DSA PROJECT

Laksh Gupta 18BCI0190

Aditya Agrawal 18BCE0586

Abstract

We have made a program that tells about price and quantity of a product in nearby store. For this purpose, we have stored a sample dataset of 4 stores containing 10 products each. We have used binary file handling for storing and accessing the product data. As student, sometimes we need to find out the minimum price of a particular product in nearby stores or sometimes we need to find out if a particular product is available at a particular store or not. Our program will solve this problem by providing them with details they want.

In our program, we have given two options:

*   Backend

*   Frontend

One is useful for the store owner so that they can perform the following operations:

*   Enter a new product

*   Delete a product

*   View Inventory

And the second option is useful for customer. This option asks for the product name. After giving the product name, it displays all the stores which have that product along with its price and quantity in their store.

table

Sample Inventory:
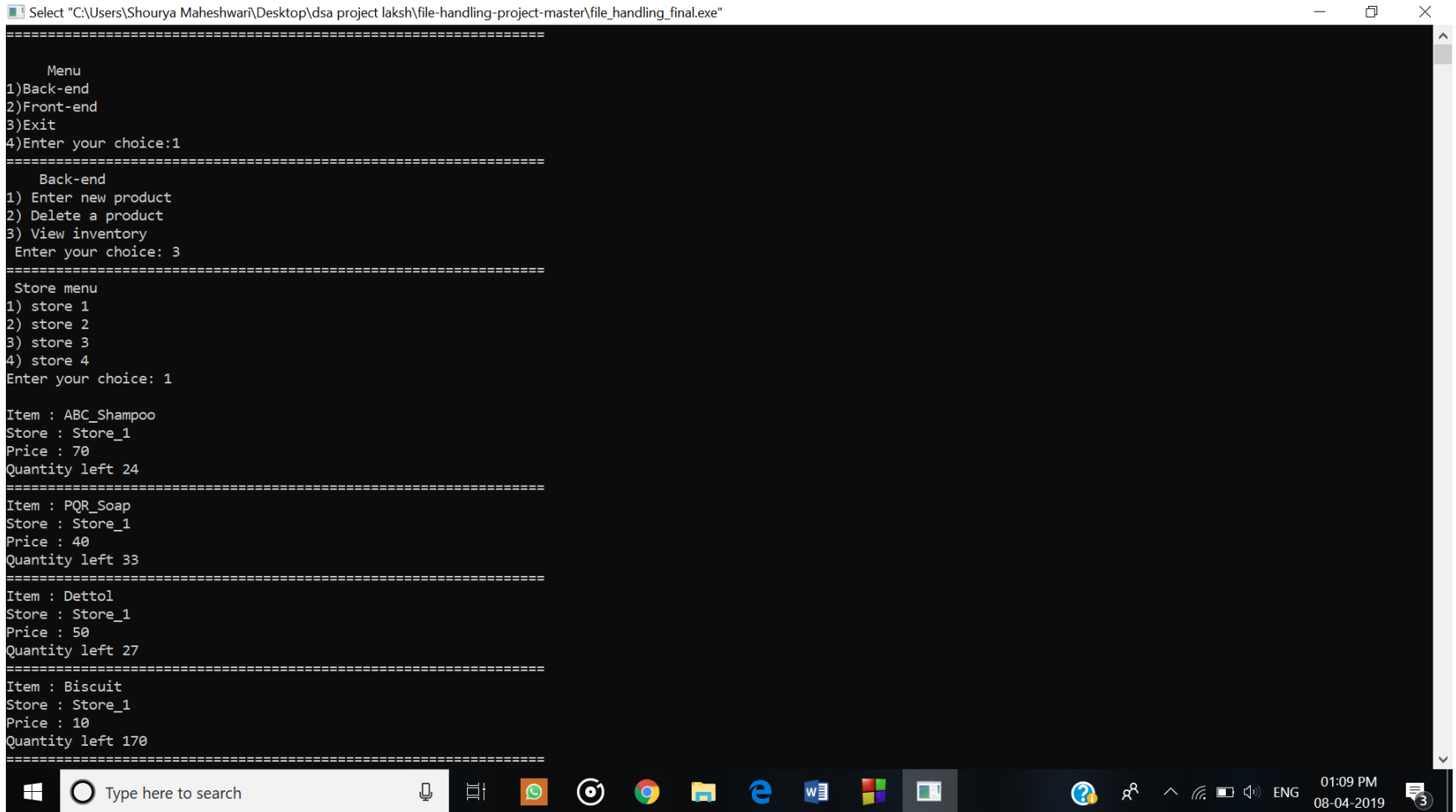


```
mysql> select *from inventory;
+-------+------------------+-------+----------+
| Store | Product          | Price | Quantity |
+-------+------------------+-------+----------+
|     1 | ABC Shampoo      |    70 |       24 |
|     1 | PQR Soap         |    40 |       33 |
|     1 | Dettol           |    50 |       27 |
|     1 | Biscuit          |    10 |      170 |
|     1 | Maggie           |    12 |      220 |
|     1 | Colgate          |    48 |       17 |
|     1 | Surf Excel       |    99 |       69 |
|     1 | Butterflow Pen   |    10 |       54 |
|     1 | Fogg Deo         |   229 |        8 |
|     1 | Lays Orange      |    10 |       88 |
|     2 | Dettol           |    40 |       17 |
|     2 | Maggie           |     8 |       99 |
|     2 | Surf Excel       |   115 |       59 |
|     2 | Lays Orange      |     9 |       27 |
|     2 | Amul Milk        |    37 |       15 |
|     2 | Classmate Notebook |  40 |        9 |
|     2 | Soya Sticks      |    12 |       44 |
|     2 | Milk Shake       |    35 |       11 |
|     2 | Veg Puff         |    10 |       12 |
|     2 | Pepsi            |    35 |        9 |
|     3 | Maggie           |    15 |       29 |
|     3 | Pepsi            |    30 |       40 |
|     3 | Colgate          |    50 |       17 |
|     3 | ABC Shampoo      |    60 |       20 |
|     3 | Amul Milk        |    46 |       25 |
|     3 | Eggs             |     7 |       91 |
|     3 | Eggs Puff        |    14 |       39 |
|     3 | Cake             |   220 |        8 |
|     3 | Basmati Rice     |   710 |       12 |
|     3 | Biscuit          |    10 |        3 |
|     4 | Maggie           |     8 |       54 |
|     4 | Pepsi            |    37 |       30 |
|     4 | Fogg Deo         |   210 |        7 |
|     4 | PQR Soap         |    36 |       19 |
|     4 | Amul Butter      |   115 |       20 |
|     4 | Kissan Jam       |    40 |       31 |
|     4 | Water Bottle     |    18 |       17 |
|     4 | Haldiram Mixture |    42 |       25 |
|     4 | Nescafe Icetea   |   135 |       11 |
|     4 | Kitkat           |    40 |       49 |
+-------+------------------+-------+----------+
40 rows in set (0.00 sec)
```

```
Quantity left 88
===================================================

Item : Lays_orange
Store : Store_1
Price : 10
Quantity left 88
===================================================

===================================================


    Menu
1)Back-end
2)Front-end
3)Exit
4)Enter your choice:2
Enter the product to be searched Maggie
===================================================

Item : Maggie
Store : Store_1
Price : 12
Quantity left 220
===================================================

Item : Maggie
Store : Store_2
Price : 8
Quantity left 99
===================================================

Item : Maggie
Store : Store_3
Price : 15
Quantity left 29
===================================================

Item : Maggie
Store : Store_4
Price : 8
Quantity left 54
===================================================
```

```
        Menu
1)Back-end
2)Front-end
3)Exit
4)Enter your choice:1
=================================================================
        Back-end
1) Enter new product
2) Delete a product
3) View inventory
 Enter your choice: 1
=================================================================
 Store menu
1) store 1
2) store 2
3) store 3
4) store 4
Enter your choice: 2
Item : vhdl
Store : 2
Price : 1500
Quantity 4
=================================================================

        Menu
1)Back-end
2)Front-end
3)Exit
4)Enter your choice:1
=================================================================
        Back-end
1) Enter new product
2) Delete a product
3) View inventory
 Enter your choice: 3
=================================================================
 Store menu
1) store 1
2) store 2
3) store 3
```

```
=====================================================
Item : Lays_orange
Store : store_2
Price : 9
Quantity left 27
=====================================================
Item : Amul_Milk
Store : Store_2
Price : 37
Quantity left 15
=====================================================
Item : Classmate_Notebook
Store : Store_2
Price : 40
Quantity left 9
=====================================================
Item : Soya_Sticks
Store : Store_2
Price : 12
Quantity left 44
=====================================================
Item : Milk_Shake
Store : Store_2
Price : 35
Quantity left 11
=====================================================
Item : Veg_Puff
Store : Store_2
Price : 10
Quantity left 12
=====================================================
Item : Pepsi
Store : Store_2
Price : 35
Quantity left 9
=====================================================
Item : vhdl
Store : 2
Price : 1500
Quantity left 4
=====================================================
```

Result

We created a GitHub repository for our project and have uploaded the c++ code and necessary binary files there.

The link to the repository is:

https://github.com/laksh-gupta/file-handling-project