

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

A medical store management system is a software application designed to streamline the operations of a pharmacy or a medical store. This system enables pharmacists and store managers to efficiently manage various aspects of their business, including inventory management, sales tracking, prescription management, customer records, and more.

In today's fast-paced world, the healthcare industry is evolving rapidly, and the demand for efficient management systems in medical stores is increasing.

Traditionally, managing a medical store involved manual processes, such as maintaining paper records, tracking inventory levels, managing prescriptions, and handling sales transactions. These manual methods were time-consuming prone to error, and often inefficient, leading to challenges in inventory management, tracking expiration dates, and ensuring accurate prescription processing.

1.2 MOTIVATION

Medical store management systems allow us to practice our programming skill in a real- world application. A Medical Store Management System serves as the backbone for efficient and effective operations within a pharmacy or medical store. An automated system can streamline the day-to-day operations of a medical store by managing inventory, sales, purchases, and other processes efficiently. It reduces manual errors and redundancy in tasks.

The real motivation to make the medical management system is to make it more secure and trustworthy. To reduce number of errors which are essential in medicine field.

1.3 STATEMENTS OF PROBLEMS

Statement of problem is an explanation in research that describes the issues that is in need of study.

- Ineffective inventory management
- Lack of transparency
- Poor record-keeping

1.4 OBJECTIVES

The objective of the medical store management system may be different according to the developer. But the main objective of this project is to manage the details of medical shop, stocks, inventory, sells.

- To help in decision making and to provides a systematic medicine inventory.
- To implement digital system for accurate and secure record keeping.

1.5 APPLICATION

A medical store management system can have several applications, depending upon the context and purpose of the system. A medical store management system can be used in a pharmacy or in a medical store. By using this system, store owner or pharmacists can improve their inventory management, reduce medication errors, improve workflow, and increase profitability. Also, this system will help to improve patient satisfaction, improve data security.

1.6 SCOPE

The scope of medical store management system can vary depending on the software solution chosen and the specific needs of the medical store. It is important for businesses to carefully consider these factors when selecting and implementing a management system to ensure it aligns with their requirements and objectives. Here, are the scopes of medical store management system:

- a. The detail of medicine which is available in medical store is easily managed and organized by using this system.
- b. This system also helps in keeping track of the available stock of medicine and also updates them on regular basis.
- c. The database for customers and employees can also be managed by using this project.
- d. It provides the facility of generated automatic bills for customers.
- e. This system helps in analyzing the location of the specific medicine available in the medical store.

CHAPTER 2

LITERATURE REVIEW

Medical store management system is the system that is designed to help medical stores run smoothly and efficiently which replaces old, manual ways of managing the store with an easier, automated system. In this literature review, we will examine the research related to medical store management system.

“Improving medical stores management through automation and effective communication” by Lt col Ashok Kumar, Marwaha Vishal, Mudera P Cariappa, Maj Gen Mukti Sharma (2015): This study shows that the inventory management system which they developed was simple and user friendly in its interface, no special training was required and the staff adopted the system without any hassles.

“Medical management system” by prof. R.A Bharatiya, Yogeshri Babari, Kedar Kenjale ,Nayan Khade, Nikita patil (2023): In this study ,the medical management system will helps in effectively managing the medical store or shop ,providing the statistics about medicine or drugs which are in stocks which data can also be updated and edited. It works as per the requirement of the user and has options accordingly.

“Evaluation of pharmaceutical inventory management challenges at public healthcare facilities” in king Cetshwayo district, Kwazulu-Natal, South Africa by Sibusiso mabizela, Hima N. Nakambale (2023): This study highlights challenges in inventory management, particularly regarding stockouts, overstocking and expiry related wastages in the evaluated healthcare facilities.

After reviewing above articles, I assure that our project will fulfill all the loopholes and gaps of the existing medical store management system by implementing robust security measures to safeguard the sensitive patient data, ensuring confidentiality and integrity which ultimately lead to costs savings, operational efficiency, and heightened customer satisfaction.

CHAPTER: 3

PROJECT MANAGEMENT AND ANALYSIS

Project management is the process of leading a team to achieve specific goals and objectives within a defined timeline. It involves planning, organizing, monitoring all the aspects of a project.

Basically, this project will handle by following time schedule and activity of group members. For programming this system, we collaborated and do coding together which enables us to complete our project before deadline. With effective communication and coordination among the group members, project became successful.

3.1 TIME SCHEDULE AND ACTIVITIES OF GROUP MEMBER

A project management timeline is a schedule for your entire project from inception to completion. Here, is the time schedule and activities of group member:

Name	Role	Activities	Working days of maximum 35 days
Kriti Khadka Chhetri	Team leader and researcher	Develop project plan, identifying requirement, manage team dynamics, assign task to group members	35 days
Purnima Sigdel	Programmer or coder	Write code according to project requirements and specifications	35 days
Vyshnavi Chhetri	Programmer or Designer	Create detailed design documentation for the development of the project and write a program related to the project.	35 days

Table 1: Time Schedule of This Project

3.2 WORK SCHEDULE (GANTT CHART)

A work schedules is a time table that organizes tasks, resources and due dates in an ideal sequences so that a project can be completed on time. Here, is the work schedule of our project:

	Total number of days				
Activities	Week 1	Week 2	Week 3	Week 4	Week 5
System analysis					
Design					
Programming or coding					
Testing and Documentation					

Table 2: Work Schedule of This Project

3.3 FEASIBILITY STUDY

A feasibility study for a medical store management system is an essential step in assessing the potential success of such a project.

- Market Feasibility: Evaluate the market demand for a medical store management system and assess potential competition in the market.
- Technical feasibility: This feasibility is used to find out whether the necessary technology, the proposed equipment have the capacity to hold the data, which is used in the project.
- Operational feasibility: This feasibility test asks if the system will work when it is developed is installed .The proposed system offers greater level of user-friendly interface, produces best results and gives high performance.
- Economic feasibility: This feasibility deals about the economic impact faced by the organization to implement the new system. The cost for implementing the proposed system, including hardware and software cost should be evaluated.
- Time feasibility: This system is a small one and hence the timeframe of 35 days is allocated for development is enough hence there is time feasibility.

CHAPTER 4

SYSTEM DESIGN

4.1 ALGORITHM

In the case of the medical store management system, the algorithm outlines the sequence of steps for managing medicines, including adding, updating, deleting, searching, displaying, and exiting the program. The algorithm of Medical Store Management system given below:

Step 1: Start

Step 2: Enter login credentials.

Step 3: Check whether the login ID is valid or not.

If valid, go to step 4.

If invalid, go back to step 2.

Step 4: Display menu options for the user:

- a. Add new medicine
- b. Update medicine
- c. Delete medicine
- d. Search for medicine
- e. Display all medicines
- f. Exit

Step 5: Enter your choice.

Step 6: If choice equals to a, add medicine

If no, choice equals to b, update medicine

If no, choice equals to c, delete medicine

If no, choice equals to d, search for medicine

If no, choice equals to e, display all medicine

If no, choice equals to f, exit

If no, display invalid input and go to step 4.

Step 7 : Prompt the user to enter information for the new add medicine:

7.1: Enter medicine details

7.2: Add the new medicine to the list.

7.3: Display confirmation message.

7.4: Go back to step 4.

Step 8: Update medicine:

- 8.1: Enter the medicine name or ID to update.
- 8.2: Find the medicine in the list.
- 8.3: If medicine found, enter new details for the medicine.
- 8.4: Update the medicine details in the list.
- 8.5: Display confirmation message.
- 8.6: If medicine not found, display "Medicine not found" message.
- 8.7: Go back to step 4.

Step 9 : delete medicine:

- 9.1: Enter the medicine name or ID to delete.
- 9.2: Find the medicine in the list.
- 9.3: If medicine found, remove the medicine from the list.
- 9.4: Display confirmation message.
- 9.5: If medicine not found, display "Medicine not found" message.
- 9.6: Go back to step 4.

Step 10: Search for medicine:

- 10.1: Enter search criteria (e.g., name, ID).
- 10.2: Retrieve and display search results from the list.
- 10.3: If no results found, display "No medicines found" message.
- 10.4: Go back to step 4.

Step 11: Display all medicines:

- 11.1: Retrieve all medicines from the list.
- 11.2: Display the list of medicines.
- 11.3: Go back to step 4.

Step 12: Exit

- 12.1: Display exit message.
- 12.2: Go to step 13 .

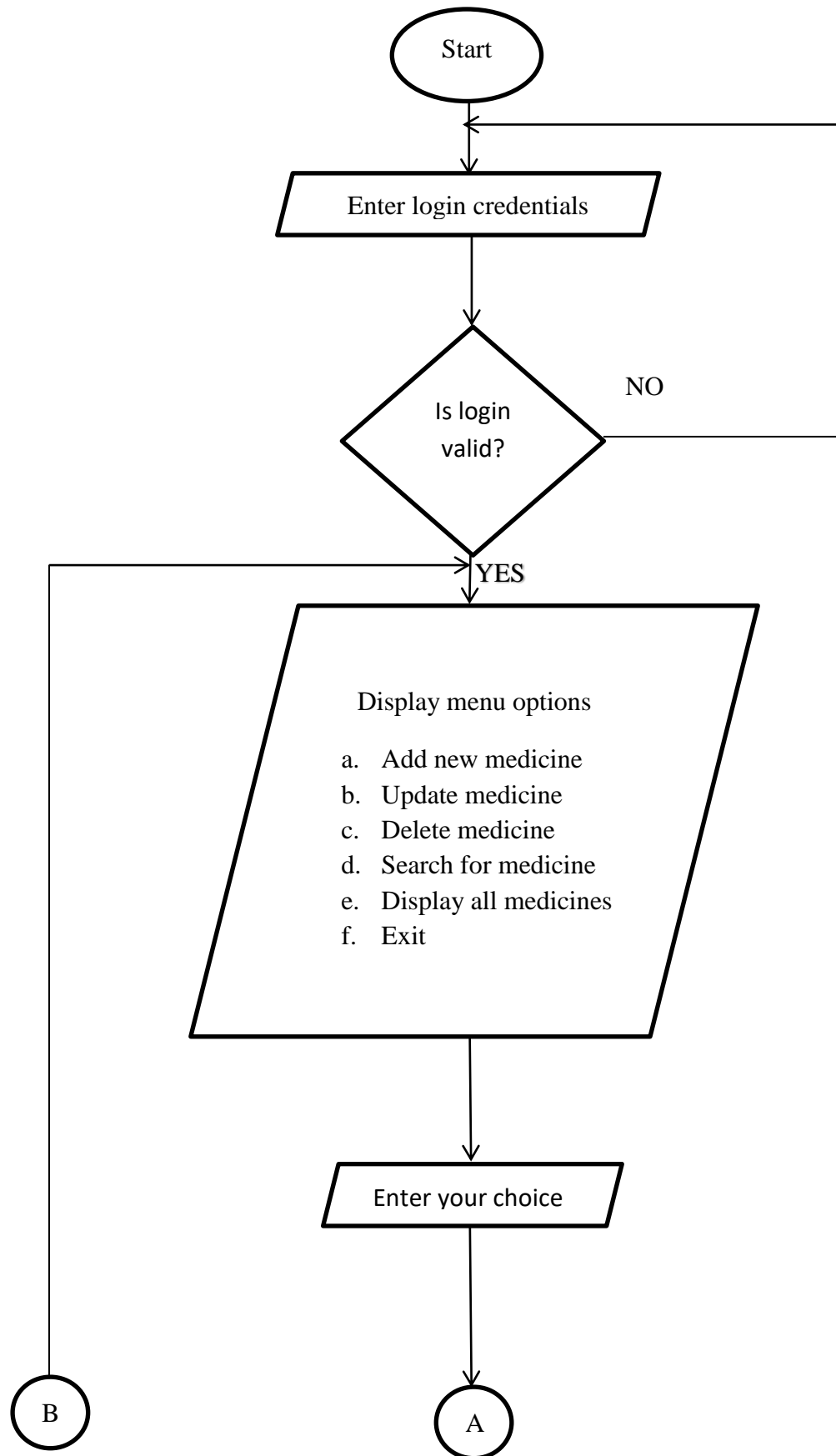
If choice is invalid:

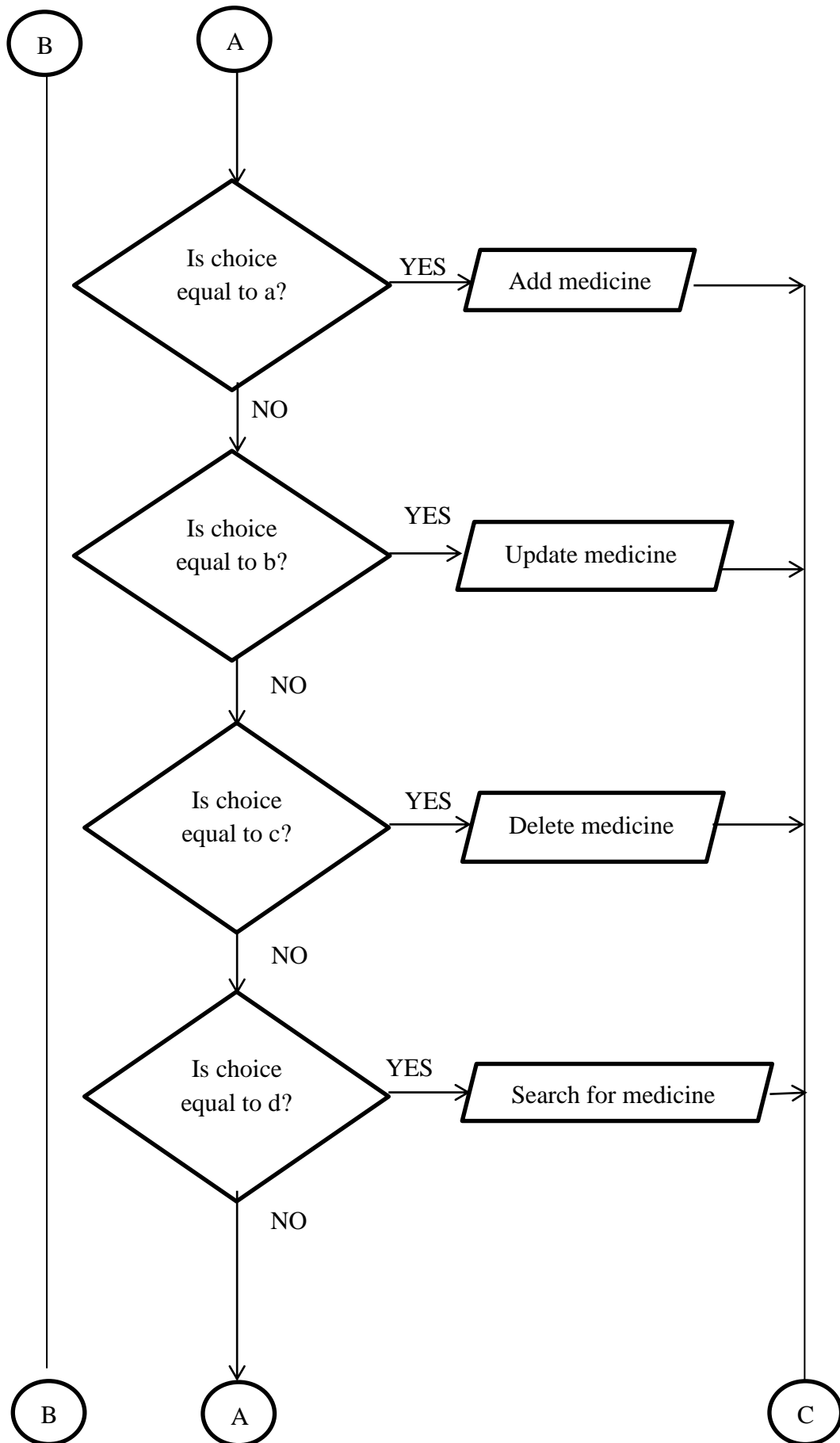
- 12.3: Display "Invalid input" message.
- 12.4: Go back to step 4.

Step 13: Stop

4.2 FLOWCHART

The Flowchart of Medical Store Management system given below:





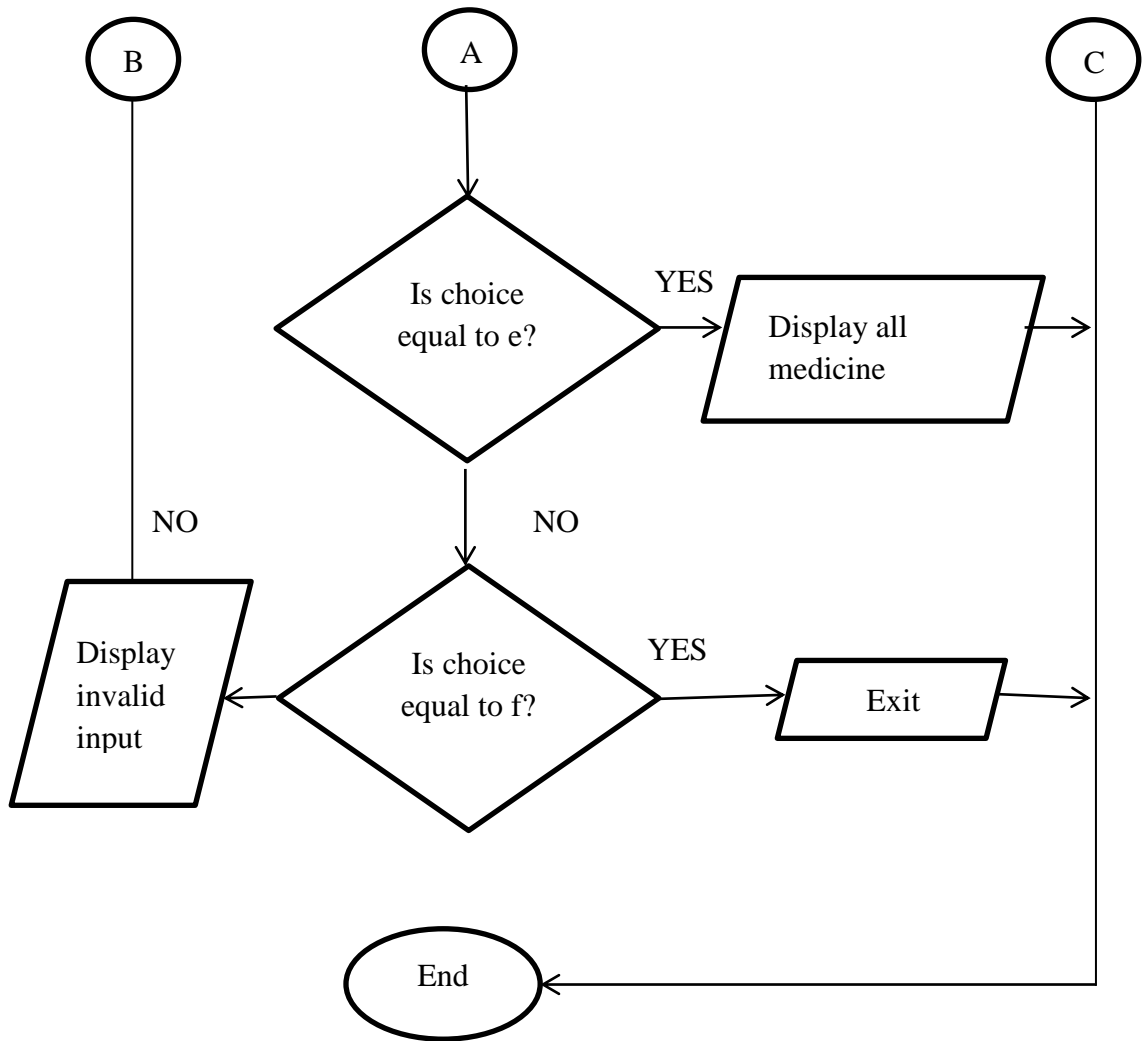


Figure 1: Flowchart of Medical Store Management System

CHAPTER 5

EXCEPTED OUTCOMES

When implementing a medical store management system in C, we can expect several significant outcomes. The system will facilitate efficient inventory management by tracking stock levels, and reorder accurately. This will help in maintaining a well-stocked inventory without risk of overstocking or running out of essential items. Additionally, this system will enhance customer service by tracking purchasing history, reduces manual work for managing the medical store stocks, medicine, company. Adding, updating, and deleting the medicines will results in proper resource management of medical store. This medical store management system helps in decision making process more efficiently and conveniently.

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