PHARMACY MANAGEMENT SYSTEM

REQUIREMENTS

Hardware Requirements:

Processor	: Intel Core i3
Ram	: 4 GB Ram or above
Space	: Less then 10 MB
Display Type	: Standard monitor for user interfaces

Software Requirements:

Operating System	: Compatible with Windows, Linux, or macOS.
Back-end	: MySQL, Python
IDE	: PyCharm, Visual Studio Code

INTRODUCTION

The 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.

Scope of a Pharmacy Management System

Inventory Management:

Tracking and managing medication inventory, including stock levels, expiration dates, and replenishment needs. Handling various types of medications such as tablets, capsules, liquids, injections, etc. Managing information about suppliers and manufacturers.

Medication Dispensing:

Facilitating the dispensing of prescribed medications to patients. Ensuring accuracy in medication dispensing and reducing the risk of errors. Recording details of dispensed medications, including patient information, dosage, and instructions.

Prescription Management :

Recording and organizing prescriptions received from healthcare providers. Verifying prescriptions, including dosage instructions and refill authorizations. Generating alerts for potential drug interactions or contraindications.

Purpose of Pharmacy Management System

Efficiency Enhancement:

To enhance the efficiency of pharmacy operations by automating routine tasks such as inventory management, sales processing, and reporting, thereby reducing manual effort and minimizing errors.

Inventory Optimization:

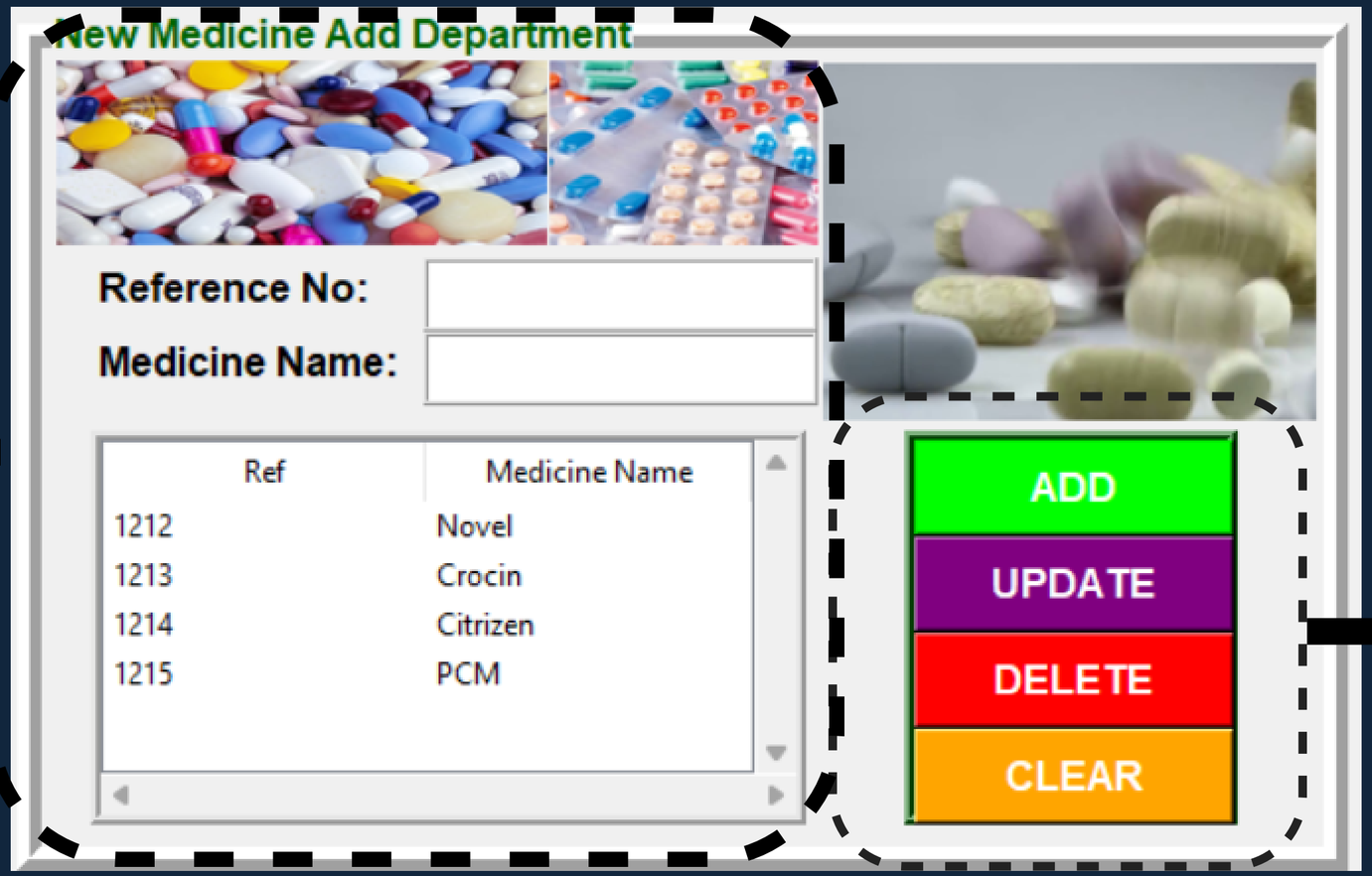
To optimize inventory management processes by providing real-time visibility into stock levels, facilitating timely replenishment, and minimizing stockouts and overstock situations.

User-friendly Interface:

To develop a user-friendly frontend interface that is intuitive, easy to navigate, and accessible across different devices, ensuring a positive user experience for pharmacists and other users of the system.

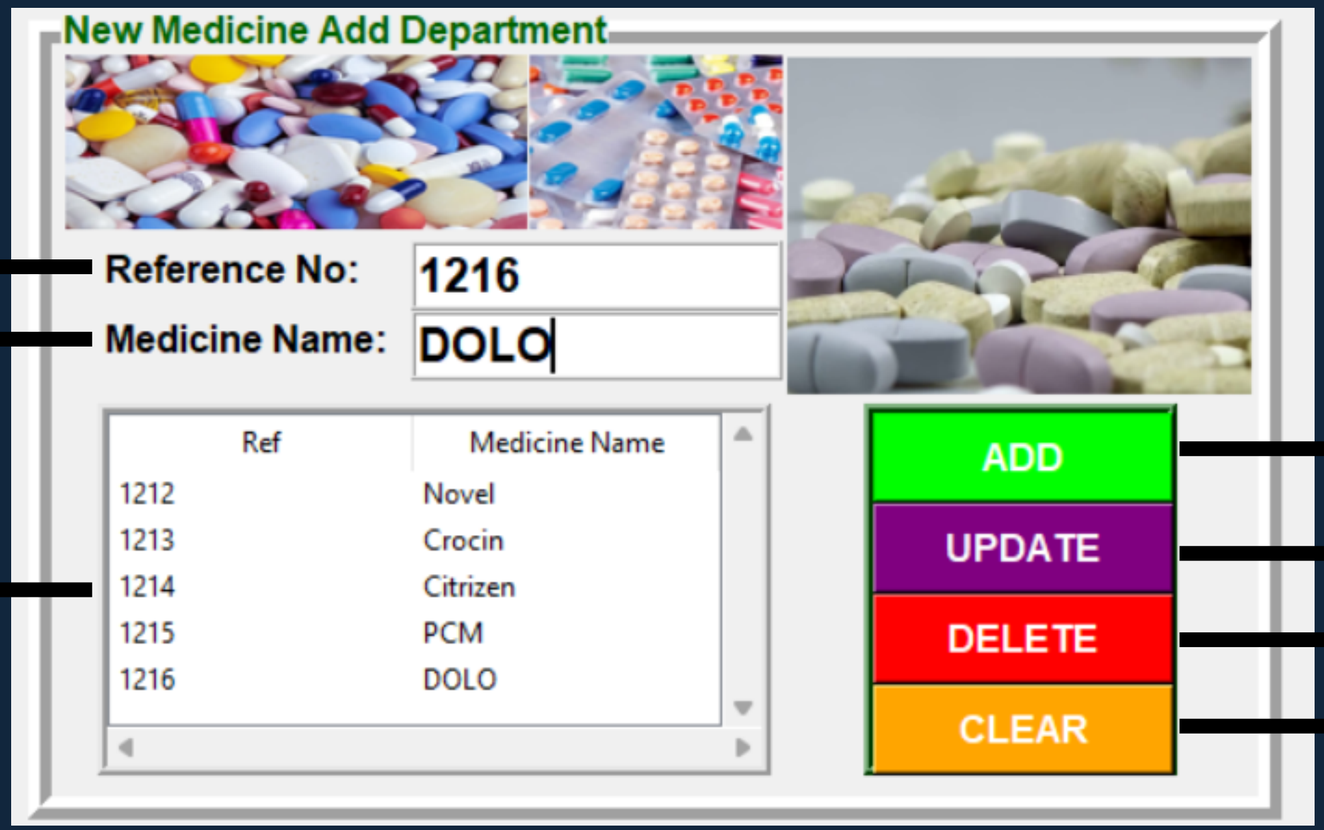
OVERVIEW OF THE PHARMACY MANAGEMENT SYSTEM

Dashboard of New medicine and Department



ADD, UPDATE, DELETE AND CLEAR

To Add New Medicine and Department



Reference No

Medicine Name

Medicine Add box

ADD Button

UPDATE Button

DELETE Button

CLEAR Button

To Add Medicine Information

Enter Ref no
Enter Cmp Name
Enter Types
Enter Med Name
Enter Lot No
Enter Issue Date
Enter Exp Date
Enter Uses
Enter Side Effect

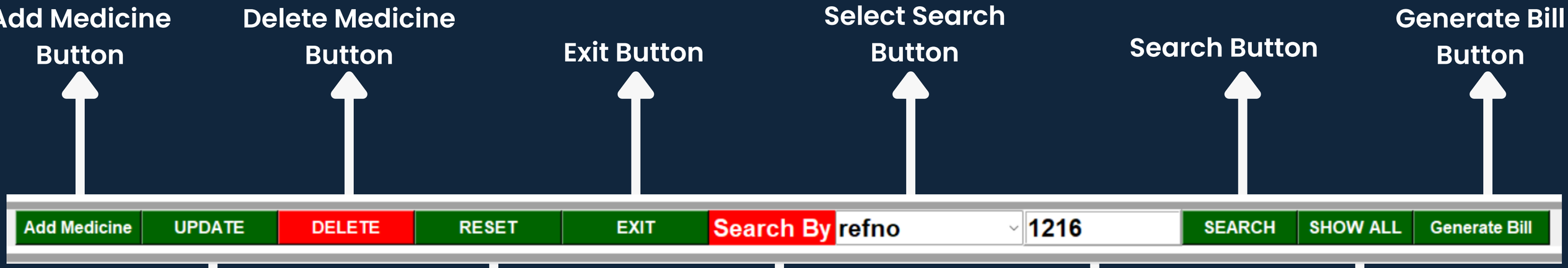
Medicine Information

Reference No	1216	Prec&warning:	Dr.const
Company Name:	Sun Pharma	Dosage:	5
Type of Medicine	Tablet	Tablets Price:	350
Medicine Name	DOLO	Product QT:	13
Lot No:	4565		
Issue Date:	12/10/2023		
Exp Date:	18/09/2024		
Uses:	Fever		
Side Effect:	No		

Stay Home Stay Safe:

Enter warning
Enter Dosage
Enter Price
Enter Quantity

Button Functionality



Added Databases

Reference No	Company Name	Type Of Medicine	Tablet Name	Lot No	Issue Date	Exp Date	Uses	Side Effect	Prec&Warning	Dosage	Price	Product Qts
1212	Amit Pharma	Tablet	Novel	4562	13/11/2023	12/10/2024	Headache	No	Dr.const	2	200	12
1213	Ashish Pharma	Tablet	Crocin	4562	13/11/2023	12/10/2024	Headache	No	Dr.const	2	200	12
1214	Hemant Pharma	Tablet	Citrizen	4563	02/05/2023	10/03/2025	Cold	No	Dr.const	4	400	20
1215	Sun Pharma	Tablet	PCM	4564	21/10/2023	22/11/2024	Pain	No	Dr.const	5	350	30
1216	Sun Pharma	Tablet	DOLO	4565	12/10/2023	18/09/2024	Fever	No	Dr.const	5	350	13

MySQL Database

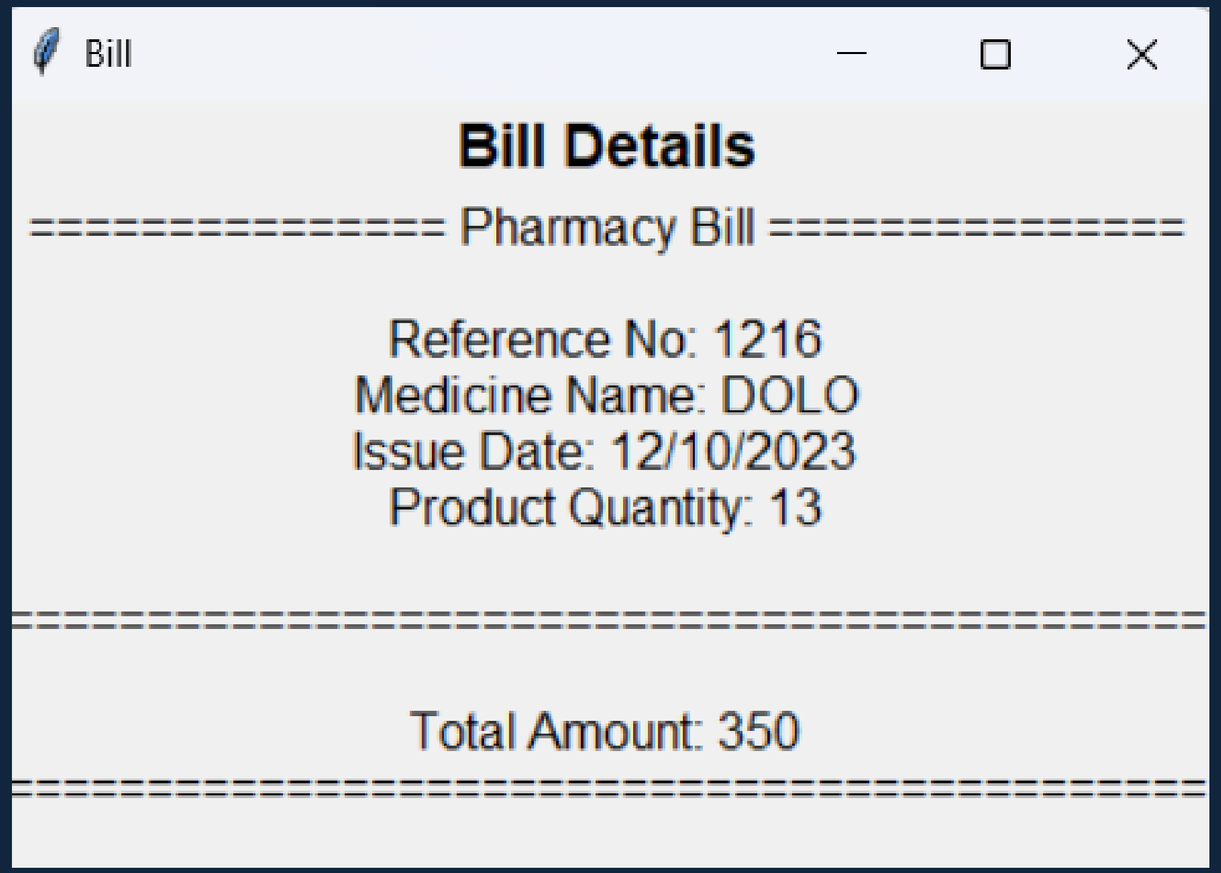
Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

Ref	MedName
1212	Novel
1213	Crocin
1214	Citrizen
1215	PCM
1216	DOLO
NULL	NULL

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

refno	cmpName	Type	medname	lot	issuedate	expdate	uses	sideeffect	warning	dosge	price	product
1212	Amit Pharma	Tablet	Novel	4562	13/11/2023	12/10/2024	Headache	No	Dr.const	2	200	12
1213	Ashish Pharma	Tablet	Crocin	4562	13/11/2023	12/10/2024	Headache	No	Dr.const	2	200	12
1214	Hemant Pharma	Tablet	Citrizen	4563	02/05/2023	10/03/2025	Cold	No	Dr.const	4	400	20
1215	Sun Pharma	Tablet	PCM	4564	21/10/2023	22/11/2024	Pain	No	Dr.const	5	350	30
1216	Sun Pharma	Tablet	DOLO	4565	12/10/2023	18/09/2024	Fever	No	Dr.const	5	350	13
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Bill


Bill
Bill Details
========== Pharmacy Bill ==========
Reference No: 1216
Medicine Name: DOLO
Issue Date: 12/10/2023
Product Quantity: 13
==========
Total Amount: 350
==========

TECHNOLOGIES USED IN CODE

Programming Languages:

Python

Python is a high-level, interpreted programming language known for its simplicity and readability. It emphasizes code readability and a clean syntax, making it easy for programmers to express concepts in fewer lines of code compared to other languages. Python supports multiple programming paradigms, including procedural, object-oriented, and functional programming. It is widely used in various fields such as web development, data analysis, artificial intelligence, scientific computing, and more.

SQL(Structured Query Language)

SQL (Structured Query Language) is a standard programming language designed for managing and manipulating relational databases. It provides a set of commands for querying, updating, and managing data stored in a relational database management system (RDBMS). SQL allows users to create and modify database schemas, insert, update, and delete records, and perform various data manipulation tasks such as filtering, sorting, and aggregating data. It is widely used across different industries for storing, retrieving, and managing structured data efficiently.

Frameworks and Libraries:

Tkinter

Tkinter is a Python library for creating graphical user interfaces (GUIs). It provides a simple and easy-to-use way to create windows, dialogs, buttons, menus, and other GUI components for your Python applications. Tkinter is based on the Tk GUI toolkit, which is a cross-platform library that provides a set of tools for building GUIs.

MySQL Connector

“mysql.connector” is a Python library that provides an interface for connecting to and interacting with MySQL databases from Python code. It allows you to execute SQL queries, manage database connections, handle transactions, and retrieve query results, among other tasks.

Frameworks and Libraries:

Pillow

The Python Imaging Library adds image processing capabilities to your Python interpreter.
This library provides extensive file format support, an efficient internal representation, and fairly powerful image processing capabilities. The core image library is designed for fast access to data stored in a few basic pixel formats. It should provide a solid foundation for a general image processing tool.

Pyttsx3

pyttsx3 is a text-to-speech conversion library in Python. Unlike alternative libraries, it works offline, and is compatible with both Python 2 and 3.

Frameworks and Libraries:

Cv2

The Cv2 library in Python is part of OpenCV, an open-source computer vision and machine learning software library. OpenCV stands for "Open Source Computer Vision Library," and it is widely used for image processing, computer vision, machine learning, and artificial intelligence tasks. OpenCV provides a large number of functions to manipulate and analyze images and videos.

Tkvideo

tkvideo is a Python library designed for integrating video playback within tkinter, Python's standard library for creating graphical user interfaces. The tkvideo library allows you to play videos in a tkinter application, which is useful when building GUI applications that require video playback functionality.

Tools and Software:

Visual Studio Code (VS Code)

Visual Studio Code (VS Code) is a free source-code editor developed by Microsoft for Windows, macOS, and Linux. It provides support for various programming languages and features such as syntax highlighting, code completion, debugging, version control integration, and extensions. VS Code is known for its lightweight and fast performance, making it popular among developers for coding and debugging tasks across different programming languages and frameworks.

MySQL

MySQL is an open-source relational database management system (RDBMS) that uses Structured Query Language (SQL) for managing and manipulating data. MySQL stores data in databases, which are organized collections of related data tables.Inside each database, data is organized into tables. Each table consists of rows and columns, similar to a spreadsheet.MySQL uses SQL as its primary language for interacting with the database. SQL allows users to perform various operations such as querying data (SELECT), inserting new records (INSERT), updating existing records (UPDATE), deleting records (DELETE), creating tables (CREATE TABLE)

THANK YOU