

Data Structure & Algorithms

(DSA-Lab)

### Project Proposal

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# PROJECT NAME:

Pharmacy Management System

# INTRODUCTION:

Pharmacy Management System is based on a concept of taking medicine orders with payments. In this system, there are no login features. The user can use the features of it which include taking new medicine order, deleting, modifying medicine orders, printing the receipt of payment and viewing the summary of total sales within a day.

# Features:

Talking about the features of the Pharmacy Management System,

1. The user can take a new medicine order. For this, the user has to provide the order number, name, date, number of medicine and select medicine.
2. The user can delete the latest medicine order by providing the order number.
3. In order to modify the order, he/she has to enter each and every detail.
4. After taking orders, the payment is to be done from the receipt section. Here in the receipt section, the system asks for a receipt number.
5. The system displays total receipt with medicine type, name, quantity, and total price.
6. Another feature of this project is about viewing the summary of total sales. This section displays each and every sale record in a list view.
7. The system does not use any external files to store the data permanently.

# PROBLEM STATEMENT:

The system should be designed to handle large volumes of data and transactions, provide real-time updates, and ensure data integrity and security. It should also be user-friendly and intuitive to use for pharmacy staff. The Pharmacy Management System in C++ aims to streamline pharmacy operations, improve efficiency, and reduce errors in inventory management and medication dispensing while ensuring compliance with regulatory requirements.

# METHODOLOGY:

We will use the concept of Link List to create new nodes and store all the data of management system according to their functions. Software requirements deal with defining software the sources requirement that need to be install on computer for the optimal functioning of an application.

# SOLUTION APPLICATION AREA:

The Pharmacy Management System in C++ can be used in various applications areas, including:

1. **Retail Pharmacies:** The system can be used by retail pharmacies to manage their inventory, sales, and billing processes.
2. **Hospital Pharmacies:** The system can be used by hospital pharmacies to manage medication dispensing, drug inventory, and prescription management.
3. **Online Pharmacies:** The system can be used by online pharmacies to manage their inventory, sales, and billing processes. It can also help to track customer information, including prescription history and medication interactions.
4. **Wholesale Distributors:** Used by wholesale distributors to manage their inventory and sales processes. It can also help to track customer information, including purchasing history and order fulfillment.

# Tools/Technology:

We use C++ programming language for the construction of this project, on a console-based ***DEV-C++***.