

George's Pharmacy is looking for a computerised system to handle their stock of products. The stock that George holds consists of drug and non-drug products. Each product has a stock code, a description, a pack size (e.g., 12 or 24), a brand name (e.g. Panadol), a cost price and a retail price. Each brand may come in many pack sizes. The brand will have a single supplier for all pack sizes, but a supplier may supply many brands. If the brand is a drug, it also has a drug type. Each drug type will have one or many brands. For example, Paracetamol is the drug type for both Panadol and for Tylenol brands. The information required about a drug type is a name, a dosage, a 'P' if it is prescription only, dispense instructions and use instructions. Each drug brand will come in one or more pack sizes (e.g. 12 or 24). Each pack size for a brand has a stock code, cost price and a retail price.

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 address and for each drug on the prescription, the drug type, the dosage and the number of days for which it is to be taken. If the customer has a medical card, then the medical card number is on the prescription also. Kevin gives the prescription to George. George takes each prescription in turn and writes it into his Prescription Book giving the prescription a unique prescription number. He looks up a set of index Customer cards. If the customer is not already on a card, he writes a new card. Each card has the customer's name, address and medical card number (if any) at the top. The prescription has a list of one or more drugs to be dispensed to the customer. If the drug is of a type that is not already listed on the customer's card, George writes the drug type, the doctor's name, the dosage and the date onto the Customer card. Sometimes the doctor will have given a specific drug brand name (e.g. Panadol), or sometimes the drug type (e.g. Paracetamol). If an unfamiliar drug brand name is given, George looks up a Drug Book to find what the type of that drug is. When George is dispensing the drug, he picks an appropriate product from his stock. He writes the Customer's name, the short description for the customer from the drug type, and the dosage onto a sticky label, which he sticks onto the product. He puts all of the products for the prescription and the prescription itself into a single bag and writes the customer's name and the prescription number on the outside of it. When the customer returns to collect the prescription, Kevin gives them the appropriate bag. In the Sales Book, he writes down the prescription number, and, for each product, he writes down the stock code, the quantity, and the cost. If the customer has a medical card, the medical card number is also written in; otherwise the customer pays for the prescription. All non-drug stock products are sold over the counter for cash. Kevin writes these sales into the Sales Book too, writing in the date, time, Stock Code, the quantity and the cost. At the end of every week, Kevin goes through the Sales Book and picks out all of the products that have been dispensed to Medical cardholders. He writes up a claim form listing all of the products dispensed, giving the prescription number, medical card number, drug type, drug brand, pack size, quantity and cost price. He keeps a copy of the claim form and submits the original to the Health Board. See a sale report for a single sale to a single customer on the next page. You may assume that any purchases that customer makes in a single day will be on a 'customer sale' report.

## George's Pharmacy Stage 3 Case Study

McCann's Pharmacy, 8-10 Barrow Street, Dublin 1								
Customer Sale								
CustomerId:		55445				Sale Date:		16/09/2019
Customer Name		Mr. Joe Bloggs						
Customer Address		1 Noname Street, City, Dublin 18.						
Medical Card No:		12345						
Prescription details				Medication				
number	Date	Doctor	Doctor's Address	Medication	Dose	Frequency	Instructions	Cost
He33441	12/09/2011	Dr. Zhivago	University of Moscow	Paracetemol	2	4 times daily for 5 days	Do not take more than prescribed amount	€4.50
He33441	12/09/2011	Dr. Zhivago	University of Moscow	Amoxicillin	1	Daily for 10 days	With or after food	€17.99
He33441	12/09/2011	Dr. Zhivago	University of Moscow	Phenol Spray	5	every two hours	Do not swallow	€3.20
HE34521	16/09/2011	Dr. Hibbert	Springfield	Ibuprofen	2	6 times daily for 4 days	With or after food	€2.99
							Total:	€28.68