George's Pharmacy

George's Pharmacy uses a computerised system to handle their stock of products. The pharmacy employs a number of people. Details that need to be stored in the system for members of staff include a staff ID, name, address, telephone number, email address, PPS number and their role within the pharmacy (e.g. counter staff, pharmacist, stock clerk etc.). Staff email addresses must contain the @ symbol.

The stock that George holds consists of drug and non-drug products. Each product has a stock code, a description, a cost price, a retail price and an indicator of whether it is a drug or non-drug (initially this is handled by having a column on the product table which is null if the product is a non-drug product). A single supplier is used for each product, but a supplier may supply many products. Each supplier has a unique ID. Also stored is the name of the supplier, address, and main telephone contact number.

All non-drug stock products are sold over the counter for payment by cash or credit/debit card. No customer details are recorded for non-drug products but details of the product, the amount sold (number of products), the date, time and member of staff who made the sale are recorded.

Drug products are only available for sale through prescription. A customer who wants a prescription filled comes into the pharmacy and submits the prescription to Kevin who works behind the counter. The prescription contains the customer's name and address, the prescribing doctor's name and surgery details and for each drug on the prescription, the dosage (amount dispensed) and instructions on how it is to be taken. If a specific product is required this will be noted on the prescription also. If the customer has a medical card, then the medical card number is on the prescription also. Both customer details and doctor details are required for each prescription, otherwise the prescription cannot be filled.

If the customer does not exist within the database, Kevin (a member of George's staff) creates a new record for the customer (name, address, contact details, medical card number (if any)). Each customer within the system has a unique ID. Similarly for the prescribing doctor, it they do not exist within the database Kevin creates a new record for the doctor (doctor's name, surgery name and surgery address) and assign a unique ID.

When inputting a new prescription into the system, Kevin inputs partial details for the prescription including the customer details, prescribing doctor details and assigns a unique prescription ID. Kevin will note this ID on the physical prescription and put it in the pile of prescriptions to be processed by the dispensing pharmacist, usually George. Kevin will be recorded within the system as the member of staff who created the prescription. If Kevin is not available, another member of staff will handle his role. A member of staff can enter many prescriptions but each prescription can only be input by one member of staff.

Whoever is the dispensing pharmacist processes the drugs for the prescription. They work through the pile of prescriptions to be processed. Each prescription has a list of one or more drugs to be dispensed to the customer. The dispensing pharmacist is responsible to inputting details of the drugs issued as part of the prescription. More than one member of staff may dispense the drugs related to a prescription due to staff work schedules.

Staff

staffID	NUMBER(6)	NOT NULL
staffName	VARCHAR(50)	NOT NULL
staffAddress	VARCHAR(50)	NOT NULL
staffPhoneNo	VARCHAR(10)	NOT NULL
staffEmail	VARCHAR(50)	NULL
staffPPS	VARCHAR(9)	NOT NULL
roleID	NUMBER(6)	NOT NULL (FK)

Doctor

docID	NUMBER(6)	NOT NULL
docName	VARCHAR(50)	NOT NULL
surgName	VARCHAR(50)	NOT NULL
surgAddress	VARCHAR(50)	NOT NULL

NonDrugSale

ndsDate	TIMESTAMP	NOT NULL
staffID	NUMBER(6)	NOT NULL (FK)
stockCode	NUMBER(6)	NOT NULL (FK)
amountSold	NUMBER(3)	NOT NULL

Role

roleID	NUMBER(6)	NOT NULL
roleName	VARCHAR(50)	NOT NULL

Product

stockCode	NUMBER(6)	NOT NULL
stockDescription	VARCHAR(50)	NOT NULL
costPrice	NUMBER(6,2)	NOT NULL
retailPrice	NUMBER(6,2)	NOT NULL
drugnondrug	NUMBER(1)	NULL
supplierID	NUMBER(6)	NOT NULL (FK)

Prescription

prescriptionID	NUMBER(6)	NOT NULL
custID	NUMBER(6)	NOT NULL (FK)
docID	NUMBER(6)	NOT NULL (FK)
staffID	NUMBER(6)	NULL (FK)

Customer

custID	NUMBER(6)	NOT NULL
custName	VARCHAR(50)	NOT NULL
custAddress	VARCHAR(50)	NOT NULL
custPhone	NUMBER(10)	NOT NULL
medCard	NUMBER(8)	NULL

Supplier

supplierID	NUMBER(6)	NOT NULL
supplierName	VARCHAR(50)	NOT NULL
supplierAddress	VARCHAR(50)	NOT NULL
supplierContactNo	VARCHAR(10)	NOT NULL

PrescriptionItem

prescriptionID	NUMBER(6)	NOT NULL (FK)
stockCode	NUMBER(6)	NOT NULL (FK)
staffID	NUMBER(6)	NULL (FK)
preDosage	NUMBER(6,2)	NOT NULL
preInstructions	VARCHAR(50)	NOT NULL