

A REPORT ON
PHARMACY MANAGEMENT SYSTEM

SUBMITTED TO THE SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE
IN THE PARTIAL FULFILLMENT OF THE REQUIREMENT
FOR

DSA MINI PROJECT (SECOND YEAR ENGINEERING)

SUBMITTED BY

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Exam No. 72143112H
Exam No. 72143065B



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UNIVERSITY 2021-2022



CERTIFICATE

This is to certify that the project report entitles

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are bonafide students of this institute and the work have been carried out by them under the supervision of **Prof. Vaishali Ganganwar** and it has been approved for the partial fulfilment of the requirement of, Second-Year course on DSA Mini Project of Savitribai Phule Pune University.

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1. PROJECT ABSTRACT

Pharmacy Management System is a small application developed using C++. In older days the Pharmacy used to maintain their records in books and papers. Here we propose a new system, using this application we can store the Details. In manual method if we forget information book then it very difficult to get the details. In manual mode it also becomes very difficult to update a particular record, also this system of storing data is inefficient. Some of the disadvantages of this manual system are:

- Takes Up a Lot of Space. The biggest downfall to manual document filing is the amount of place it takes.
- Prone to Damage and Being Misplaced. Manual document filing means you are placing faith in the people handling the files.
- Hard to Make Changes.
- Access Time.
- Lack of Security.

By using our application, we can see our data whenever we want, here we will have options like search record by name or using their id, insert new record and so on. In this project we can save our product id, cost, name, quantity and this all we can see at a time. This system is developed keeping in mind the general needs of the pharmacist while maintaining the records. We have implemented using C++.

2. INTRODUCTION

We have to implement a Pharmacy Management System using C++ programming language. To accomplish this task, we will have to use some kind of database which will store all the records and will maintain the records as well. As our Pharmacy Management system has limited fields using a File to store this data will be a good choice. SQL database can also be used for this task but as the scale of the project is small, we do not need a proper database to store our information.

3. PROBLEM STATEMENT

- To build a Pharmacy Management System
- OBJECTIVE**

4. OBJECTIVE

1. As we are studying dsa it's now time to implement dsa in real life.
2. It enhanced our problem solving skills and to think in a wider area.
3. It also checks your command on the topic which you are currently using in this project.
4. Apart from this it also includes several other data structures like linked list, hashtables, stacks, queues, etc.

2. WORKING

1. APPROACH

Generally, the electronic technology has been implemented to automate the traditional systems. So, different copy of management systems in different scope were presented. These systems include the services provided to company as well as people, such as, healthcare. The traditional data management systems for pharmacy as example, suffer from the capacity, time consuming, medicines accessibility, managing the medicines store as well as the need of qualified staff according to the requirements of employer expectations.

2. ALGORITHM

1. Creates a function which stores the data of available medicines in the store. To do this hashing and linked list are use. Also to search and store the bill information hashing is used.
2. Creates a delete function which is used to delete the recent billing of any number. User can use this function to delete any specific bill.
3. Create modify function which can modify the earlier bill.
4. Create an order_list function which combines all the items of the bill and returns the amount after calculating amount of each item in the bill.
5. There is one daily_summary function which returns the total sale of the day. This way the pharmacy owner does not need to keep any different record of what is sold. It is automatically stored.
6. The user can select the required medicine from the list and the the amount of medicine he requires and then he can pay and print the bill.

3. SOFTWARE AND HARDWARE REQUIREMENTS

1. HARDWARE REQUIREMENTS

- a. Intel i3/i5/i7 processor
- b. 4 GB RAM

2. SOFTWARE REQUIREMENTS

- 1. OS - Windows/Linux
- 2. C++ Programming Language
- 3. G++ Compiler
- 4. DEV C++ IDE

4.

INPUT AND OUTPUT

1. INPUT

There are many options for input.

Options are there which include

1. New bill creation
2. delete latest Medicine order
3. Modify Order List
4. Print the Receipt and Make Payment
5. Daily Summary of total Sale

And after we select an option there are other respective inputs.

Add Order Details

```
*****
DRUGS ID      DRUGS TYPE      DRUGS NAME      DRUGS PRICE(INR)
*****
0001          OTC          Amoxicillin 500 mg      INR 200.00
0002          OTC          Vitamin D 50000 IU      INR 300.00
0003          OTC          Aibuprofen 800 mg      INR 100.00
0004          OTC          Cetirizine hydrochloride 10 mg      INR 400.00
0005          OTC          Azithromycin 250 mg      INR 100.00
0006          OTC          Amlodipine besylate 10 mg      INR 500.00
0007          OTC          Albuterol sulfate 108 mcg/act      INR 700.00
0008          OTC          Cyclobenzaprine hydrochloride 10 mg      INR 400.00
0009          OTC          Hydrochlorothiazide 25 mg5      INR 300.00
0010          OTC          Cephalexin 500 mgn      INR 500.00
*****
```

```
Type Order no: 10
Enter Customer Name: Naveen
Enter Date : 12/01/2022
How many Medicine would you like to order:
( Maximum is 10 order for each transaction )
3
Please enter your selection :
1
Medicine Name: Probiotics
How many medicine do you want: 2
The amount You need to pay is: 4 INR
Press any key to continue . . .
```

```
Enter Date : 12/01/2022
How many Medicine would you like to order:
( Maximum is 10 order for each transaction )
3
Please enter your selection :
1
Medicine Name: Probiotics
How many medicine do you want: 2
The amount You need to pay is: 4 INR
Press any key to continue . . .
Please enter your selection :
3
Medicine Name: Acid Free C(500mg)
How many medicine do you want: 2
The amount You need to pay is: 2 INR
Enter the Reciept Number To Print The Reciept
```


2. OUTPUT

The bill comes out as the output. As soon as the user is done purchasing the medicines the program displays the total amount the customer has to pay. It also displays the medicines the customer has purchased. This helps the user to cross examine if he has purchased the correct medicines in correct amount or not. Also after seeing the bill he may choose if he wants some changes in the bill. Those changes can also be implemented easily.

```

                Here is the Order list
=====
Receipt Number : 10
Customer Name: Naveen
Order Date : 12/01/2022

=====
| Medicine Type | Medicine Name | Quantity | Total Price |
=====++=====++=====++=====++=====
OTC              Probiotics              2              400
-----
OTC              Acid Free C(500mg)              200
-----
OTC              Women'S Multivate              1              400
-----
Total Bill is : 1000
Type the exact amount You need to pay: 1000

Payment Done
Thank You
```

5. APPLICATION

1. A pharmacy management software is any system used in a pharmacy that helps automate the pharmacy workflow. This includes such tasks as reviewing physician orders and preparing medications, controlling the inventory and making drug orders, handling billing and insurance, providing counselling, identifying incompatibilities, and more — all while following legal protocols and compliances.
2. Improving pharmacists efficiency. Pharmacists spend most of their working hours dispensing drugs. This task requires lots of concentration, a great deal of verification, drug interaction checking, not to mention making sense of the doctor's handwriting. Is it necessary to dispense drugs manually? Not at all. With seamless computer-computer communication in place, prescriptions can be easily handled by software, freeing more time for pharmacists to interact with patients. Which leads us to the next benefit.
3. Preventing medicine fraud. Pharmacies play a pivotal role in helping manage the distribution of controlled dangerous substances (CDSs) by entering all prescription information in the Prescription Drug Monitoring Program database and checking it when dispensing drugs. A pharmacy management system integrated with the PDMP portal allows you to cut down logging time and effort to just a few clicks as information is automatically added to the patient's history. Mathematics
4. Improving patient health outcomes. Patients are seeking counselling from pharmacists and a PMS can directly or indirectly help them get better counselling. Apart from spending more time with a customer in person, pharmacists can communicate with them online on a patient portal. And by setting up a connection to a hospital's EHR, a pharmacist can access a patient's medication history to make better recommendations. Besides, special medicine adherence tools can help patients manage drugs they take, helping them easily refill prescriptions that are refillable and receive notifications about them.

6. REFERENCES

1. GeekforGeeks
2. Stackoverflow
3. Google
4. YouTube