

# Pharmacy Management System

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## ABSTRACT

*Increasing health concerns among people demands efficiency in Pharmacy Stores. The need to migrate from originally paper-based to electronic notebooks with data storage, computational features and reliable electronic documentation has aroused. For this project, I have designed a Pharmacy Management System based on Python MySQL Database Access for small businesses. The software with an easy-to-use interface has been designed to allow stock maintenance, database access and electronic documentation for billing purposes with valued customer support. These features have been later used to compute discounts for customers, daily revenues, and determine steps to prevent potential revenue loss. Being an open-source software, it can be used by a wide variety of retail and wholesale outlets to automate the process of manually maintaining the records and cash flows. The results have been potentially generalizable. This software saves your time and money.*

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## 1. Introduction

This is an Open-Source Software designed for medical store management purposes for small businesses. In this era of growing demands of Pharmaceutical and Chemical products for health and medicine; every Pharmacy/Medical store, be it a small of medium sized businesses are running rampant towards efficient store management and rapid revenue computation. Instead of using the conventional style of paper-based records and documentation, electronic methods are preferred for stock maintenance, automatic updating of records while billing and reliable electronic documentation. The software would reduce daily effort wage and labor numbers. Crushing numbers can now be left to the system. The system computes and displays the daily revenue total and also notifies the products to expire the oncoming week. The system is based on Python Programming language for scripting and SQL Database Access for storage of records. The advantages of these features are explained in the next section

### 1.1 Technologies

In order to design maintenance software, the basic requirements would be: a powerful Platform, reliable storage capability and a simple interface. All these have been accomplished by Python, a powerful cross-platform language that can run in any device with a Windows or GNU/Linux Interface. When coding an application, there is a requirement for dynamic content fulfilled by SQL. The mainly used technologies for the coding process of the software have been introduced.

## 1.2 Python Programming

Python is an interpreter, object-oriented, high-level programming language with dynamic semantics. Its high-level built-in data structures, combined with dynamic typing and dynamic binding; make it very attractive for Rapid Application Development, as well as for use as a scripting. Python's simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance. Python supports modules and packages, which encourages program modularity and code reuse. The Python interpreter and the extensive standard library are available in source or binary form without charge for all major platforms, and can be freely distributed.

- Tkinter GUI & PySQL Database access has been immensely used to design this software.
- The software is designed to use this technology due to the above said reasons, to connect to the valued customers securely.

## 1.3 SQL

When coding an application, the decision to use SQL is a requirement for dynamic content. SQL is a database application that can be used by large or small businesses. SQL Queries can be used to retrieve large amounts of records from a database quickly and efficiently. SQL databases use long-established standard, which is being adopted by ANSI & ISO. Non-SQL databases do not adhere to any clear standard. Using standard SQL, it is easier to manage database systems without having to write substantial amount of code. With the emergence of Object-Oriented DBMS, object storage capabilities are extended to relational databases.

We have used PySQL Database access for safe and secure storage of stock data.

SQL Database has a huge advantage over the temporary storage variables list, tuples and dictionaries in python which has been explained in the next section.

## 2. Project AIMS and Objectives

The Project is related to Pharmacy or a Medical Stores which are in small scale and have to depend on the pen and paper. As we the know the medicine are the important things as the clothing, shelter and food. So we decided to implement a cheapest and easy way to store all the data and tally all the product. The most important thing in Medical is the Expiry check if there is an Expiry product, we cannot able to check in the bunch of paper and pen we have to check daily of expired product and to make it easy and faster its important to move forward with technology and smart. That's are all aim to make every pharmacy fast and safer and up to date.

## 3. Hardware and Software Requirements

### 3.1 Hardware Requirements

1. Monitor
2. Keyboard
3. Mouse
4. CPU

### 3.2 Software Requirements

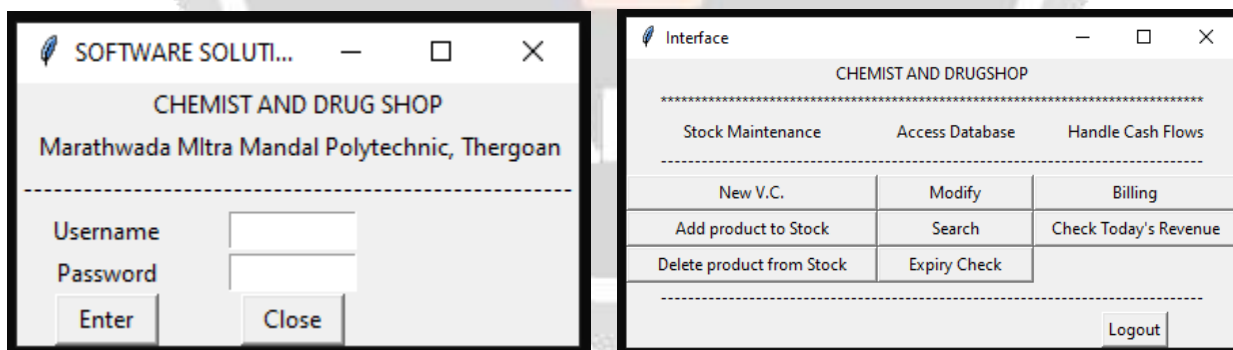
1. Operating System Windows 8 and above version
2. Python 3.0 Installed

## 4. Program Details

### 4.1 Module used in Program

No	Module	Uses
1	tkinter	Tkinter is used to create a Graphical User Interfaces (GUI) and it's the only framework built into the python standard library.
2	time	It provides a function for getting local time from the number of second elapsed since the epoch called localtime()
3	Sqlite3	It is used to integrate the SQLite database with python
4	random	Random module is an inbuilt module of python which is used to generate random number.
5	tempfile	In python module used in a situation where we need to read multiple files, change or access the data in file and gives output file based on the result of processed data.

#### 4.2 Program Output



tk

ENTER NEW PRODUCT DATA TO THE STOCK

Name:

Type:

Quantity Left:

Cost:

Purpose:

Exp. Date:

Rack location:

Manufacturer:

Back

Name	Type	Quantity Left	Cost	Purpose	Exp.	Rack	Manufacturer
1. combiflame	supine	144	24	headache	04-11-2017	1	medi
2. disprin	supine	414	12	headache	21-01-2022	1	medi
6. crocin	supine	20	20	headache	10-02-2032	1	medi

tk

BILLING SYSTEM

Enter Name:

Enter Address:

Value Id (if available):

Main Menu

SELECT PRODUCT	RACK	QTY LEFT	COST	QUANTITY
1. combiflame	1	144	Rs 24	<input type="text"/>
2. disprin	1	414	Rs 12	<input type="text"/>
6. crocin	1	20	Rs 20	<input type="text"/>

tk

ENTER VALUED CUSTOMER DETAILS

Name:

Address:

Value Id:

tk

Today: 2/6/2022

Total revenue: Rs 0.0

tk

EXPIRY CHECK

Today : 2/6/2022

Selling Expired Medicines and Drugs is Illegal

combiflame

tk

Delete a product from Stock

Enter Product to delete:

Product	Qty	Exp.dtt	Cost
1. combiflame	144	04-11-2017	24
2. disprin	414	21-01-2022	12
6. crocin	20	10-02-2032	20

tk

SEARCH

SEARCH FOR MEDICINE

Symptom Name:

tk

SEARCH

SEARCH FOR MEDICINE

Symptom Name:

1. combiflame Rs 24 Rack: 1 Mfg: medi

## 5.ACKNOWLEDGEMENT

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## 6. REFERENCES

1. Programming with Python (Reference Book) by Mr. Thareja.

