

# **A Project Report on** **Pharmacy Management System**

Submission of

**Course CSE-402: Software Engineering Lab**



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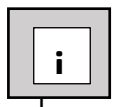
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The undersigned have examined the report entitled “**Pharmacy Management System**” presented by **Mostafa Ahmed An-Nur**, a member of course **CSE-402: Software Engineering Lab** group and hereby certify that it is worthy of acceptance.

03-10-2021

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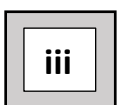
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Group member’s name

Dedicated To  
**Our Honorable Teachers.**



## **ABSTRACT**

The pharmacy management system, also known as the pharmacy information system, is a system that stores data and enables functionality that organizes and maintains the medication use process within pharmacies.

These systems may be an independent technology for the pharmacy's use only, or in a hospital setting, pharmacies may be integrated within an inpatient hospital computer physician order entry (CPOE) system.

Necessary actions for a basic, functioning pharmacy management system include a user interface, data entry and retention, and security limits to protect patient health information. Pharmacy computer software is usually purchased ready made or provided by a drug wholesaler as part of their service. Various pharmacy software operating systems are used throughout the many practice settings of pharmacy across the world.

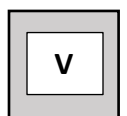
## ACKNOWLEDGMENTS

First and foremost, we would like to express our gratitude to Allah, the most gracious and the most merciful, for allowing us to complete this project. And then we would like to thank to our **Supervisor Rubya Shaharin**, Assistant Professor, Department of Computer Science & Engineering, Jatiya Kabi Kazi Nazrul Islam University, Trishal, Mymensingh for her helpful suggestions in selecting our project topic, planning and implementing the work. Also she greatly helped us in improving our report writing and presentations, which, obviously, will guide us throughout our future life. we would like to give our special thanks to our parents and friends.

We wish to express thanks to **Mst. Jannatul Ferdous**, Head, Department of Computer Science & Engineering, Jatiya Kabi Kazi Nazrul Islam University for providing us lab opportunities with lab materials related to our project work.

We also thank all of our friends, group member & lab assistant and our family for helping to complete the project “**Pharmacy Management System**”.

Finally, we express our thanks to the Department of Computer Science and Engineering for giving us the opportunity to study here and supporting us greatly through our graduation study.



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# **CHAPTER 01**

## **INTRODUCTION**

### **1.1 Introduction**

The main aim of the project is the management of the database of the pharmaceutical shop. This project is insight into the design and implementation of a Pharmacy Management System. This is done by creating a database of the available medicines in the shop. The primary aim of pharmacy management system is to improve accuracy and enhance safety and efficiency in the pharmaceutical store. The aim of this project is to develop software for the effective management of a pharmaceutical store. We have developed this software for ensuring effective policing by providing statistics of the drugs in stock. The database is then connected to the main program by using interconnection of the Visual Basic program and the database already created. Pharmacy management system is useful to maintain correct database by providing an option to update the drugs in stock. This is pharmacy management system; it is used to manage most pharmacy related activities in the pharmacy.

Pharmacy management system is a management system that is designed to improve accuracy and to enhance safety and efficiency in the pharmaceutical store. This program can be used in any pharmaceutical shops having a database to maintain. It is a computer based system which helps the Pharmacist to improve inventory management, cost, medical safety etc. The software used can generate reports, as per the user's requirements. Using this pharmacy management system user is also able to generate report within a specified period of time. The system allows the user to enter a manufacturing and expiry date for a particular product or drug during opening stock and sales transaction. The software can print invoices, bills, receipts etc. It can also maintain the record of supplies sent in by the supplier. The system will also give report showing the list of products expiry after a specified date before the product eventually expires. The system services and goals are established by consultation with system user. It also involves manual entry upon arrival of new batches of drugs and upon drug movement out of the pharmacy for a certain period. Pharmacy management system is being build. Pharmacy management system is robust, integrated technology. every month, the pharmacist may want to generate report for the movement of drugs in and out of the pharmacy, getting information about the drugs e.g. expiry date, date purchased, number of drug type left, location of a drug



in the pharmacy. Pharmacy management system deals with the maintenance of drugs and consumables in the pharmacy unit. This pharmacy management system is user friendly.

## **1.2 Background Study**

Before Developing a “Pharmacy Management System” we have to study about how the system actually works and what are the features which exists inside the system. As we have seen that there must be different portal for Administrator, manager , pharmacist and cashier. Also we need to add different functionalities for each of the portals.

## **1.3 Our Approach**

We want make pharmacy management system more efficient ,user friendly and mostly a system which can make everyday pharmacy management easier.

## **1.4 Objectives**

It is the user friendly application for Pharmacist which reduces the burden and helps to manage all sections of Pharmacy like Medicine management and Billing etc.which improve the processing efficiency. This will enhance the efficiency of clinical work and ease patient’s convenience, bearing in mind that in Ethiopia is heading towards pharmaceutical care of patients. It deals with the automating tasks of maintaining of Bills. In Pharmacy, Billing management is the key process. In

addition, Pharmacy management system will be able to process drug prescription with ease. Including safe data store about medicine as well as fast searching, delete and update of medicines. The pharmacy management system is built for the sake of ensuring effective and clear data saving and manipulating as well as neat work on the pharmacy medical products. The pharmacy management system is easy for use so the user can do pharmacy actions without ambiguities. This refers the pharmacy management system project highly minimize time and resource by which, searching the medicine data you can get the data in quickest time. The main Objectives of the PMS is making the pharmacy organizations computerized by creating neat work through minimizing or eliminating wasting of time as well as removing the resources such as papers for data saving since know a days is paper based, decrease malfunctioned works on the medical usage by giving correct information on each medicine. This system is also helpful to improve the efficiency of the system by ensuring effective monitoring of services and activities. A summarized list of drugs dispensed to patient can be viewed for monitoring purposes.

## **1.5 Key Features of Proposed System**

**The project will have the following key features:**

- A login panel
- Administrator Portal
- Manager Portal
- Cashier Portal
- Pharmacist Portal
- Dashboard
- Stock for global drugs
- Local Pharmacists list
- Invoice and Prescription

## 1.6 Keywords

**The keywords related to our projects are as follow:**

- Login
- Admin
- Manager
- Pharmacist
- Cashier
- Prescription
- Stock
- Invoice
- Dashboard
- Users
- Logout

## 1.7 Organization of This Report:

### **Chapter 1: Introduction**

In this part we have introduced what our project is and how it can give us efficiency in pharmacy management sector. We have also described about what features and facilities in our proposed system will have.

### **Chapter 2: Software Overview**

The Pharmacy Management System is the project which is mainly developed for people who are connected in pharmacy management in their daily life .We can select for each and every portal with different login mode that who will work with the product. We can also select different function for the user. We can also exit it if needed. Finally we can print invoice receipt for customer.

### **Chapter 3: Pharmacy Management System**

In this section the traditional and conventional ways of software development is described briefly .We also described which development process we followed during the development of this proposed system. The system architecture and model is also included textually and visually. We described the software model through necessary Screenshots in this chapter. Basically, Pictorial description of software project is given in this section.

### **Chapter 4: Program Analysis and Design**

We discussed about the specific steps which are taken to develop the proposed system. We represented our software project with Flow chart and state diagram in this chapter. We also explained here about how it works and data validation.

### **Chapter 5: Result and Discussion.**

In this section we have discussed and shown the final output of our Software Project. We also described about the testing part, scope and limitation, further development.

## CHAPTER 02

# SOFTWARE OVERVIEW

### 2.1 Motivation

Android is the world's most popular operating system for mobile devices and tablets. Its makes a revolution in the world of technology. Most of the android applications are popular which are useful and entertaining for user. So we wanted to create a system which is developed by android. If designed properly, a mobile version based this system could be more sufficient for the user.

Thus, the following points describe the motivation for a PC version of the project .

### 2.2Tools

(1)We used an Notepad++ to implement, build and operate the code.



**Fig1:Notepad ++**

(2) We took the help of PHP, JavaScript, MySQL, JQuery to build our software project.



**Fig2:HTML+ CSS**



**Fig3:jQuery**



**Fig4:MySQL**



**Fig5:JavaScript**



**Fig6:PHP**

## **2.3 Overview of the Software**

In the project the first thing we see after interfacing is the login panel. Here we can enter username and password and also select our role according which we are trying to use the system. If the role is admin ,then the person can add or delete new manager, cashier or pharmacist. If the role is manager then he/she can view user, prescription and manage stock of drugs. For pharmacist role it is possible managing stock of drugs and also generate prescriptions. Lastly, for Cashier he/she will be able to generate invoice for payment of prescription.

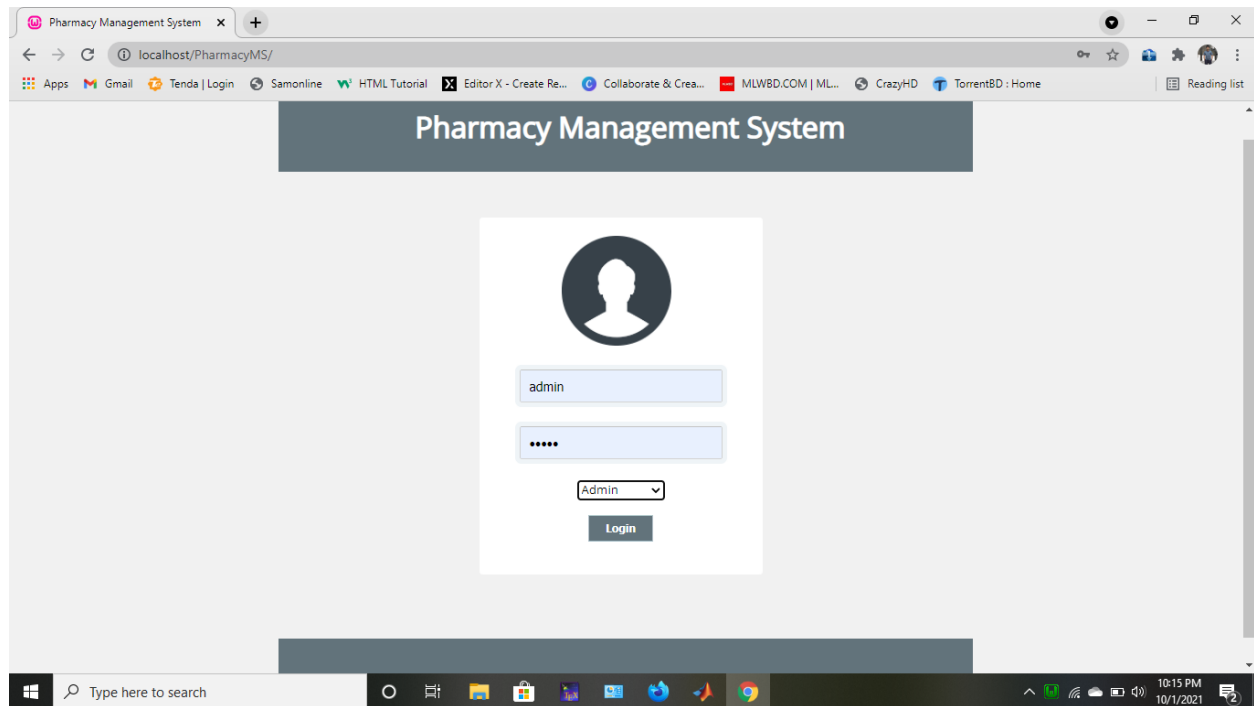


# CHAPTER 03

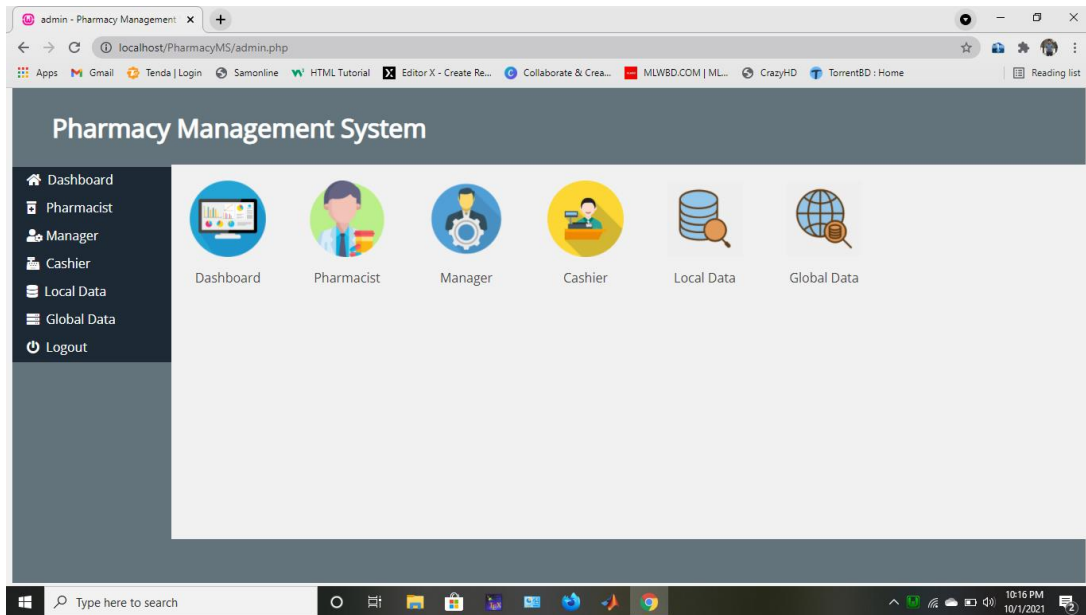
## PHARMACY MANAGEMENT SYSTEM

### 3.1 Pictorial Description

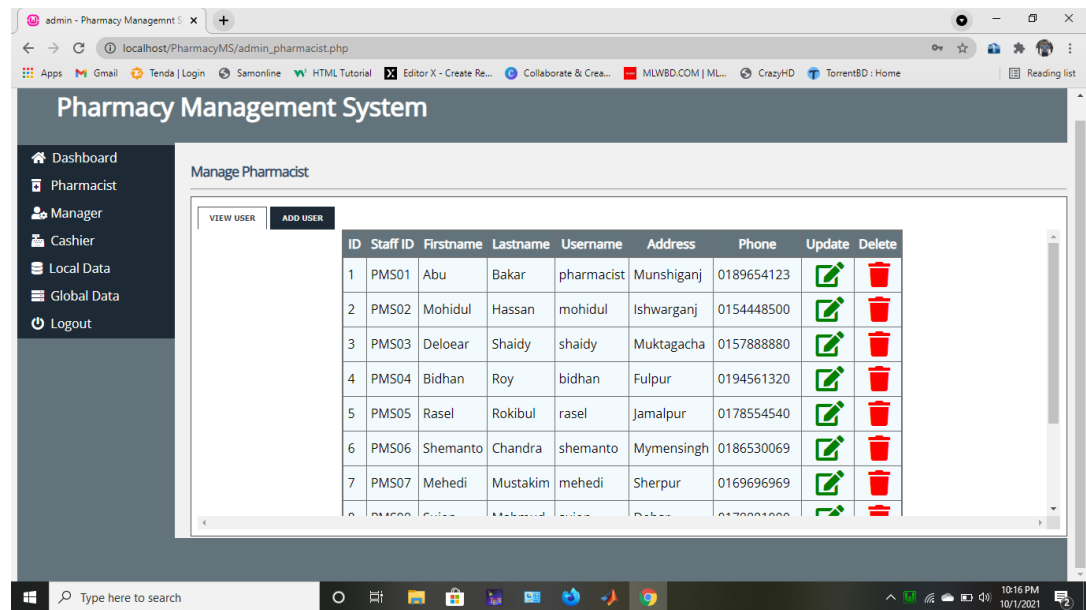
Our Software project related all necessary screenshots are provided below:



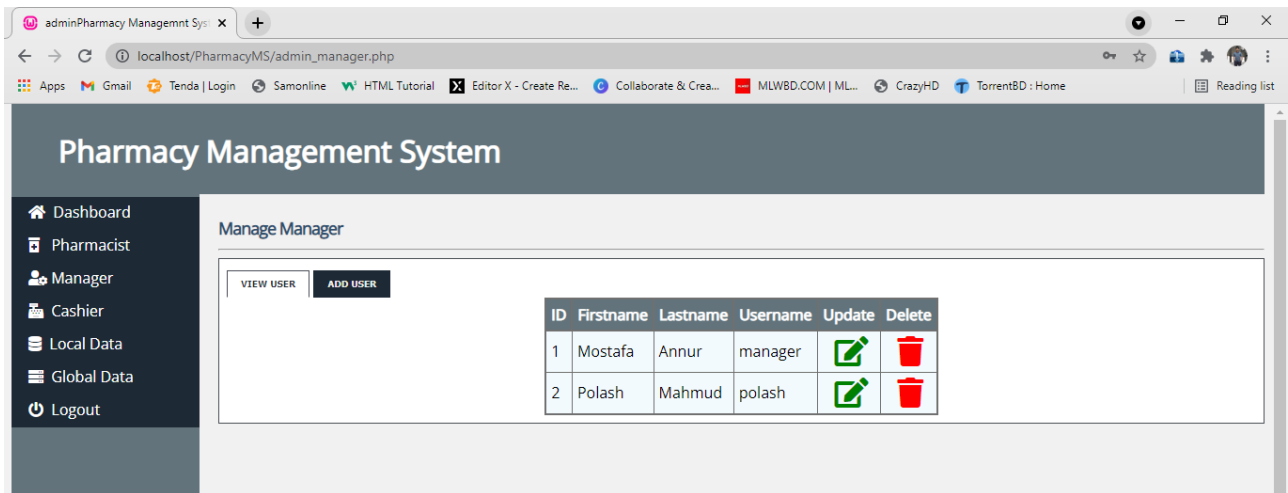
**Fig7:Login**



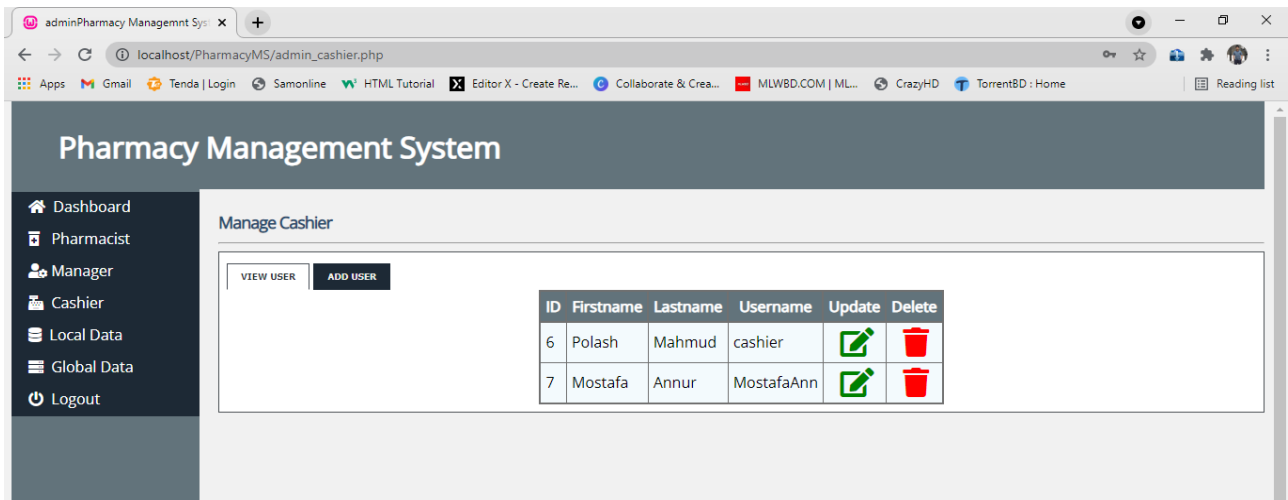
**Fig8:Dashboard**



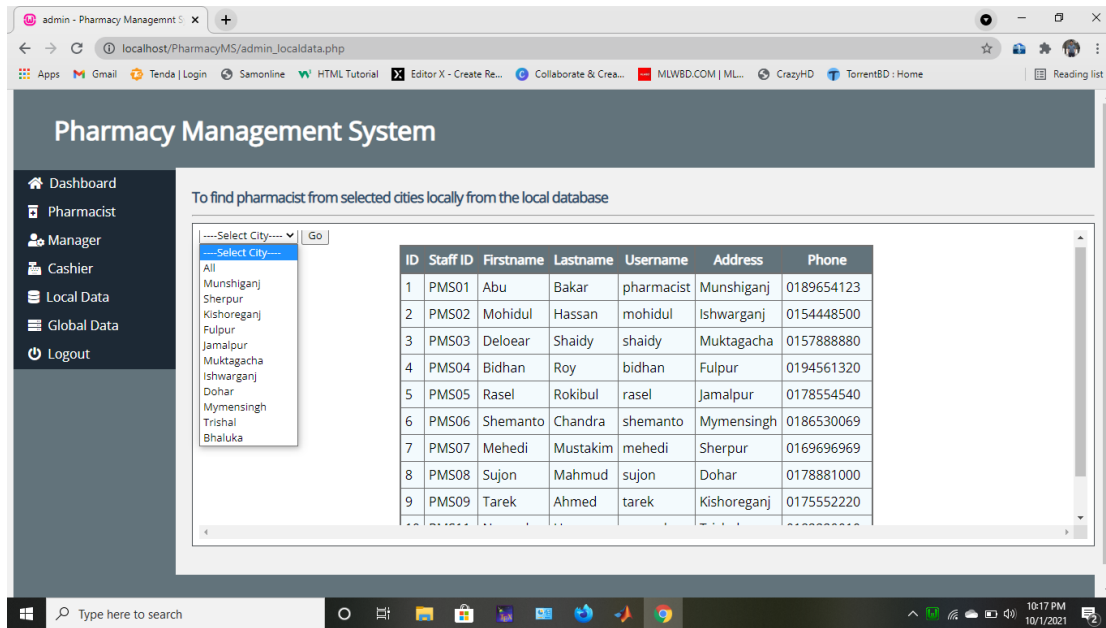
**Fig9:Manage Pharmacist**



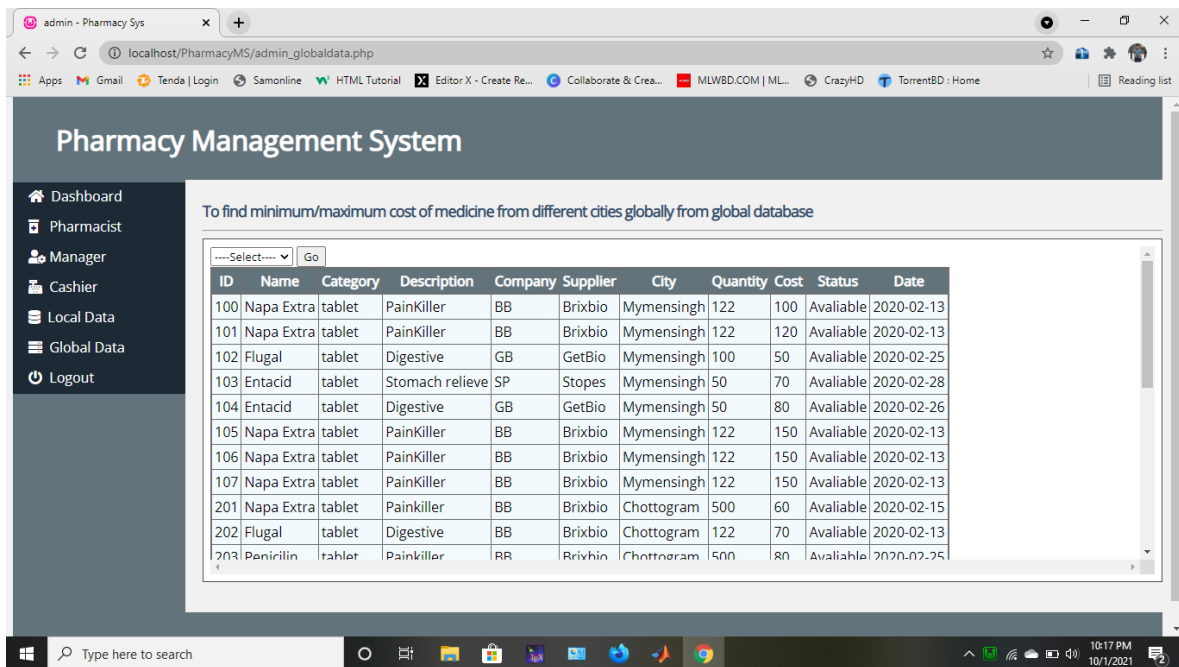
**Fig10: Manage Manager**



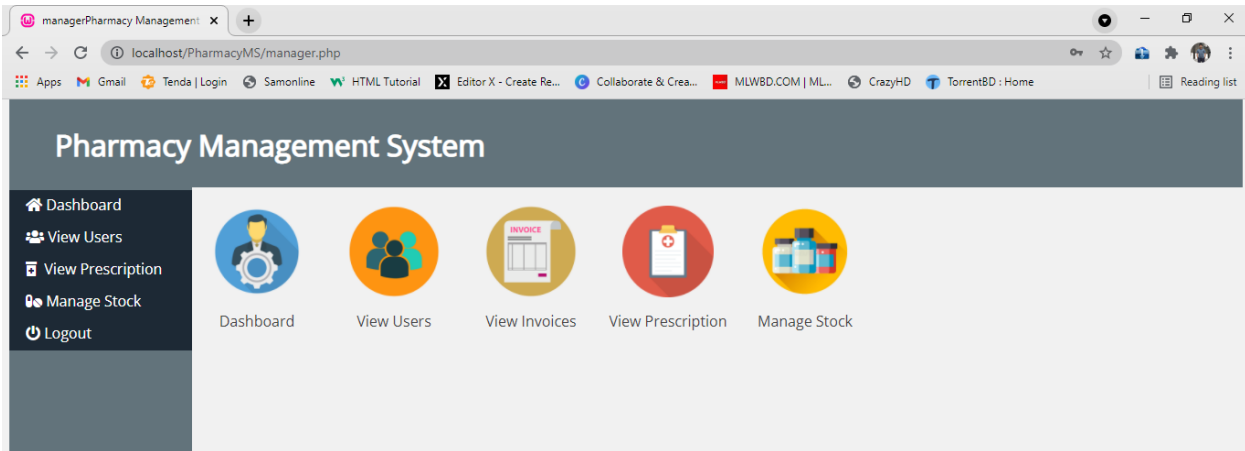
**Fig11: Manage Cashier**



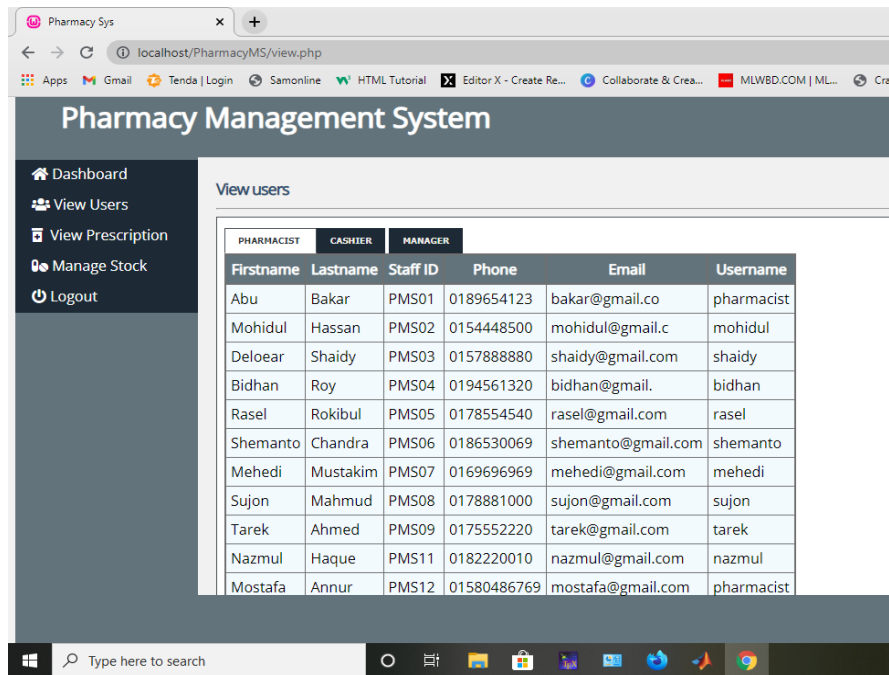
**Fig12:Local Pharmacist**



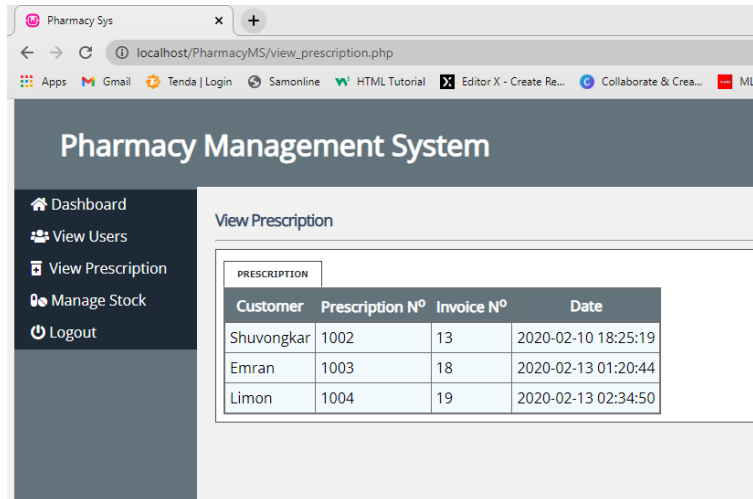
**Fig13:Global Medicine**



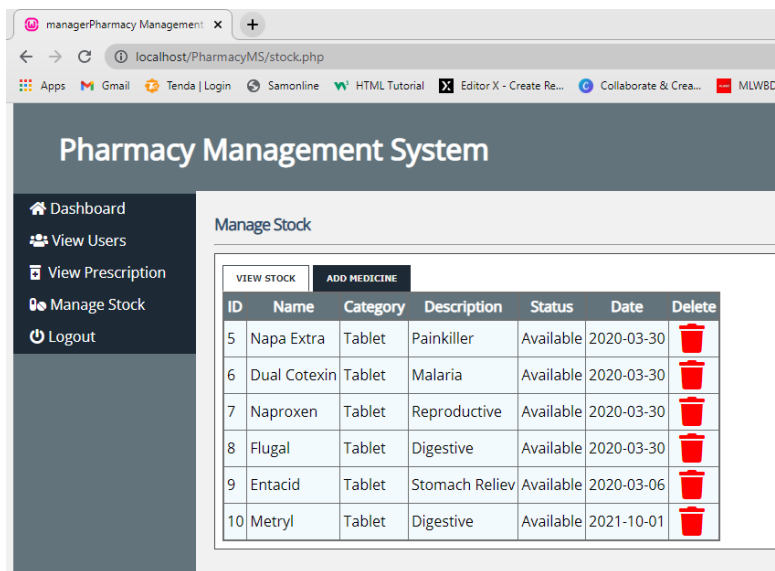
**Fig14: Manager Dashboard**



**Fig15: User View**



**Fig16:Prescription View**

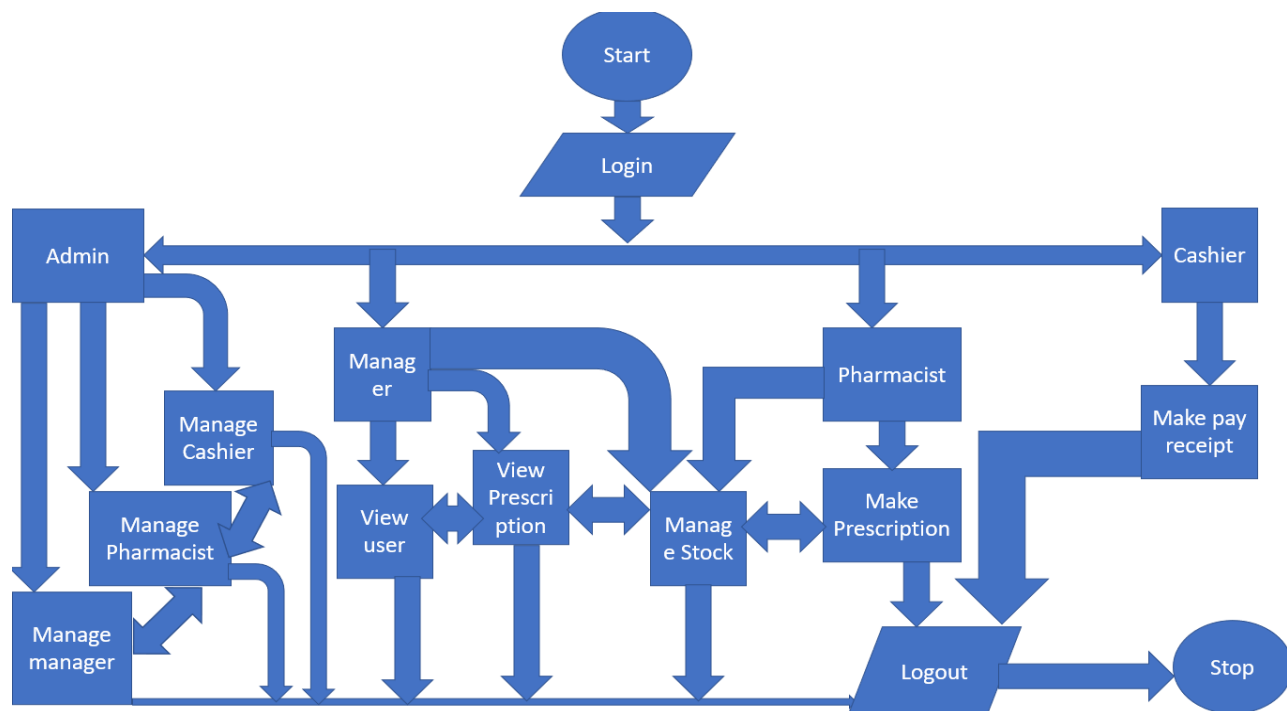


**Fig17:Manage Medicine**

## CHAPTER 04

### PROGRAM ANALYSIS AND DESIGN

#### 4.1 Flowchart



**Fig18: Flowchart of the Project**

#### 4.2 How It Works

The project is simple to use. It is developed by HTML language in frontend and PHP, JavaScript ,MySQL in backend. We took the help of CSS and Bootstrap which is mainly a **HTML** framework toolkit. With the help of PHP's built in function the software is developed. After accessing the grant permission the software asks for the necessary information for Login into the system. Following all the instructions we can use the system four different roles.

## 4.3 Data Validation

The software project also has the feature of data validation. That means whenever we enter any illegal data specially typing mistakes, it denies to access these data and sound beep for entering the correct information until it receives the legal data.



**Fig19: Data validation whether its correct or wrong.**



## **CHAPTER 05**

### **PROJECT OUTCOME AND CONCLUSION**

#### **5.1 Project Features and Advantages**

##### **Features**

1. It has a Login Panel.
2. It has a Dashboard Panel.
3. It has four different roles for user.
4. Invoice can be generated as pdf receipt.
5. Different user of different role can use the system differently.

##### **Advantages**

1. Admin can add new manager, pharmacist, cashier for the system and also can delete if needed.
2. Manager and pharmacist can update medicine list and their stock availability.
3. Different pharmacist available in different cities can be found.
4. We can find maximum and minimum value of drugs in country with stock availability.
5. We can generate pdf document for payment history which will be good for account management use.

## 5.2 Limitations

- 1.The system is not ready for use online.
- 2.There are some bugs in the system in prescription and receipt generation.
- 3.We don't have a storage to store big data for the system.
- 4.The security of the system is not fully protected.
- 5.As there is no biometric system, anyone with username and password can log into the system.



**Fig20: WEB connectivity Icon**



**Fig21: Storage Icon**

## 5.3 Further Development

Our system has all the functionalities to use as a pharmacy management system. But we have some plans to make it more efficient, reliable.

Our expectation is that in future we can make sure to add some important features i.e.:

- (1) We want to make our system menu totally button based so that we can use it in Android devices too.
- (2) Also, we expect to add the facility for storing user's data and information in a file for the purpose of later achievement.
- (3) We also want to make our system online, so that any user can use it from anywhere via internet.

## **5.4 Conclusion**

Our project resulted in a working implementation of the system Pharmacy Management. The whole process was to implement the front view of the project properly and then work with them. The hardest part of the project was to implement php codes for connecting all the layout with each other. Also we needed to create a database which helped to complete the system. Altogether it was a great experience for us to develop the management project and we successfully implemented with having so many ups and downs.

## **5.5 References**

1. [geeksforgeeks.org](http://geeksforgeeks.org)
2. [w3schools.com](http://w3schools.com)
3. [google.com](http://google.com)