

NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY

(AN AUTONOMOUS INSTITUTION, AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY,

BELGAUM, APPROVED BY AICTE & GOVT.OF KARNATAKA



COURSE LA2 REPORT

on

Pharmacy Management System

Submitted in partial fulfilment of the requirement for the award of Degree of

Bachelor of Engineering

in

Computer Science and Engineering

Submitted by:

Anurag Nepal

1NT19CS036

Avishek Rijal

1NT19CS045

Baibhav Dhakal

1NT19CS048



Department of Computer Science and Engineering

2020-21



TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM

Nitte Meenakshi Institute of Technology

(AN AUTONOMOUS INSTITUTION AFFILIATED

PB No. 6429, Yelahanka, Bangalore 560-064, Karnataka



Telephone: 080- 22167800, 22167860

Fax: 080 – 22167805

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Course Project titled “Pharmacy Management System” is an authentic work carried out by Anurag Nepal(1NT19CS036), Avishek Rijal(1NT19CS045), Baibhav Dhakal(1NT19CS048). Bonafide students of Nitte Meenakshi Institute of Technology, Bangalore in partial fulfilment for the award of the degree of Bachelor of Engineering in COMPUTER SCIENCE AND ENGINEERING of Visvesvaraya Technological University, Belagavi during the academic year 2020-21

Name Signature of the Faculty In charge

Name and Signature of the HOD

DECLARATION

We hereby declare that

- (i) This Presentation does not contain text, graphics or tables copied and pasted from the Internet, unless specifically acknowledged, and the source being detailed in the report and in the References sections.
- (ii) All corrections and suggestions indicated during the internal presentation have been incorporated in the report.
- (iii) Content of the report has been checked for the plagiarism requirement

Name	USN	Signature
Anurag Nepal	1NT19CS036	
Avishek Rijal	1NT19CS045	
Baibhav Dhakal	1NT19CS048	

Date:

ACKNOWLEDGEMENT

The satisfaction and euphoria that accompany the successful completion of any task would be incomplete without the mention of the people who made it possible, whose constant guidance and encouragement crowned our effort with success. We express our sincere gratitude to our Principal Dr. H. C. Nagaraj, Nitte Meenakshi Institute of Technology for providing facilities.

We thank our HoD, Dr.Thippeswamy M.N for the excellent environment created to further educational growth in our college. We also thank him for the invaluable guidance provided which has helped in the creation of a better technical report.

Thanks to our Subject Faculty, Ms. Shobha P. We also thank all our friends, teaching and nonteaching staff at NMIT, Bangalore, for all the direct and indirect help provided in the completion of the presentation.

Signature		
Anurag Nepal	1NT19CS036	
Avishek Rijal	1NT19CS045	
Baibhav Dhakal	1NT19CS048	

Date:

ABSTRACT

We started this project hoping to help the pharmacies which are seeing a sudden spike in visits by the general public and it could be hard for them to maintain a physical ledger, so our project aims to implement an app such that a pharmacist can add/delete stocks. With the help of this project a pharmacist can be updated with the latest prices of the drugs as well as being updated with the stock inside the store. Due to covid 19 pandemic the demand of pharmacies has skyrocketed since the basic sanitation ingredients like hand sanitizers, masks and medical gloves are being sold by the pharmacy. This project aims to digitize the efforts of the pharmacies and decrease physical contact between the buyer and the pharmacist as per the protocol initiated by the World Health Organization.

TABLE OF CONTENTS

CERTIFICATE	2
DECLARATION.....	3
ACKNOWLEDGEMENT.....	4
ABSTRACT	5
TABLE OF CONTENTS	6
CHAPTER 1: INTRODUCTION	7
MOTIVATION:	7
OBJECTIVE:	7
Chapter 2:LITERATURE SURVEY.....	8
Chapter 3: REQUIRED SYSTEM SPECIFICATIONS	8
HARDWARE REQUIRED.....	8
SOFTWARE REQUIRED	8
Chapter 4: IMPLEMENTATION	9
Database Design:.....	9
Modules Design:	10
Chapter 5:TEST CASES	11
Wrong password:.....	11
Stock Decrease	11
Chapter 6: RESULTS.....	14
Chapter 7:CONCLUSIONS	19
Chapter 8: REFERENCES	20

CHAPTER 1: INTRODUCTION

MOTIVATION:

The declaration of COVID-19 a pandemic and a deathly threat by the World Health Organization on 11 March 2020 marked the start of a worldwide health crisis of an unprecedented nature and scale. The approach taken by countries across the globe varied widely, however, all agreed on a single cause, social distancing and minimizing physical contact with members of the society. The influx of products being sold from pharmacies has skyrocketed. The local pharmacies near us were all using physical ledgers for billing and keeping track of their expenses and stocks. But with the influx of sales due to covid physical methods were proving incapable of keeping track of sales and stocks so this project aims to digitize what we know as traditional pharmacy while promoting our global approach of minimizing physical contact.

OBJECTIVE:

1. With the help of this project we wish to implement an app such that a pharmacist can add/delete stocks.
2. With the help of this project a pharmacist can be updated with the latest prices of the drugs
3. With the help of this project a pharmacist can have the price to be paid by the customer ready in the app without the need of generating a physical bill and adding it into the ledger.
4. Also to understand how to work on Front-end (Java) and Back-end (MySQL).

Chapter 2:LITERATURE SURVEY

“A pharmacist who is a professional such patients, according to a medical doctor or other clinician rules ordered drugs. Medicine is an in-depth knowledge of how the human response to various drugs and chemicals, as well as how drugs interact with each other” (Charles E. Rosenberg, 1980). Pharmacists are required to give the correct amount and type of the medicines to serve the customers right. So a digital tool to help them in such thing is highly appreciated.

Due to the size and quality of pharmacy services, the pharmacy is a very large customer base. These customers often visit a closed pharmacy mainly from service to work. During this time, an increase in the number of customers provides shelter at the pharmacy, making it even more burdensome for the pharmacist. In this case, the pharmacist introduces a short period of difficult customers. The pharmacy management record is kept in paper-filled cabinets. Paper records will be difficult to keep track of in relation to a bigger pharmacy and stocks may get misplaced, and finding the expiration date, medication type.(Rajesh,Naveed,Heetesh,2016).

Anything that helps plan and provide an automated distribution and transparency process will help medical professionals and pharmacists feel free to play an easy way to help patients, James Owen, S. Pham, Pham, Director of the American Association of Pharmacists practice (AShP).

Chapter 3: REQUIRED SYSTEM SPECIFICATIONS

HARDWARE REQUIRED

Processor: Intel Pentium IV(and up) or AMD processor(and up)

RAM: 1GB+

Hard Disk: 40GB+

SOFTWARE REQUIRED

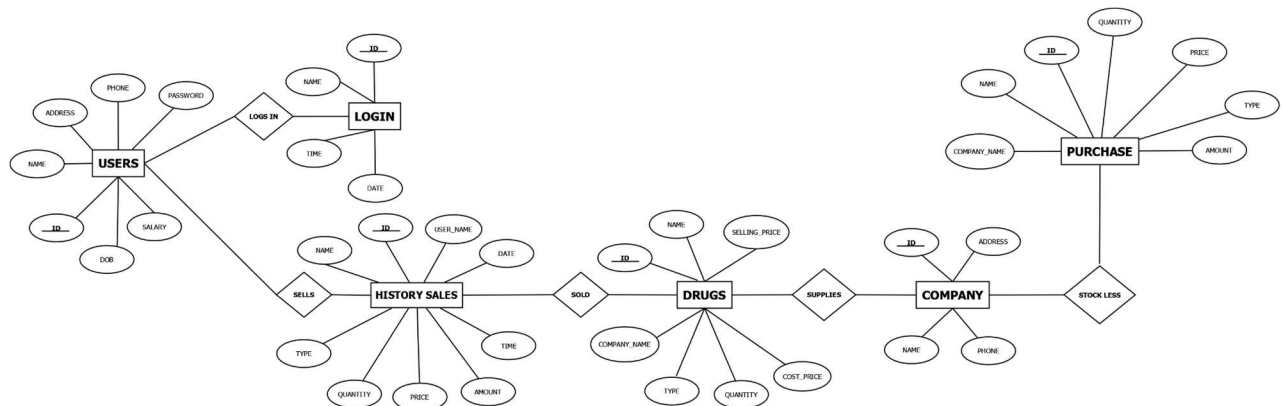
Operating System: Windows/ MacOS/ Linux operating system.

Tools: JRE,JDK,JAVAFX,MYSQL

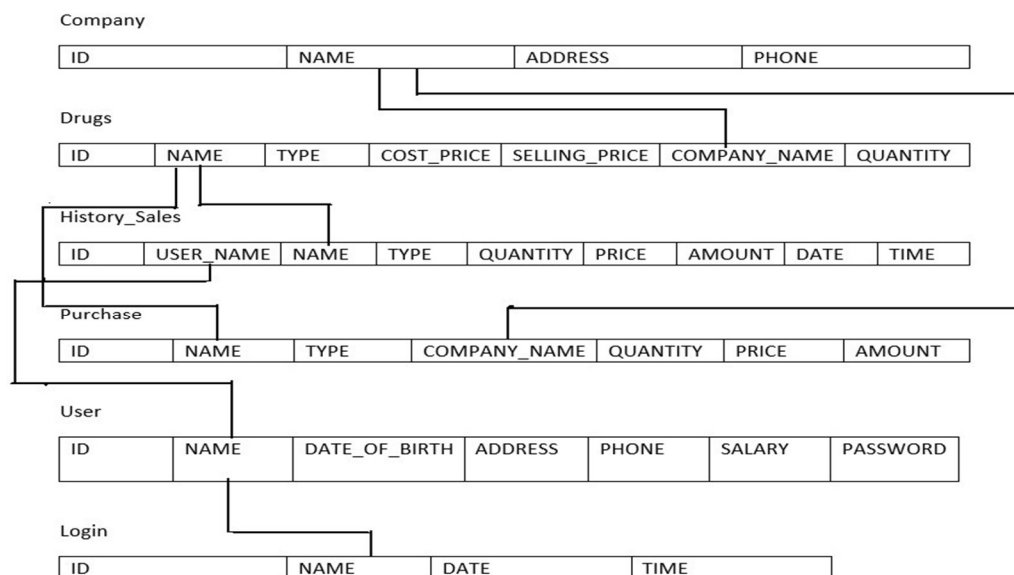
Chapter 4: IMPLEMENTATION

Database Design:

The following ER model describes the domain we worked on this project and gives the outline for the backend used in this project. It is composed of the entity types and relationships that exist between instances of those entity types.



We also have a relational schema for the database we created that can help define the constraints of the data representing the domain.



Modules Design:

We have the following modules that we implemented in the project:

Login Page: This page takes the username and password and checks if that user has access to the program. Upon successful login, it redirects to the homepage.

Homepage: This is where all the modules come together in the form of the menu buttons. The clicking of a certain button redirects to the respective module in the program. It also has a sign out button to close the current session.

Company: In company we have the option to look at the companies available or add a new one. With the help of ID, we can also remove any company if need be.

Drugs: This houses the stock of medicines we have and we can see the list and add or delete them.

Sale: This is where the sale of medicines is recorded and done. There is a list of the sales done with the time, date and the person who sold the medicine. And it has a new sale form where the medicines can be bought and the stock is affected accordingly.

Purchase: This is for the replenishment of the stocks for the pharmacy. The company in ties with the pharmacy supplies the medicines and the purchases are recorded.

User: this is the employee details page where the users who can get access to the app are shown. New users can be added as the pharmacy grows.

Chapter 5: TEST CASES

Wrong password:

Pharmacy Login

NITTE Pharmacy

User...


Passw...

[Login](#)

Incorrect Username or Password.Try Ag...

Stock Decrease

[illegible]


New Sale Form
—
□
×

Employee Name:
anurag

Medicine Name:
Glucose ▼

Quantity:
10

Submit Back

Amount to be paid:550

Show Sales


history_sales
—
□
×

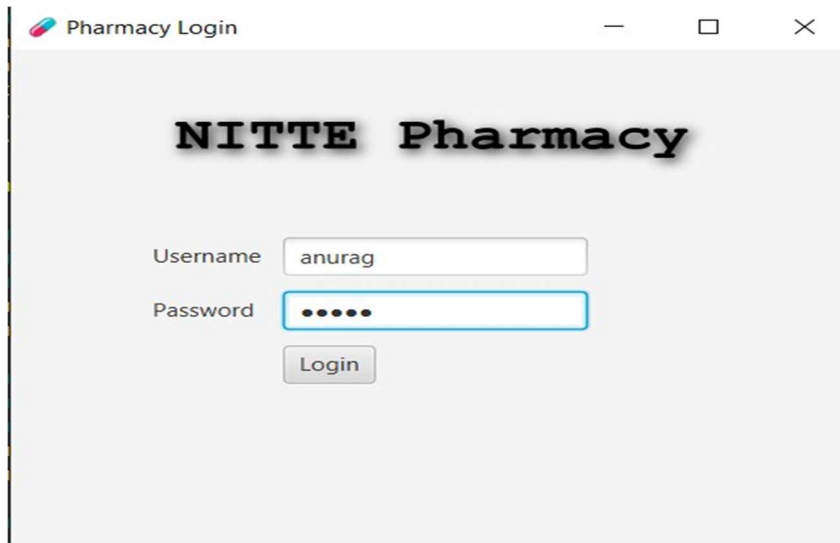
ID	USER_NAME	NAME	TYPE	QUANTITY	PRICE	AMOUNT	DATE	TIME	
1	admin	Brufin		10	100.0	1000.0	2021-07-08	23:13:49	
2	admin	Novaphil		12	100.0	1200.0	2021-07-08	23:13:49	
4	admin	Rhinex	Pills	10	100.0	1000.0	2021-07-08	23:21:46	
6	anurag	Brufin	pills	10	100.0	1000.0	2021-07-19	22:32:13	
7	anurag	Brufin	pills	10	100.0	1000.0	2021-07-19	23:01:05	
10	anurag	Brufin	Pills	10	120.0	1200.0	2021-07-20	18:02:14	
11	anurag	Brufin	Pills	10	120.0	1200.0	2021-07-20	18:09:08	
13	anurag	Novaphil	Pills	11	35.0	385.0	2021-07-20	19:27:39	
15	anurag	Brufin	Pills	1	120.0	120.0	2021-07-20	20:02:42	
16	anurag	Brufin	Pills	1	120.0	120.0	2021-07-20	20:06:33	
18	avishek	Rhinex	Liquid	1	110.0	110.0	2021-07-21	08:48:34	
19	avishek	Novaphil	Pills	1	35.0	35.0	2021-07-21	08:48:50	
20	anurag	Brufin	Pills	2	120.0	240.0	2021-07-21	11:49:07	
21	anurag	Benadryl	Syrup	1	120.0	120.0	2021-07-21	12:23:16	
22	anurag	Glucose	Powder	10	55.0	550.0	2021-07-21	13:00:24	

Back
ID to be deleted:
Delete
Add New

[illegible]

Chapter 6: RESULTS

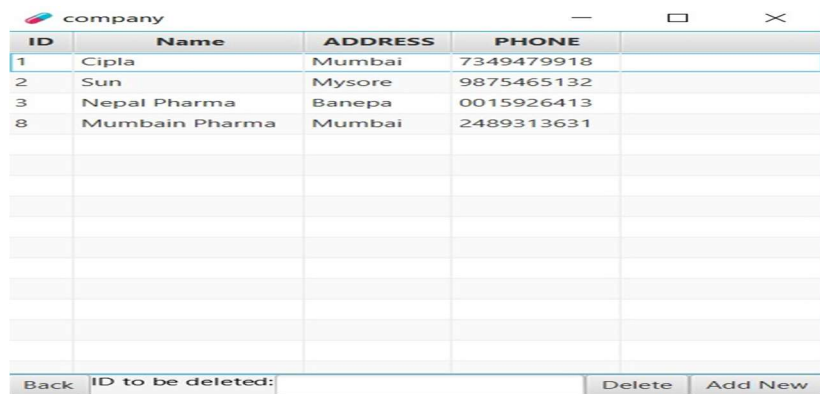
By using MYSQL commands with JDBC connector and JAVAFX as the frontend ,this app stores and shows all the data fed to it and can be used to create new ones. This app allows the pharmacy to keep track of the stocks and generate new sales. We have included the screenshots of the program running for every page we have created.



LOGIN PAGE



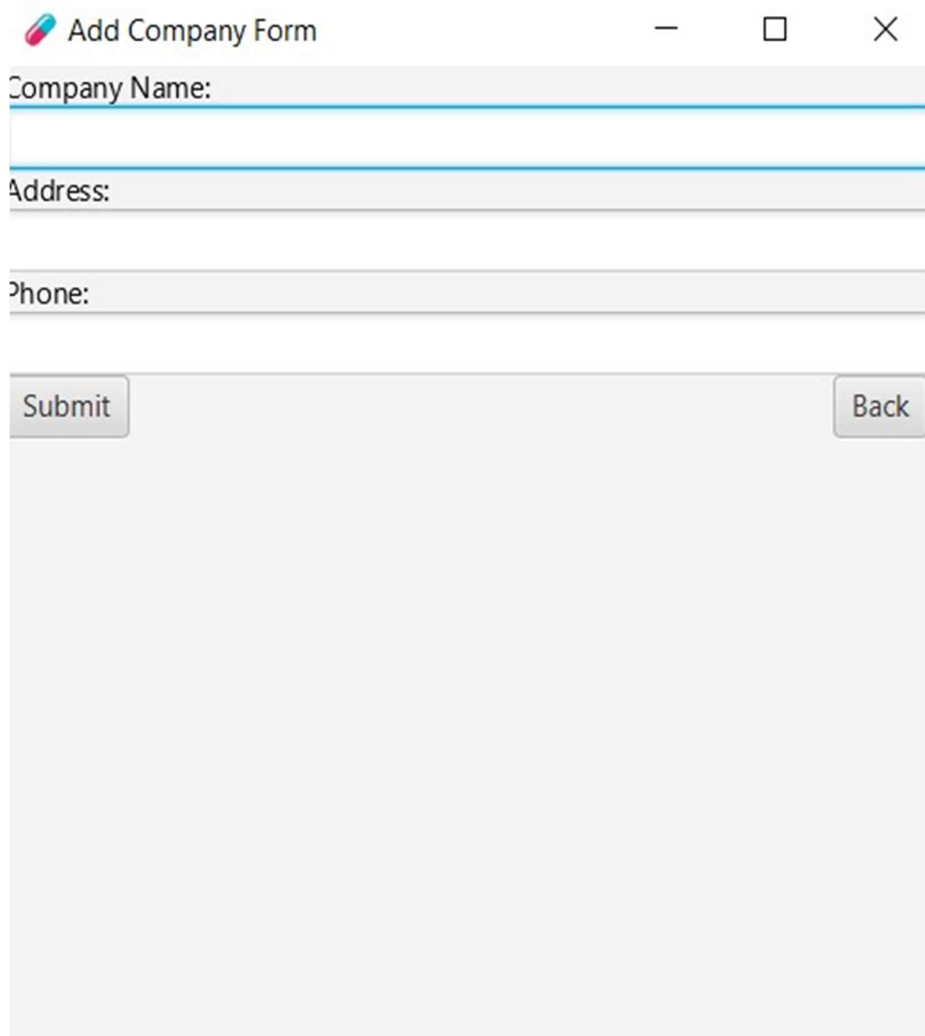
HOME PAGE SHOWING THE MENU BAR



ID	Name	ADDRESS	PHONE
1	Cipla	Mumbai	7349479918
2	Sun	Mysore	9875465132
3	Nepal Pharma	Banepa	0015926413
8	Mumbain Pharma	Mumbai	2489313631

Back ID to be deleted: Delete Add New

Company table with the option to delete if needed



Add Company Form

Company Name:

Address:

Phone:

Submit Back

Form to add a new company


[illegible]

Form to add or delete drugs

The screenshot shows a window titled "Add Drugs Form" with standard Windows window controls (minimize, maximize, close). The form contains the following elements:

- Drug Name:** A text input field.
- Type:** A text input field.
- Cost Price:** A text input field.
- Selling Price:** A text input field.
- Company Name:** A text input field with a dropdown arrow on the right side.
- Quantity:** A text input field.
- Buttons:** "Submit" and "Back" buttons at the bottom.

Add drugs form



New Sale Form

Employee Name:
inurag

Medicine Name:

Quantity:

Submit Back

Show Sales

New sale form

purchase

ID	NAME	TYPE	COMPANY_NAME	QUANTITY	PRICE	AMOUNT	
1	Brufin	Pills	Sun	100	10.0	1000.0	
2	Brufin	Pills	Sun	10	100.0	1000.0	
3	Brufin	pills	Sun	100	100.0	10000.0	
4	Novaphil	Pills	Cipla	10	35.0	350.0	
5	Brufin	Pills	Cipla	10	80.0	800.0	
6	Brufin	Pills	Cipla	100	80.0	8000.0	
7	Novaphil	Pills	Sun	11	30.0	330.0	
8	Novaphil	Pills	Cipla	11	30.0	330.0	

Back ID to be deleted: Delete Add New

Purchase Details

New Purchase Form

—

□

×

Medicine Name:

Company Name:

Cipla

Mumbain Pharma

Nepal Pharma

Sun

Back

New Purchase Form

Add New Employee Form

—

□

×

Name:

Date Of Birth:

Address:

Phone:

Salary:

Password

Submit

Back

Add new employee form

Chapter 7:CONCLUSIONS

We successfully completed and integrated a shop centric digital ledger for a small scale pharmacy which is user friendly, which can run on low powered machines as well as be used by people who are not familiar with technology while this is extremely user friendly. We believe, if implemented properly, this software can give pretty good profits in the long run and can allow the pharmacy to make future plans accordingly.

In the future we hope to make the table column editable so the program doesn't have to run the sql queries time and again. We are also planning to add a payment getaway so that buying and selling drugs can be contactless and easy. This program can further be modified to implement multi-threading to compensate for simultaneous use. Furthermore, we can implement biometric verification in the login menu which would help in security of the valuable data.

Chapter 8: REFERENCES

Electronic Documents

E-books

- [1] Mahesh Bhavde and Sunil Patekar, Programming with Java, Pearson Education, 2008.
- [2] Rajesh, Naveed, Hitesh, Pharmacy Management of the Public Sector, 2016.

Online Code References

- [1] [Sayed Ibrahim, Pharmacy Management system, GitHub](#)
- [2] [Sashi Kanth, How To Create Dynamic Table View In JAVAFX, Stack Overflow](#)