

# Visual Programming

Group project

Group R1

**Pharmacy management system**

## GROUP MEMBERS

No	Registration number	Name
01	2020/ICT/104	Ruchira Dilshan
02	2020/ICT/95	Anuradhya Liyanaarachchi
03	2020/ICT/08	D. Pavithra
04	2020/ICT/64	M.I.F. Ilma
05	2020/ICT/83	G. Lakshna

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# 1.Introduction

The project “Medicync” is an application developed using C# technology as front end and backend is MYSQL.

Pharmacy management system can make work easier by giving the details of the medicine when its name is entered. The application has already stored available medicines in the pharmacy. It becomes very difficult in big medical stores to handle the details of all medicines manually, so by using this pharmacy management system we can maintain the records of all medicines.

This application has more benefits, easy to find medicine because we use strong search option. The add option and delete options also make the customer to handle the application more efficiently.

Types of users are:

- Admin
- Customer

The application is reduced to avoid errors while entering the data. It also provides error message while entering invalid data. No formal knowledge is needed for the user to use his system.

Thus by this all, this is a user friendly application. This system described above can lead to error free, secure, reliable and fast management system.

The system will do the following activities:

- Store medicine data
- Search medicine data efficiently
- Update, delete and edit medicine information
- Generate report on medicine
- Prepare bill for the medicine

## 2.Objectives

It is a user friendly application for pharmacists which reduces the burden and helps to manage all sections of pharmacy, like medicine management and billing etc. This improves the processing efficiently. It deals with the automating tasks maintaining the bills. In pharmacy, billing management is the key process. Including safe data store about medicine as well as fast searching, delete and update of medicines. The pharmacy management system is easy for use so the user can do pharmacy actions without ambiguities.

The main objectives of PMS is making the pharmacy organizations computerized by creating neat work through minimizing or eliminating waste of time as well as removing the resource such as papers for data saving.

### **Primary Objectives**

- Facilitating seamless user onboarding through a comprehensive Billing Management system.
- Implementing a dynamic Category Management system, allowing effortless addition, editing, and deletion of items within the distinct categories of medicine.
- Enabling efficient Customer Management by offering the flexibility to add, delete, and edit customer details seamlessly.
- Precision-driven Billing System, providing accurate calculations for medicine.

### **Secondary Objectives**

- Scalability and adaptability of the system to meet evolving business needs.
- Integration of data analytics for predictive insights into consumer behavior and inventory management.

## 3.Methodology

### I. Requirement gathering

We have used several requirements while creating our pharmacy management system.

The inception phase involved a multifaceted approach to gather project requirements. This included extensive stakeholder consultations, industry analysis, user personal studies, and heuristic evaluations of existing PMS systems.

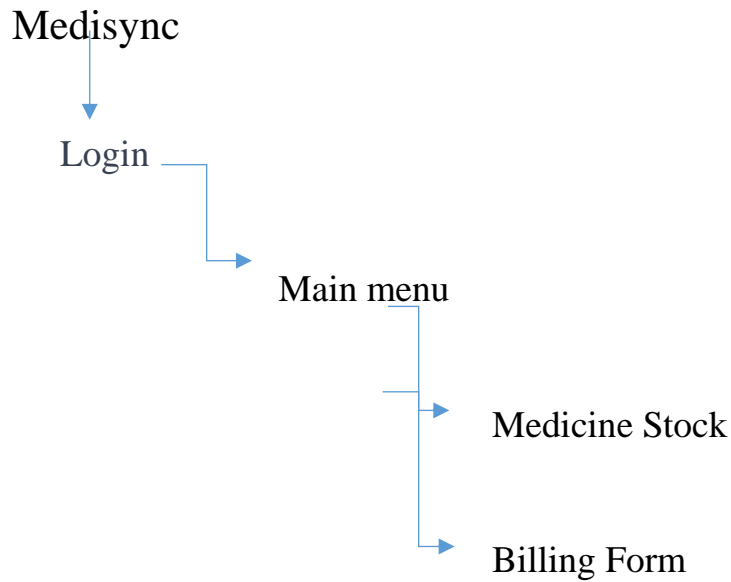
### II. Tools and technologies

The development stack incorporated advanced technologies:

- Frontend: Utilized Visual Studio
- Backend: Employed [Database Management System], ensuring data integrity and efficiency.

## 4.Implementation

Medisync project successfully implemented features for managing medicines and stock efficiently. The project follows a standard structure with separate forms.



### Medisync

The root directory representing the entire Pharmacy Management System project

- **Main menu**  
This is the primary navigation hub of the system, containing links to the "Medicine Stock" page and the "Billing Form" page.
- **Login**  
The login page is a critical component of the Pharmacy Management System, serving as the gateway for user authentication and access to the system. The implementation of the login page is encapsulated within the login class. This class is responsible for handling user input, validating credentials, and initiating the transition to the main menu upon successful authentication.

- **Medicine Stock**

This page facilitates the retrieval of essential information about medicines, including the selling price, buying price, quantity, and expiration date. Users can access this information by entering the name of a specific medicine.

### **Features**

1. Search Functionality: Enables users to check details by entering the medicine name.
2. Add New Stock: Allows for the addition of new stock details
3. Update Stock: Permits the modification of existing stock details.
4. Delete Stock: Provides the functionality to remove stock details.

- **Billing Form**

This page streamlines the process of generating bills for customer purchases.

### **Features**

1. Stock Availability Check: Users can check the availability of a particular stock by entering the medicine name when a customer places an order.
2. Add to bill: Allows for the addition of selected stock items to the bill.
3. Print Bill: Enables the printing of the finalized bill.

## **I. Interface Design**



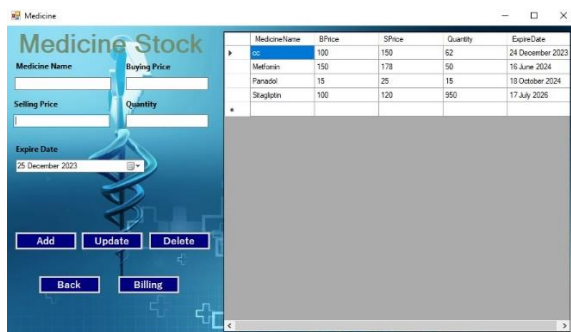
Picture 1: Front page



Picture 2: Login page



Picture 3: Main menu page



Picture 4: Medicine Stock page



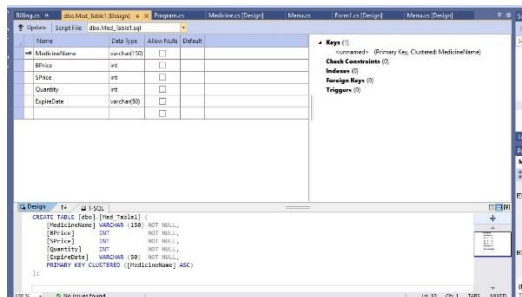


Picture 5: Billing Form page

## II. Database

Database created for get stock details.

- Med\_Table:
- MedicineName(primaryKey): Unique identifier for each stock
- Bprice: Buying price of the medicine.
- SPrice: Selling price of the medicine.
- Quantity: Available quantity of the medicine in stock.
- ExpireDate: Expiry date of the medicine.



## III. Output

1. Add the cetirizine medicine in 100 quantity



2. Change the quantity of Metformin 50 into 500 and update successfully



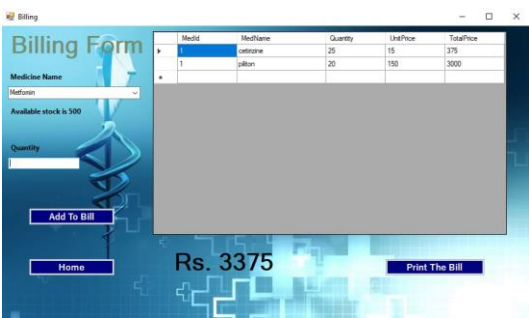
3. Select sitagliptin medicine and delete it



4. Check the availability of cetirizine quantity



5. Add more medicine to bill and Print the bill



## 5.Conclusion

In conclusion, the Pharmacy Management System project, coded in C# and utilizing the .NET framework, has proven to be a significant advancement in the efficient management of pharmaceutical operations. The development team successfully implemented crucial features such as medicine stock tracking, billing, and a user-friendly interface for seamless interaction.

### **Achievements and Outcomes:**

- **Efficient Medicine Stock management:**  
The Medicine Stock module allows for real-time tracking of medicine details, including buying and selling prices, quantity, and expiration dates. This functionality enhances the overall efficiency of managing pharmaceutical inventory.
- **Streamlined Billing Process:**  
The Billing Form provides a simplified and effective solution for generating bills. The system checks the availability of stock and allows for seamless addition and printing of bills, contributing to a smooth customer interaction process.
- **User-Friendly Main menu:**  
The implementation of a clear and intuitive Main Menu, featuring links to essential components like Medicine Stock and Billing, enhances the overall usability of the system.

## 6.References

- To get an idea about stock management:  
[https://youtu.be/AZrFAyV5h3s?si=2tMhSO\\_4g7ksqVYN](https://youtu.be/AZrFAyV5h3s?si=2tMhSO_4g7ksqVYN)
- For coding we referred ChatGPT.