
Billing Software Application

Problem Statement: An ABC company requires a billing software for its super-market where different types of products are sold to the customers on retail basis. This billing software will help

- a. The cashier to see the product information on entering the product code
- b. Calculate the total cost for each product based on the quantity
- c. Store the sales details.

Microservices –

1. Product Microservice
2. Sales-Transaction Microservice
3. Billing Microservices

Display menu to cashier to perform sales operations.(Spring MVC App)

4. **Make a sale**
5. **Exit**

1. Enter Product Details

Following information should be accepted from the cashier when he/she bills the product chosen by the customer.

Enter the product code: 1001

Enter the quantity: 2

Note:

- i. Quantity should not be lesser than or equal to zero
- ii. Validation should be taken care for all input fields

2. Calculating Total and displaying the bill

When the above details are entered by the cashier, this application should calculate the line total (product_price * quantity), display the following information and save same in Map in Dao class. Product ID can be auto generated with a counter in Dao class.

Product Name: iPhone
Product Category: Electronics
Product Description: Smart Phone
Product Price (Rs): 45000
Quantity: 2
Line Total (Rs): 90000
Proceed with the sale? [Y/N]

Sales completed and transaction saved.

Class Diagrams

Product

- productCode : long/String
- productName : String
- category : String
- description : String
- price : float

SalesReceipt

- productCode : long/String
- productName : String
- quantity : int
- price: float
- totalAmount: float

ProductNotFoundException

Create appropriate user defined exception classes and any other supporting classes required.