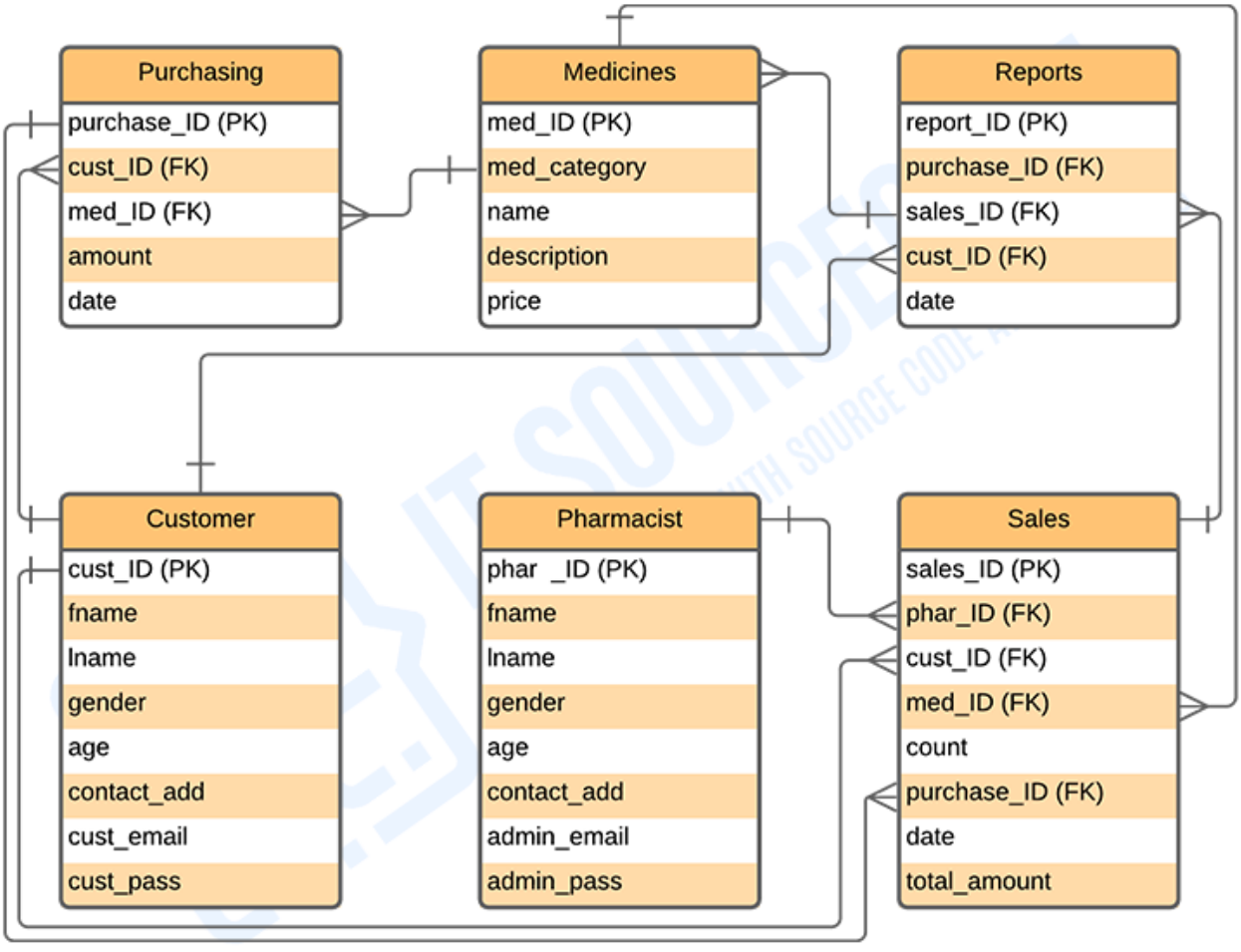
construction. The **pharmacy management system entity-relationship diagram (ERD)** also aids in defining the data types to be stored such as their attributes and characteristics.

All other real-world projects are presented with ER Diagrams (database designs). To display the details and attributes of a data store, the **ER diagram for pharmacy management system** is used in conjunction with its data flow diagram. It visualizes how data is connected generically.

ERD (Entity-relationship diagram) is utilized in software engineering during the planning phase of software development. It aids in the identification of various system constituents and their interrelationships. **Pharmacy Management System ERD** is also used as the foundation of the pharmacy system DFD (Dataflow Diagram).

ER Diagram for Pharmacy Management System

ER Diagram of Pharmacy Management System shows the system entity relationships in each entity and their supposed functions in each relationship.



Pharmacy Management System ER Diagram

Based on the image above, the **Entity-Relationship Diagram for Pharmacy Management System tables** were the following: customer, pharmacist, medicines, purchasing, sales, and reports. The tables are made to meet the required specification of the system and provide much more specific details of each entity within the system.

Pharmacy Management System Database Design

This **Pharmacy management system database design** was made based on managing pharmacy requirements. The system can encode both customer and medicines information. Pharmacy admin can have access to the status and information of the medicine in terms of the number sold and remains to identify the inventories of sales and stocks.

The features included in the system ER diagram were the security and monitoring of the medicines' information and status and customers' order. These features were also listed and recorded in reports that served as the history of transactions done in the system.

Pharmacy Management System ER Diagram Tables

These tables below provide the complete database table details such as **Field Name**, **Descriptions**, **data types**, and **character lengths**. Each of these tables represents the characteristics and the attributes of data storage.

The **field** column presents the names of each database's attributes, the **description** column gives the complete thought of each attribute, the **type** column is their data type and the **length** are for their character lengths.

Table Name: Customer

Field	Description	Type	Length
cust_ID (PK)	Customer ID	Int	11
fname	First Name	Varchar	255
lname	Last Name	Varchar	255
gender	Gender	Int	11
age	Age	Int	11
contact_add	Contact Address	Int	11
cust_email	Customer Email	Varchar	255
cust_pass	Customer Password	Varchar	255

Table Name: Pharmacist

Field	Description	Type	Length
phar_ID (PK)	Pharmacist ID	Int	11
fname	First Name	Varchar	255
lname	Last Name	Varchar	255
gender	Gender	Int	11
age	Age	Int	11
contact_add	Contact Address	Int	11

phar_email	Email	Varchar	255
phar_pass	Password	Varchar	255

Table Name: Medicines

Field	Description	Type	Length
med_ID (PK)	Medicine ID	Int	11
med_category	Medicine Category	Varchar	30
name	Name	Varchar	30
description	Description	Varchar	30
price	Price	Varchar	30

Table Name: Purchasing

Field	Description	Type	Length
purchase_ID (PK)	Purchase ID	Int	11
cust_ID (FK)	Customer ID	Int	11
med_ID (FK)	Medicine ID	Int	11
amount	Amount	Varchar	255
date	Date	Date	

Table Name: Sales

Field	Description	Type	Length
sales_ID (PK)	Sales ID	Int	11
phar_ID (FK)	Pharmacist ID	Int	11
cust_ID (FK)	Customer ID	Int	11
med_ID (FK)	Medicine ID	Int	11
count	Medicine Count	Int	11
purchase_ID (FK)	Purchase ID	int	11
date	Date of Sale	Date	
total_amount	Total Amount	Varchar	255

Table Name: Reports

Field	Description	Type	Length
report_ID (PK)	Report ID	Int	11
purchase_ID (FK)	Purchase ID	Int	11
sales_ID (FK)	Sales Id	Int	11
cust_ID (FK)	Customer ID	Int	11
date	Date of Report	Date	

The tables given will be the basis for developers on how would they do the **pharmacy management system database design**. It has the complete description of the database and they will put this into the program or data storage the same as the names given to each of the tables. They will create a database with the attributes given as well as the value of each attribute.