

DSA PROJECT

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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;
```

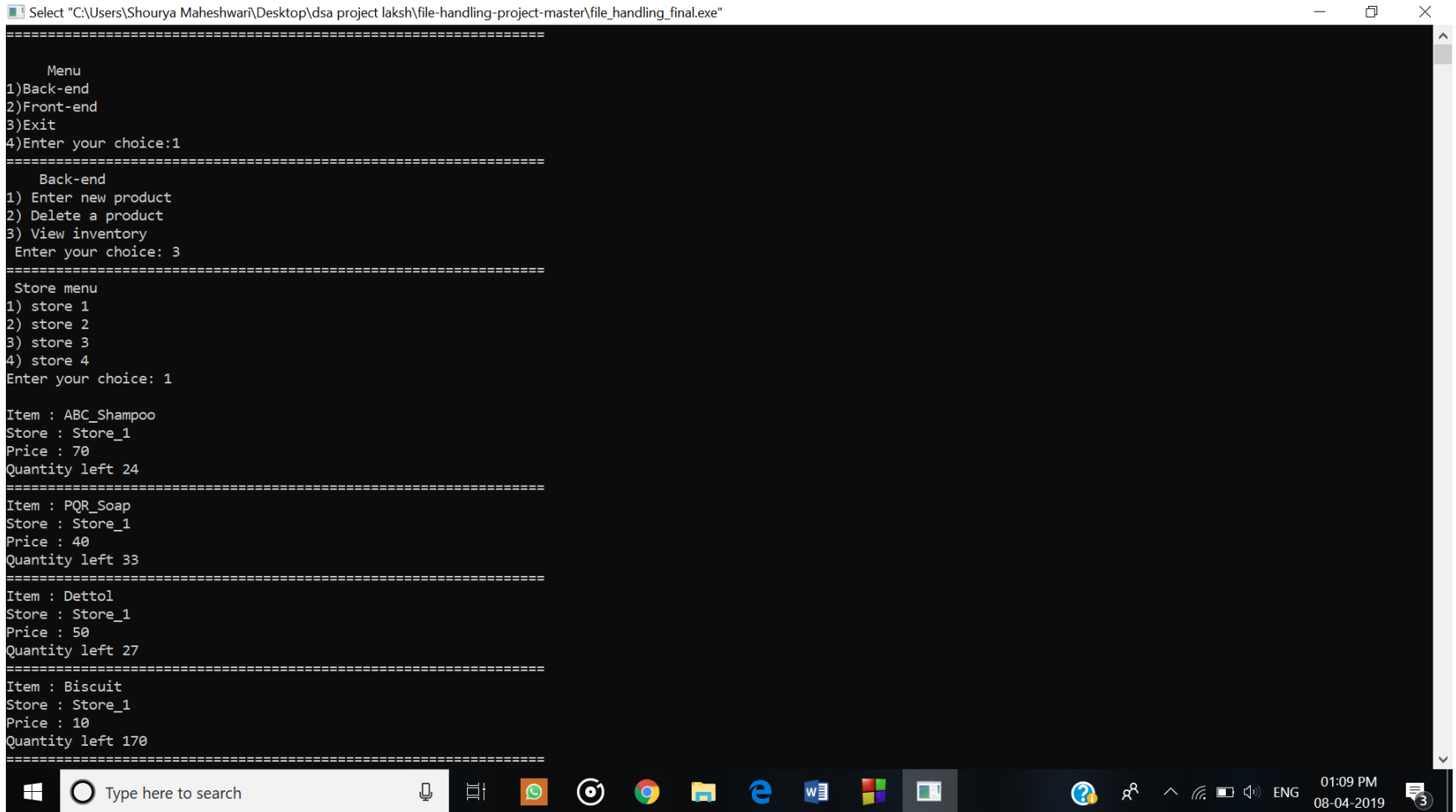
Store	Product	Price	Quantity
1	ABC Shampoo	70	24
1	PQR Soap	40	33
1	Dettol	50	27
1	Biscuit	10	170
1	Maggie	12	220
1	Colgate	48	17
1	Surf Excel	99	69
1	Butterflow Pen	10	54
1	Fogg Deo	229	8
1	Lays Orange	10	88
2	Dettol	40	17
2	Maggie	8	99
2	Surf Excel	115	59
2	Lays Orange	9	27
2	Amul Milk	37	15
2	Classmate Notebook	40	9
2	Soya Sticks	12	44
2	Milk Shake	35	11
2	Ueg 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)

Output

```
Select "C:\Users\Shourya Maheshwari\Desktop\dsa project laksh\file-handling-project-master\file_handling_final.exe"
=====
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
4) store 4
Enter your choice: 1

Item : ABC_Shampoo
Store : Store_1
Price : 70
Quantity left 24
=====
Item : PQR_Soap
Store : Store_1
Price : 40
Quantity left 33
=====
Item : Dettol
Store : Store_1
Price : 50
Quantity left 27
=====
Item : Biscuit
Store : Store_1
Price : 10
Quantity left 170
=====
```



The screenshot shows a Windows 10 desktop environment. A terminal window is open, displaying the output of a program titled "file_handling_final.exe". The program has a menu with four options: 1) Back-end, 2) Front-end, 3) Exit, and 4) Enter your choice:1. The user has selected option 1, which leads to a "Back-end" menu with three options: 1) Enter new product, 2) Delete a product, and 3) View inventory. The user has selected option 3, which leads to a "Store menu" with four options: 1) store 1, 2) store 2, 3) store 3, and 4) store 4. The user has selected option 1, which displays the following information for "ABC_Shampoo" in "Store_1": Price : 70, Quantity left 24. The program then displays information for "PQR_Soap" in "Store_1": Price : 40, Quantity left 33. Next, it displays information for "Dettol" in "Store_1": Price : 50, Quantity left 27. Finally, it displays information for "Biscuit" in "Store_1": Price : 10, Quantity left 170. The taskbar at the bottom shows the Windows Start button, a search bar, and several pinned applications including WhatsApp, a game controller, Google Chrome, File Explorer, Microsoft Edge, Microsoft Word, and a file manager. The system tray on the right shows the date and time as 01:09 PM on 08-04-2019, along with network, volume, and language indicators.

Select "C:\Users\Shourya Maheshwari\Desktop\dsa project laksh\file-handling-project-master\file_handling_final.exe"

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



Type here to search



01:09 PM
08-04-2019



"C:\Users\Shourya Maheshwari\Desktop\dsa project laksh\file-handling-project-master\file_handling_final.exe"

```
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 : vhd1
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
```



Type here to search



01:11 PM
08-04-2019



"C:\Users\Shourya Maheshwari\Desktop\dsa project laksh\file-handling-project-master\file_handling_final.exe"

=====
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 : vhd1
Store : 2
Price : 1500
Quantity left 4
=====



Type here to search



ENG

01:11 PM

08-04-2019



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>