

Instructions

Problem Statement - 1

Bob (Retailer) having a fruits shop with a different variety of fruits. And the following are the prices.

Banana - 0.5\$

Orange - 1\$

Apple - 5\$

WaterMelon - 10\$

Papaya - 8\$

Mango - 15\$

PineApple - 20\$

Pomegranate - 12\$

Guava - 2\$

Note: These prices may vary day to day.

Alice is a shopper having 100\$ and wants to buy 100 fruits which should consist of any of 3 varieties.

Create a web application where a retailer can create a store with available fruits (quantity and price) and any shopper can do a purchase of fruits with the above combination and also shopper can purchase any fruits.

User stories:

Retailer

A Retailer should be able to sign-up using email, first name, last name, address, and PAN number. (Email: Unique across the system)

A Retailer should be able to login with given credentials and ability to see his store.

A retailer can have/create only a single store (attributes: name, description, location).

A retailer should be able to enter his/her fruits description of the quantity of each fruit with prices.

A retailer should be able to see his/her transaction of every day (customer purchases).

A retailer should be able to see his/her available money in his wallet.

A retailer can change the prices of fruits every day (But can change only once a day).

Shopper

A shopper should be able to log- in and see the available stores of all retailers.

A shopper should be able to purchase with the given combination of 3 varieties of 100 fruits with 100\$.

Shopper will have 3500\$ in his/her wallet.

A shopper should be able to see all the combinations of 3 varieties before purchase, can select any one of the combination and purchase.

Fund/Wallet should be updated with effective money at both Retailer and Shopper.

Shopper can purchase or can do any number of transactions.

A shopper should purchase only once a day for one retailer.

A Shopper can only able to purchase if the quantity is available in the store.

A Shopper transaction minimum purchase of 100\$ with 3 varieties of 100 fruits.

Problem Statement - 2

Write SQL to get no of retailers available in the system.

Write SQL to get the shoppers counts for each retailer (who purchased).

Write SQL to get all the shoppers count.

Write SQL to get purchase amount per day wrt to a retailer.

Write SQL to find top retailer based on the number of purchases - Bonus points

Write SQL to find a loyal shopper of any retailer based on the number of purchased more than threshold 5 - Bonus points