ST JOSEPH ENGINEERING COLLEGE
An Autonomous Institution
Affiliated to VTU, Belagavi
Mangaluru-575028

MINI PROJECT REPORT ON

"PHARMACY DATABASE MANAGEMENT"

Submitted By

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Under the guidance of

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
2022-2023

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

Certified that the project work entitled **"Pharmacy Management System"** carried out by

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bonafide students of IV semester students in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of St Joseph Engineering College during the year 2022-23.It is certified that all corrections/ suggestions indicated during Internal Evaluation have been incorporated in the report.The project report has been approved as it satisfies the academic requirements in respect of miniproject work .

Ms Pruthiv M R
Project Guide

Dr Sridevi Saralaya
HOD-CSE

EXTERNAL VIVA

NAME OF THE EXAMINER   **SIGNATURE**

1.

2.

Acknowledgment

The satisfaction and euphoria that accompanies the successful completion of any task would be incomplete without mentioning the people who made it possible, whose constant guidance and encouragement crowned our efforts with success.

We take this opportunity to thank those who have helped and motivated us throughout the completion of this project.

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Abstract

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.

This program can be used in any pharmaceutical shops having a database to maintain it. The software used can generate reports, as per the user's requirements. The software can print invoices, bills, receipts etc. It can also maintain the record of supplies sent in by the supplier. Here, the admin who are handling the organization will be responsible to manage the record of the employee. Each employee will be given with a separate username and password.

The aim of the project is to create an effective software to help the pharmacist to maintain the records of the medicines, handle user details, generate invoice, check and renew validity and provide a scope of communication between users by using inbuilt messaging system. Pharmacy management system deals with the maintenance of drugs and consumables in the pharmacy unit. This pharmacy management system is user friendly.

Table of Contents

List of Figures

List of Tables

Chapter 1

Introduction

The project's primary objective is to streamline pharmaceutical shop database management through the development of a Pharmacy Management System. This system ensures precise medication tracking, bolstering safety and operational efficiency within the store. Our software enables effective stock control, report generation, and secure user access, facilitating seamless interaction between users via an integrated messaging system. It addresses the complex demands of pharmacy management, catering to both administrative and employee needs, offering a user-friendly solution for pharmaceutical establishments.

1.1   Problem Definition

The problem at hand involves the need for an efficient software solution to aid pharmacists in effectively managing medication records, user information, invoice generation, validity checks, and fostering communication among users within a pharmacy unit. This challenge necessitates the development of a user-friendly Pharmacy Management System capable of handling intricate pharmacy operations and catering to administrative and employee requirements, ultimately enhancing overall pharmacy management.

1.2   Scope and Importance

The scope of this Pharmacy Management System encompasses comprehensive medication tracking, user management, invoicing, and communication features, serving pharmaceutical stores of various sizes. Its significance lies in improving accuracy, safety, and efficiency in pharmaceutical operations, reducing errors, enhancing customer service, and enabling better stock control. This system caters to the evolving needs of the pharmacy industry, contributing to its modernization and growth.

Chapter 2

Software Requirement Specification

2.1 Description on Implementation

List of modules

- Login page

- Homepage

- Company

- Purchase

- Drugs

- Sales

- User/Settings

- Messaging

2.2 Software Requirement Specification

Software Requirement Specification

- **Language** : Java

- **Database used**: MySQL.

- **Design used**: Java.

- **Operating System**: Window 11.

- **Software used**: XAMPP.

2.3 Hardware Requirement Specification

- **Installed Memory** : 2GB or Higher

- **Processor**: 1GHz or Higher.

- **Hard Disk Space**: 16GB availability .

- **Display**: Standard outpout display.

Chapter 3

System Design

3.1 ER Diagram

Figure:3.1 shows the ER diagram of student database.
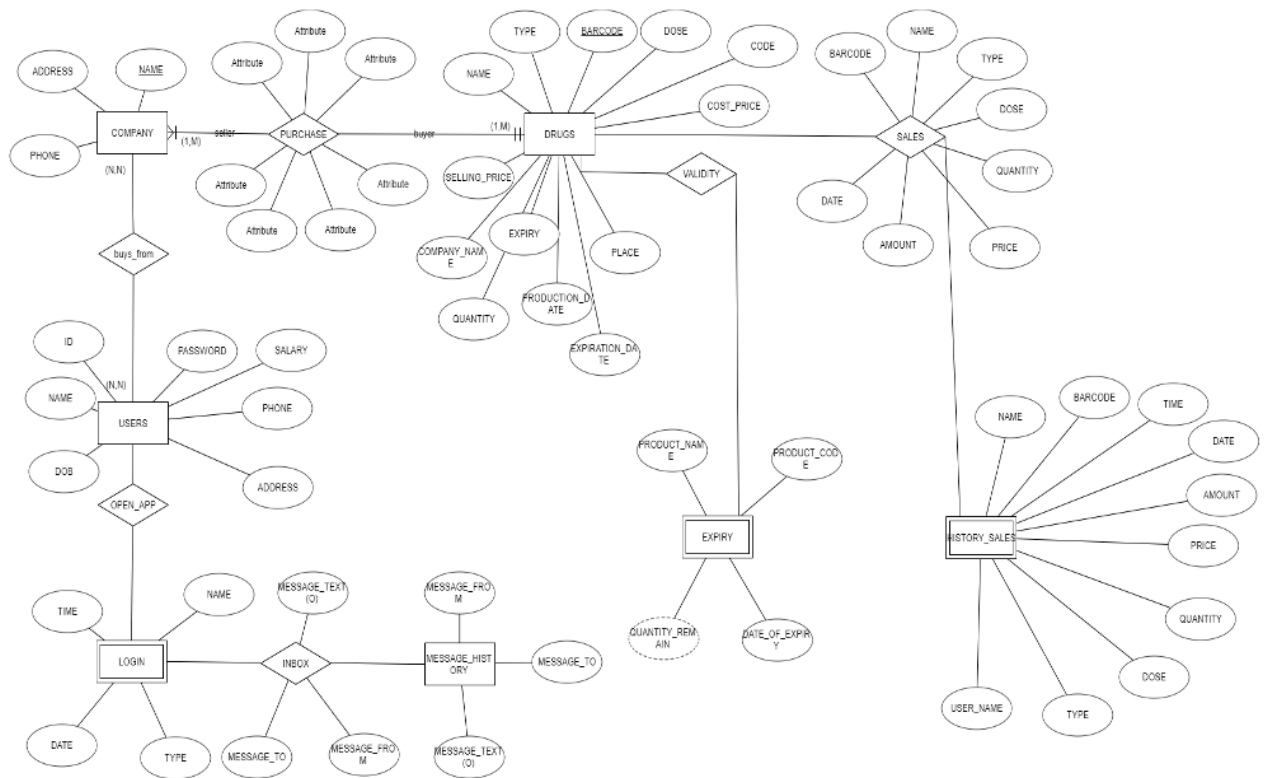
Figure 3.1: ER diagram

3.2 Schema Diagram

Figure:3.2 shows the Schema Diagram of student Database.

COMPANY

NAME	ADDRESS	PHONE

DRUG

NAME	TYPE	BARCODE	DOSE	CODE	COST-PRICE	SELL-PRICE	EXPIRY	COMPANY-NAME	PRODUCTION-DATE	EXPIRATION-DATE	PLACE	QUANTITY

HISTORY_SALE

USER-NAME	BARCODE	DOSE	TYPE	PRICE	AMOUNT	DATE	TIME	NAME	QUANTITY

PURCHASE

COMPANY_NAME	BARCODE	TYPE	PRICE	AMOUNT	NAME	QUANTITY

SALE

BARCODE	DOSE	TYPE	PRICE	AMOUNT	NAME	QUANTITY	DATE

USER

ID	NAME	DOB	PHONE	ADDRESS	SALARY	PASSWORD

LOGIN

NAME	TYPE	DATE	TIME	ID

INBOX

MESSAGE-FROM	MESSAGE-TO	MESSAGE-TEXT	SENDER_ID

Figure 3.2: Schema diagram

4

3.3   Table description

Figure:3.3

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
☐ 1	NAME 🔑	varchar(50)	latin1_swedish_ci		No	None			🖊 Change	⊝ Drop	More
☐ 2	ADDRESS	varchar(50)	latin1_swedish_ci		No	None			🖊 Change	⊝ Drop	More
☐ 3	PHONE	varchar(20)	latin1_swedish_ci		No	None			🖊 Change	⊝ Drop	More

Figure 3.3: company table

Figure:3.4

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
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☐ 2	TYPE	varchar(20)	latin1_swedish_ci		No	None			🖊 Change	⊝ Drop	More
☐ 3	BARCODE 🔑	varchar(20)	latin1_swedish_ci		No	None			🖊 Change	⊝ Drop	More
☐ 4	DOSE	varchar(10)	latin1_swedish_ci		No	None			🖊 Change	⊝ Drop	More
☐ 5	CODE	varchar(10)	latin1_swedish_ci		No	None			🖊 Change	⊝ Drop	More
☐ 6	COST_PRICE	double			No	None			🖊 Change	⊝ Drop	More
☐ 7	SELLING_PRICE	double			No	None			🖊 Change	⊝ Drop	More
☐ 8	EXPIRY	varchar(20)	latin1_swedish_ci		No	None			🖊 Change	⊝ Drop	More
☐ 9	COMPANY_NAME	varchar(50)	latin1_swedish_ci		No	None			🖊 Change	⊝ Drop	More
☐ 10	PRODUCTION_DATE	date			No	None			🖊 Change	⊝ Drop	More
☐ 11	EXPIRATION_DATE	date			No	None			🖊 Change	⊝ Drop	More
☐ 12	PLACE	varchar(20)	latin1_swedish_ci		No	None			🖊 Change	⊝ Drop	More
☐ 13	QUANTITY	int(11)			No	None			🖊 Change	⊝ Drop	More

Figure 3.4: drugs table

Figure:3.5

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☐ 2	PRODUCT_CODE	varchar(20)	latin1_swedish_ci		No	None			🖊 Change	⊝ Drop	More
☐ 3	DATE_OF_EXPIRY	varchar(10)	latin1_swedish_ci		No	None			🖊 Change	⊝ Drop	More
☐ 4	QUANTITY_REMAIN	int(11)			No	None			🖊 Change	⊝ Drop	More

Figure 3.5: expiry table

Figure:3.6

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
☐	1	**USER_NAME**	varchar(20)	latin1_swedish_ci		No	*None*			🖊 Change	⊝ Drop	More
☐	2	**BARCODE**	varchar(20)	latin1_swedish_ci		No	*None*			🖊 Change	⊝ Drop	More
☐	3	**NAME**	varchar(50)	latin1_swedish_ci		No	*None*			🖊 Change	⊝ Drop	More
☐	4	**TYPE**	varchar(10)	latin1_swedish_ci		No	*None*			🖊 Change	⊝ Drop	More
☐	5	**DOSE**	varchar(10)	latin1_swedish_ci		No	*None*			🖊 Change	⊝ Drop	More
☐	6	**QUANTITY**	int(11)			No	*None*			🖊 Change	⊝ Drop	More
☐	7	**PRICE**	double			No	*None*			🖊 Change	⊝ Drop	More
☐	8	**AMOUNT**	double			No	*None*			🖊 Change	⊝ Drop	More
☐	9	**DATE**	varchar(15)	latin1_swedish_ci		No	*None*			🖊 Change	⊝ Drop	More
☐	10	**TIME**	varchar(20)	latin1_swedish_ci		No	*None*			🖊 Change	⊝ Drop	More

Figure 3.6: history of sales table

Figure:3.7

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
☐	1	**MESSAGE_FROM**	varchar(20)	latin1_swedish_ci		No	*None*			🖊 Change	⊝ Drop	More
☐	2	**MESSAGE_TO**	varchar(20)	latin1_swedish_ci		No	*None*			🖊 Change	⊝ Drop	More
☐	3	**MESSAGE_TEXT**	varchar(200)	latin1_swedish_ci		No	*None*			🖊 Change	⊝ Drop	More

Figure 3.7: inbox table

Figure:3.8

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
☐	1	**NAME**	varchar(50)	latin1_swedish_ci		No	*None*			🖊 Change	⊝ Drop	More
☐	2	**TYPE**	varchar(20)	latin1_swedish_ci		No	*None*			🖊 Change	⊝ Drop	More
☐	3	**DATE**	varchar(20)	latin1_swedish_ci		No	*None*			🖊 Change	⊝ Drop	More
☐	4	**TIME**	varchar(20)	latin1_swedish_ci		No	*None*			🖊 Change	⊝ Drop	More

Figure 3.8: login table

Figure:3.9

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
☐	1	**MESSAGE_FROM**	varchar(20)	latin1_swedish_ci		No	*None*			🖉 Change	⊖ Drop	More
☐	2	**MESSAGE_TO**	varchar(20)	latin1_swedish_ci		No	*None*			🖉 Change	⊖ Drop	More
☐	3	**MESSAGE_TEXT**	varchar(200)	latin1_swedish_ci		No	*None*			🖉 Change	⊖ Drop	More

Figure 3.9: message history table

Figure:3.10

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
☐	1	**BARCODE** 🔑	varchar(20)	latin1_swedish_ci		No	*None*			🖉 Change	⊖ Drop	More
☐	2	**NAME**	varchar(50)	latin1_swedish_ci		No	*None*			🖉 Change	⊖ Drop	More
☐	3	**TYPE**	varchar(20)	latin1_swedish_ci		No	*None*			🖉 Change	⊖ Drop	More
☐	4	**COMPANY_NAME** 🔑	varchar(20)	latin1_swedish_ci		No	*None*			🖉 Change	⊖ Drop	More
☐	5	**QUANTITY**	int(11)			No	*None*			🖉 Change	⊖ Drop	More
☐	6	**PRICE**	double			No	*None*			🖉 Change	⊖ Drop	More
☐	7	**AMOUNT**	double			No	*None*			🖉 Change	⊖ Drop	More

Figure 3.10: purchase table

Figure:3.11

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
☐	1	**BARCODE**	varchar(20)	latin1_swedish_ci		No	*None*			🖉 Change	⊖ Drop	More
☐	2	**NAME**	varchar(50)	latin1_swedish_ci		No	*None*			🖉 Change	⊖ Drop	More
☐	3	**TYPE**	varchar(10)	latin1_swedish_ci		No	*None*			🖉 Change	⊖ Drop	More
☐	4	**DOSE**	varchar(10)	latin1_swedish_ci		No	*None*			🖉 Change	⊖ Drop	More
☐	5	**QUANTITY**	int(11)			No	*None*			🖉 Change	⊖ Drop	More
☐	6	**PRICE**	double			No	*None*			🖉 Change	⊖ Drop	More
☐	7	**AMOUNT**	double			No	*None*			🖉 Change	⊖ Drop	More
☐	8	**DATE**	varchar(15)	latin1_swedish_ci		No	*None*			🖉 Change	⊖ Drop	More

Figure 3.11: sales table

Figure:3.12

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
☐	1	ID 🔑	int(11)			No	None			✏ Change	⊝ Drop	More
☐	2	NAME	varchar(50)	latin1_swedish_ci		No	None			✏ Change	⊝ Drop	More
☐	3	DOB	varchar(20)	latin1_swedish_ci		No	None			✏ Change	⊝ Drop	More
☐	4	ADDRESS	varchar(100)	latin1_swedish_ci		No	None			✏ Change	⊝ Drop	More
☐	5	PHONE	varchar(20)	latin1_swedish_ci		No	None			✏ Change	⊝ Drop	More
☐	6	SALARY	double			No	None			✏ Change	⊝ Drop	More
☐	7	PASSWORD	varchar(20)	latin1_swedish_ci		No	None			✏ Change	⊝ Drop	More

Figure 3.12: users table

Chapter 4

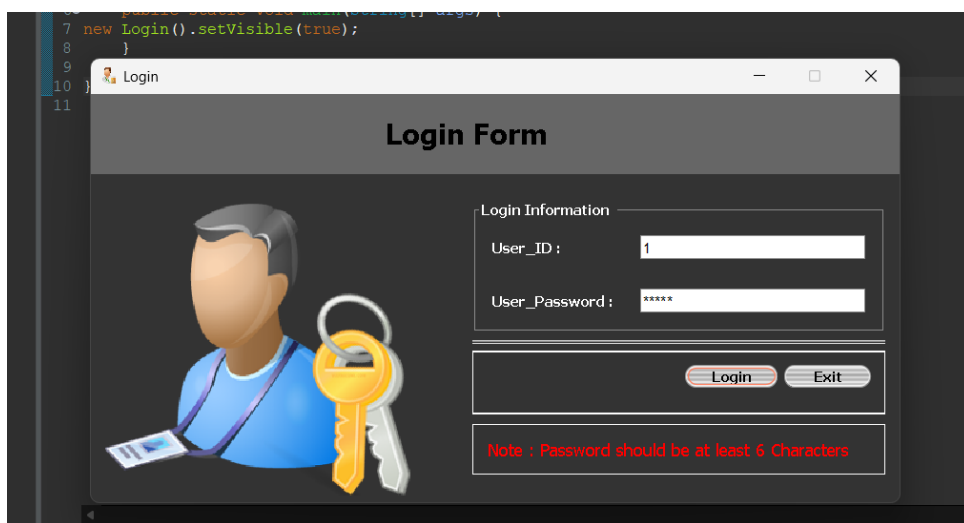# Screenshots

Figure:4.1 shows the screenshot of Login page

Figure 4.1: Login Page
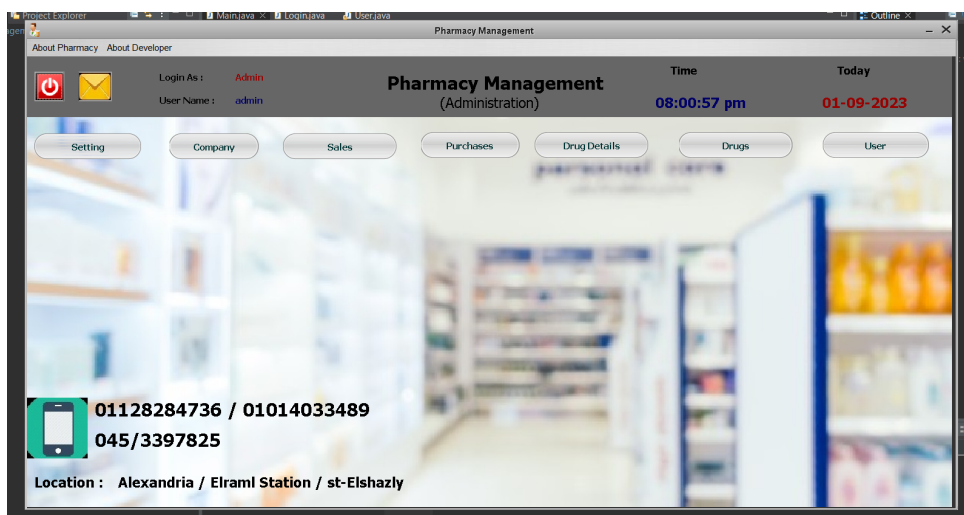
Figure:4.2 shows the screenshot of home page

Figure 4.2: admin home Page

Figure:4.3 shows the screenshot of drug list

Figure 4.3: drug list

Figure:4.4 shows the screenshot of user info

Figure 4.4: user info

Figure:4.5 shows the screenshot of deals list

Figure 4.5: deals list

Chapter 5

Conclusion and Future Scope

Conclusion

- Detailed information gathering has to be done. Without that, the purpose for using the software won't be satisfied properly.

- Implementing the software requires a change in business practices.

- Efficient organization of all knowledge and easy retrieval of information is possible.

- It leads to ease in functioning of business processes

Future Scope

- In this project, we can also include Bar code using bar code reader which will detect the expiry date and other related information.

- Project can be made more robust by adding bio-metric verification.

- There is also scope to expand by implementing newer technologies like AI,cloud etc.

Bibliography

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[3] *MySQL Documentation*

[4] *Youtube*

[5] *Google*