DATABASE FINAL EXAMIANTIONS

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(A)

Case Study

Background Information

Pharmacy is the clinical health science that links medical science with chemistry. It is credited with the discovery, production, disposal, safe and effective use, and control of medications and drugs. The pharmacy practice requires phenomenal information on pharmaceuticals, their activity system, results, cooperation, portability and harmfulness. Simultaneously, it requires information on the treatment and comprehension of the neurotic interaction. Similarly, Digistic Pharmacy is a multinational pharmacy company devoted to helping people enjoy healthy, better lives by delivering high-quality, speciality, proven drugs to health care providers and patients.

Company Operations

The pharmacy purchases its supply of medications from reputable distributors and after every transaction there is a purchase invoice. Employees keep track of prescriptions in the inventory. Whenever, medicines are sold to walk-in patients or hospital centres, there is a sales invoice created. Also, there are continuous searches to ensure that outdated drugs are properly disposed of.

Purpose

Digistic Pharmacy ensures:

- That there is genuine care given to patients.
- That the sale of drugs is lawful.
- That the medications provided to patients are adequate.

Service

The Pharmacy is responsible for delivering high-quality, speciality, proven drugs to health care providers and patients.

Target Market

These include local customers or walk-ins and sometimes local or foreign health facilities.

Aim of Project

This project aims to create a record management system that would aid the daily activities of the Pharmacy.

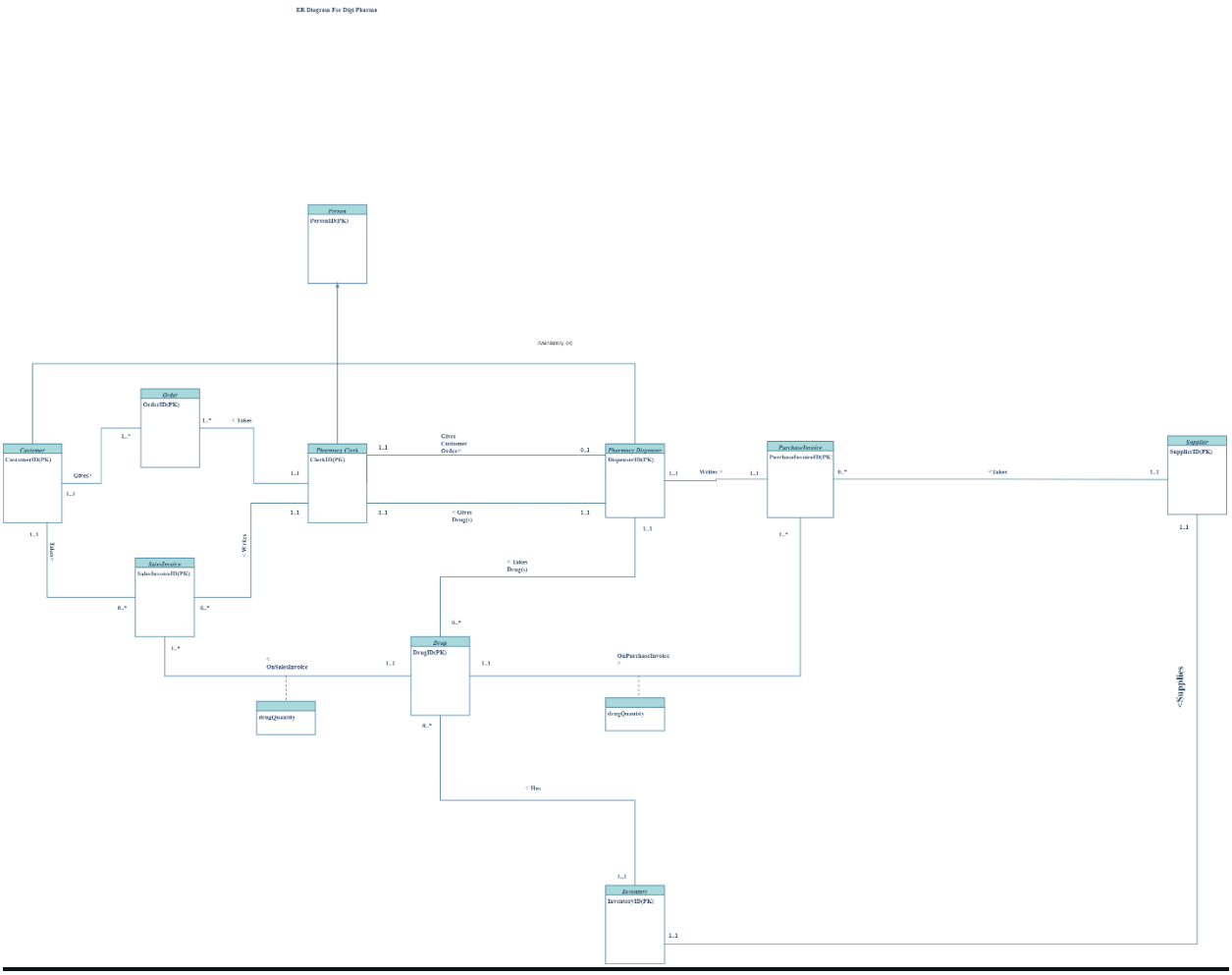
(B)

Functionalities of the Pharmaceutical Database System:

- Add and update details of suppliers and customers.
- Keep efficient records of drugs.
- Check expired drugs.
- Facilitate the creation of a sales invoice.
- Add and edit details of employees of the Pharmacy.
- Track payments made by customers and payments to suppliers.
- Track number of drugs sold.
- Track number of drugs available in the inventory.
- Track number of expired drugs.

- Track number of drugs received from suppliers.
- Check if customer order is available.

Task 1.2


ER Diagram For Digi Pharma
Person
PersonID(PK)
Order
OrderID(PK)
Customer
CustomerID(PK)
Pharmacy Clerk
ClerkID(PK)
Pharmacy Dispenser
DispenserID(PK)
PurchaseInvoice
PurchaseInvoiceID(PK
Supplier
SupplierID(PK)
SaleInvoice
SaleInvoiceID(PK)
Drug
DrugID(PK)
Inventory
InventoryID(PK)
drugQuantity
drugQuantity
Gives
Takes
Writes
Has
Supplies

NON-KEY ATTRIBUTES

Person

- First Name
- Last Name
- Gender
- Telephone Number
- E-mail Address
- Address of Residenc
- Date of Birth

Customer

- First Name
- Last Name
- Telephone Number
- E-mail Address
- Address of Residence
- Occupation
- Date of Birth

Sales Invoice

- Sale Date
- Sale Time
- Total Amount
- Payment Type
- Discount
- Amount Paid
- Amount Remaining
- Drug Quantity

Pharmacy Clerk

- First Name
- Last Name
- Telephone Number
- E-mail Address
- Address of Residence
- Shift
- Date of Birth
- Experience

Pharmacy Dispenser

- First Name
- Last Name
- Telephone Number
- E-mail Address
- Address of Residence
- Shift
- Experience
- Date Of Birth

Purchase Invoice

- Purchase Date
- Purchase Time
- Total Amount
- Payment Type
- Amount Paid
- Amount Remaining
- Drug Quantity

Supplier

- Telephone Number
- E-mail
- Address
- Location

Inventory

- Number of Drugs Available
- Number of Drugs Received
- Number of Expired Drugs
- Number of Drugs Sold.

Drug

- Drug Name
- Manufacture Date
- Expiry Date

Customer Order

- Order Details

Enterprise Rules

- A customer gives one or many orders.
- A customer takes zero or many sales invoices.
- A pharmacy clerk take one or many orders.
- A pharmacy clerk writes zero or many sales invoices.
- Each sales invoice is written by a pharmacy clerk.
- A pharmacy clerk gives a customer order to no or one pharmacy dispenser.
- Exactly one pharmacy clerk receives drugs from exactly one pharmacy dispenser.
- Exactly one pharmacy dispenser writes exactly one purchase invoice.
- A supplier takes zero or more purchase invoices.
- A supplier supplies exactly one inventory.
- An inventory has zero, one or many drugs.
- A sales invoice has one or many drugs on it.
- A purchase invoice has one or many drugs on it.
- A pharmacy dispenser takes zero, one or many drugs.

Assumptions

- There is an assumption that every pharmacy has employees and customers.
- There is an assumption that the pharmacy's inventory is not empty.
- There is an assumption that the pharmacy has only one supplier.
- There is an assumption that the pharmacy has one inventory.
- There is an assumption that employees work in shifts.

Task 2.1

Person

PersonID(PK)	Fname	Lname	Gender	Telephone	E-mail	Address	DOB

Customer

CustomerID(PK)	Occupation	*PersonID(FK)*

Pharmacy Clerk

PharmacyClerkID(PK)	Shift	Experience	*PersonID(FK)*

Pharmacy Dispenser

PharmacyDispenserID(PK)	Shift	Experience	*PersonID(FK)*	*PharmacyClerkID(FK)*

Supplier

SupplierID(PK)	Telephone	Email	Address	Location

Inventory

InventoryID(PK)	NumberofDrugsAvailable	NumberofDrugsReceived	Numberof ExpiredDrugs	Number Of Drugs Sold	*SupplierID(FK)*

Drug

DrugID(PK)	DrugName	ManufactureDate	ExpiryDate	InventoryID(FK)

CustOrder

OrderID(PK)	OrderDetails	*CustomerID(FK)*	*PharmacyClerkID(FK)*

Sales Invoice

SalesInvoiceID(PK)	Sale_ Date	Sale_Time	Total_Amount	Payment_ Type	Discount	Amount_ Paid	Amount_Remaining	*CustomerID(FK)*	*PharmacyClerkID(FK)*	Drug Quantity	*DrugID(FK)*

Purchase Invoice

PurchaseInvoiceID(PK)	Purchasee_ Date	Purchase_ Time	Total Amount	Payment Type	Amount Paid	Amount_Remaining	*PharmacyDispenserID(FK)*	*SupplierID(FK)*	Drug Quantity	*DrugID(FK)*