VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELGAVI, KARNATAKA

A DBMS mini-project Report

on

"PHARMACY MANAGEMENT SYSTEM"

Submitted in partial fulfilment for the award of degree of
Bachelor of Engineering
In
INFORMATION SCIENCE AND ENGINEERING
By

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CERTIFICATE

Certified that the project work entitled **"PHARMACY MANAGEMENT SYSTEM"** is a bonafide work carried out by **Mr. VIJAYKUMAR A B, USN: 4NN20IS055 , Mr. ROHITH D ANAND, USN: 4NN20IS036, Mr. RAJAT RAGHAVENDRA HEGDE, USN: 4NN20IS035** in the partial fulfillment for the award of degree of Bachelor of Engineering in Information Science and Engineering of the Visvesvaraya Technological University, Belgaum during the year 2022-23. The project report has been approved as it satisfies the academic requirements with respect to the Project work prescribed for Bachelor of Engineering Degree.

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Your's Sincerely,

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ABSTRACT

We are designing our mini-project using NetBeans (front end) and MySQL(backend). It is very efficient in coding the mini-projects involved in the logical schema and hence its clean and clear to understand.

The NetBeans specification describes an abstract API provides access to components Managed by the service component runtime (Declarative Services). Provides support for running the Ant build tool in the platform. Provide support for performing structural and textual compare operations on arbitrary data and displaying results.

Our project "***PHARMACY MANAGEMENT SYSTEM***" is related to pharmacy store. This system helps in storing data of medicines in pharmacy stores and also for their pharmacists to know about the available medicines. People who have to order the medicines can login using user id and password.

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Chapter 1

INTRODUCTION

A database is an organized collection of data. A relational database, more restrictively, is a collection of schemas, tables, queries reports, views, and other elements. Database designers typically organize the data to model aspects of reality in a way that supports processes requiring information, such as (for ex) modelling the availability of rooms in hotels in a way that supports finding hotel with vacancies.

A database-management system (DBMS) is a computer-software application that interacts with end-user, others applications, and the database itself to capture and analyse data. A general purpose DBMS allows the definition, creation, querying, update, and administration of databases. Well known DBMS include MySQL, PostgreSQL, Enterprise DB, MongoDB, MariaDB, Microsoft SQL server, oracle, Sybase, Sap, HANA, Mem SQL, SQLite and IBM DB2.

A database is not generally different across DBMS, but different DBMS can interoperate by using standards such as SQL and ODBC or JDBC to allow a single application to work with more than one DBMS. Computer scientists may classify database-management systems according to the database models that they support the most popular database systems since 1980s have all supported the relational model – generally associated with the SQL language.

sometimes a DBMS is loosely referred to as a "database".

1.1. About Database Management System

In the 1970s and 1980s, attempts were made to build database systems with integrated hardware and software. The underlying philosophy was that such integration would provide higher performance at lower cost. Examples were IBM system/38, the early offering of tera data, database machine **C. Wayne Ratliff** the creator of DBASE stated: "DBASE was different from programs like BASIC, C, FORTRAN, and COBOL in that a lot of the dirty work had already been done. The data manipulation is done by DBASE instead of by the user can concentrate on what he is doing, rather than having to mess with the dirty details of opening, reading and closing files and managing space allocation," DBASE was one of the top selling software titles in the 1980s and early 1990s.

1.2. Advantages of DBMS

Databases are used to support internal operations of organization and to underpin online interactions with customers and suppliers.

Databases are used to hold administrative information and more specialized data, such as engineering data or economic models. Examples of database application include computerized library systems, flight reservation Systems, computerized parts in inventory systems, and many content management systems that store websites as collections of Web Pages in a database.

1.3. Application on Databases Management System

A Databases Management System is a computerized record-keeping system. It is a repository or a container for collection of computerized data files. The overall purpose of DBMS is to allow the users to define, store, retrieve and update the information contains in the database on demand. Information contained in the database on demand. Information can be anything that is of significance to an individual or organization.

Some of the following are the uses of DBMS:

1. Effective and efficient management of data
2. Query processing and management
3. Easy to understand and user friendly
4. Security and integrity of data
5. Data sharing and storage

1.4. Introduction to SQL

SQL Structured query Language is a domain- specific language used in programming and designed for managing data held in a relational database management system (RDBMS), or for stream processing in a relational data stream processing in a relational data stream management system (RDBMS). It is particularly useful in handling structured data, i.e. data incorporation relations among entities and variables.

SQL devices in several ways from its theoretical foundation, the relational model and its tuple calculus. In that model, a table is a set of tuples, while in SQL, tables and query results are list of rows the same may occur multiple times, and the order of rows can be employed in queries (e.g. in the LIMIT clause).

Originally based upon relational algebra and tuple relational calculus, SQL consists of a **data definition language, data manipulation language,** and **data control language.** The scope of SQL includes data insert, query, update and delete, Schema creation and modification, and data access control. Although SQL is often described as, and to a great extent is, a declarative language, it also includes procedural elements.

The four main categories of SQL statements are as follows:

1. DML (Data Manipulation Language)
2. DDL (Data Definition Language)
3. DCL (Data Control Language)
4. TCL (Transaction Control Language)

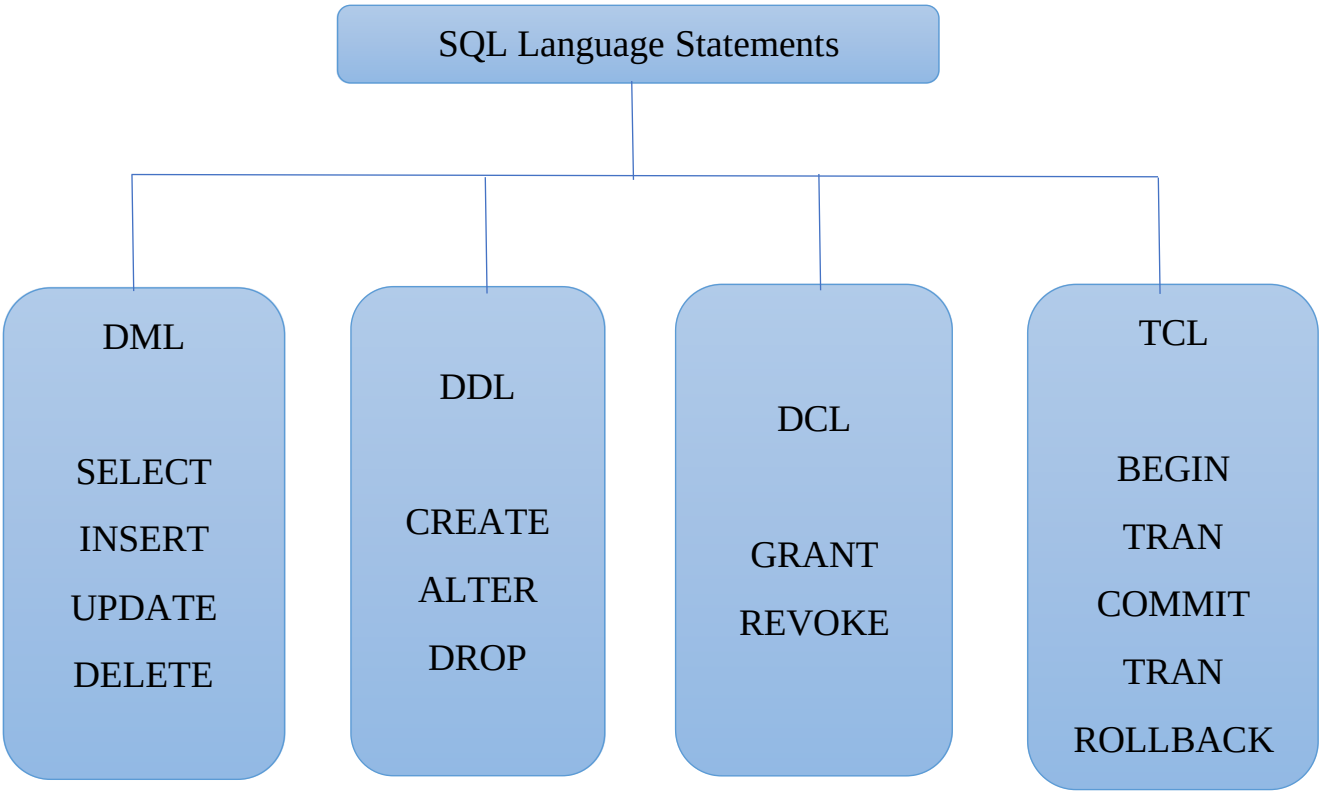


Fig 1.1: four main categories of SQL statements

1.5. DML (Data Manipulation Language)

DML statements affect records in table. These are basic operations we perform on data such as selecting a few records from a table, inserting new records. deleting unnecessary records, and updating/modifying existing records.

DML statements include the following:

SELECT– select records from a table SYNTAX:

SELECT * FROM <TABLENAME>

INSERT - insert new records SYNTAX:

INSERT INTO**<table name> values (value1, value2, value3…);**

UPDATE- update/modify existing records SYNTAX:

Table_ name SET column_ name = value [column_ name= value....] [WHERE condition]

DELETE - delete existing records.

SYNTAX:

DELETE FROM table_ name [WHERE condition];

1.6. DDL (Data Definition Language)

DDL statements are used to alter/modify a database or table structure and schema. These statements handle the design and storage of database objects.

CREATE - create a new Table, database, and schema SYNTAX:

CREATE TABLE [table name] ([column definitions]) [table parameters];

ALTER – alter existing table, column description SYNTAX:

ALTER object type, object name parameters;

DROP -delete existing objects from database

SYNTAX**:**

DROP Table<table name>;

1.7. DCL (Data Control Language)

DCL statements control the level of access that users have on database objects.

GRANT – allow the users to read /write on certain database objects.

REVOKE- keeps users from read/write permission on database objects.

1.8. TCL (Transaction Control Language)

TCL statements allow you to control and manage transactions to maintain the integrity of data within the SQL statements

BEGIN Transaction-opens a transaction

COMMIT Transaction-commits a Transaction

ROLLBACK Transaction- ROLLBACK a Transaction in case of any error

1.9. Introduction to Pharmacy Management System

The Database will contain the tables which will have the various contents related to Pharmacy store. It involves the information about availability of medicines.

Technology plays a major role in different fields and areas that affects all the aspect of human activities. Therefore, our societies get a lot of benefits from modern technology including the medical field.

The pharmacy management system is intended to increase accuracy, safety, and efficiency in the pharmacy. Pharmacy management system is designed to improve accuracy and to enhance safety and efficiency in the pharmacy. It is a computer-based system which helps not only to the pharmacist but also the customers. The system involves manual entry upon arrival of new batches of drugs and upon drug movement out of the pharmacy for a certain period, e.g. every month.

The **pharmacy management system project abstract** must answer or address the needs of every issue that happens in the pharmacy. The issues could include the poor security of their record, manual handling of drug information, and others.

Pharmacy Information Management, Medicine Management, Categorize Medicine Information, Monitor Medicine Orders, Manage Sales and Stocks, Drug Inventory Management, and Generate Processes Reports.

Pharmacists can use the Pharmacy Management System program to help them methodically manage their pharmacies. When a medicine's name is input, the Pharmacy Management System can help by providing details about the medicine. A computer displays information about the medicine, such as its dosage and expiration date. In large medical stores, manually handling the specifics of all the drugs becomes very tough. We can keep track of all the medicines by using this pharmacy management system. It is updated with new information as new medicines are introduced, and it includes an expiration date as well as a search option. When we complete the name of a medicine, it displays the medicine's details.

This application can be used by any other store to automate the process of manually maintaining the records related to the subject of maintaining the stock.

1.10. Objectives

The main objective of PHARMACY MANAGEMENT SYSTEM is to maintain the list of medicine, information of medicine, customer order details etc. It is designed to achieve the following objectives:

1. To computerize all details regarding medicines details, customer order details and list of medicines.
2. The customer should be able view the medicine details and his bill with the help of the username and password.
3. Automate the existing system of manually maintained records of the counter sales, purchases, reorder levels, Supplier and Customer monetary positions and other related transactions made by the seller.
4. Users should be able to view the list of medicine.
5. The information of the medicine should be kept up to date and their record should be kept in system for historical purpose.
6. To provide optimal drug inventory management by monitoring the drug movement in the pharmacy.
7. To ensure that the system is user friendly and time-saving.
8. To evaluate the acceptability of the proposed system

Chapter 2

REQUIREMENT SPECIFICATION

A System requirements specification is a document or set of documentation that describes the features and behaviour of a system of software application. It includes a variety element that attempts to define the intended functionality required by the customer to satisfy their different uses. There are two types of requirements: Hardware and Software requirements.

In addition to specifying how the system should behave, the specification also defines at a high level the main business processes that will be supported, what simplifying assumptions have been made and what key performance parameters will need to be met by the system

.

This document describes the nature of a project, software or application. This includes the purpose, scope, functional and non-functional requirements, software and hardware requirements of the project.

2.1. Hardware requirements

It captures the complete hardware requirements for the system or a portion of the system. These requirements include the minimum processor speed, memory, and disc space required to install windows. In almost all cases, you will want to make sure that your hardware exceeds these requirements to provide adequate performance for the services and applications running on the server.

Processor: Intel core processor (Core i5 processor)

RAM: 4 GB and above

Hard-disc: 194 MB and above

2.2 Software requirements

The software requirements are description of features and functionalities of the target system. Requirements convey the expectation of the users from the software product. The requirements can be obvious or hidden, known or unknown, expected or unexpected from client's point of view.

It is a document created by system analyst after the requirements are collected from various stake holders. It defines how the intended software will interact with hardware external interface, speed of operation, response time of the system, portability of the software across various platforms, maintainability, speed of recovery after crashing, security, quality, limitations etc.

Operation system: Windows 11

Front end programming language: JAVA. (jdk-18.0.1.1)

IDE: NETBEANS 15

Back end: MySQL Server 8.0.31 CE

Querying language: MYSQL

Chapter 3

SYSTEM DESIGN

The system design document describes the system requirements, operating environment, system and sub system architecture, files and databases design, input formats, output layouts, human-machine interfaces, detailed design, processing logic, and external interfaces.

3.1 E-R DIAGRAM

An entity relationship (ER MODEL) describes inter-related things of interest in a specific domain of knowledge. An ER model is composed of entity types and specify relationships that can exists between instances of those entity types. Fig 3.1 shows the ER diagram of Pharmacy management system.

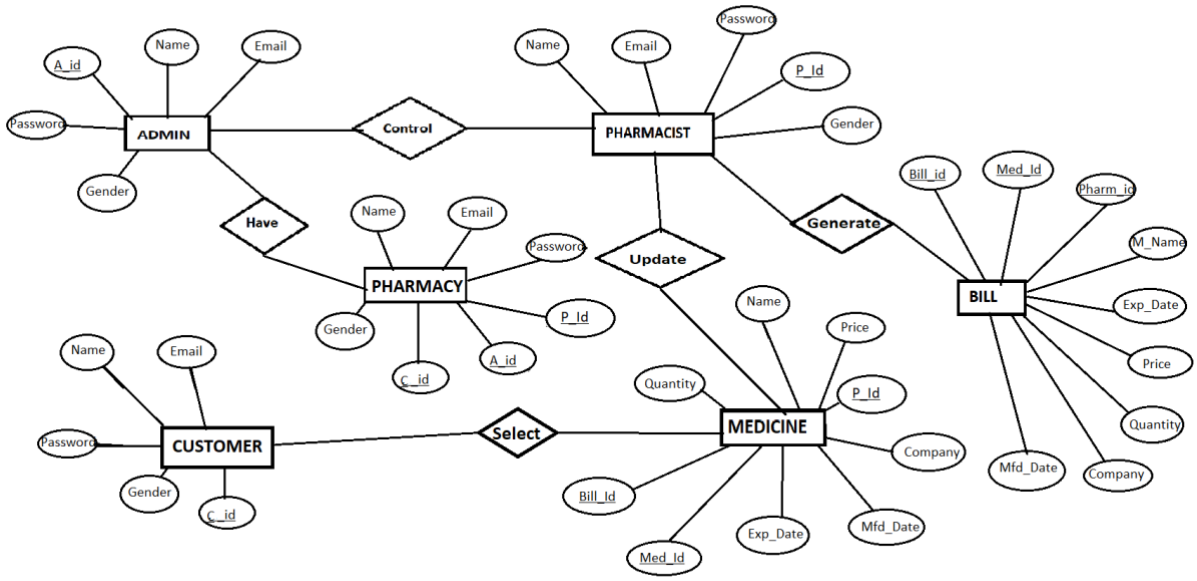


Fig 3.1: ER-Diagram of Pharmacy Management System

3.2. Logical Schema

A database schema is the skeleton structure that represents the logical view of the entire database. It defines how the data is organized and how the relations among then are associated. It formulates all the constraints that are to be applied on the data.

A database schema defines its entities and the relationship among them. It contains a descriptive detail of the database, which can be depicted by means of schema diagram. It's the database designers who design to help programmers understand the database and make it useful. Fig 3.2 shows the logical schema of the Pharmacy management system.

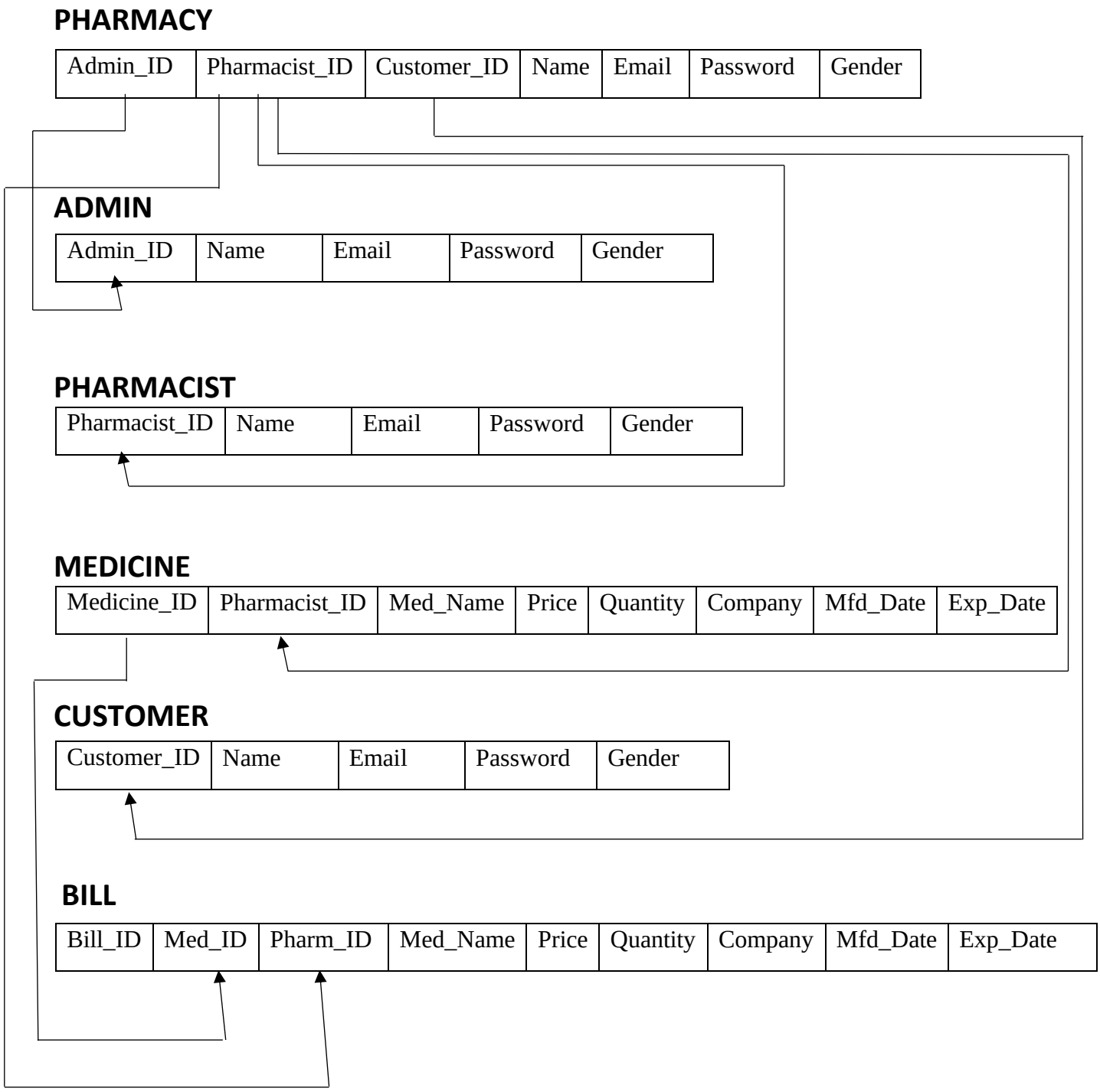


fig 3.2: Logical Schema of Project

Chapter 4

IMPLEMENTATION

The special methods used in the project are explained:

4.1 Module

Admin Module

In this module the admin can add admin login credentials, add, view and update Admin and Pharmacist details.

Pharmacist Module

In this module Pharmacist the can add medicines credentials, add, view and update medicine details. He can also delete the medicines.

Customer Module

In this module the customer can view the list of medicines in the store. They can select medicine quantity and place the order.

4.2 Table Description

ADMIN

Admin_Id	Name	Email	Password	Gender

The database provides details such as Admin details. It is highly necessary to protect this information from falling into wrong hands. Hence only certain set of people should be allowed to access the database and, in the system, only the authorized admins are allowed to do so. The admin of the Pharmacy Management Database System can access the database by logging into the database, using their respective usernames and passwords. The usernames and passwords are also stored in the same database.

PHARMACIST

P_Id	P_Name	Email	Password	Gender

Pharmacy table is used to store the Pharmacist details in the store .i.e Pharmacist_id, Name, Email, Password, Gender.

MEDICINES

P_Id	Med_Id	Med_Name	Price	Qty	Company	Mfd_Date	Exp_Date

Medicines table is used to store list of medicine in the store. It includes details like Pharmacist_id, Med_Name, Med_Price, Available Quantity, Company, Mfd_Date, Exp_Date of the medicines.

CUSTOMER

Cust_ID	Cust_Name	Email	Password	Gender

Customer table is used to store the Customer details in the store .i.e Cust_id, Cust_Name, Email, Password, Gender.

BILLING

Bill_Id	P_Id	Med_Id	Med_Name	Price	Qty	Company	Mfd_Date	Exp_Date

Billing table is used to store list of medicine order by customer. It includes details like Bill_Id,Pharmacist_id, Med_Name, Med_Price, Available Quantity, Company, Mfd_Date, Exp_Date of the medicines.

4.3 Triggers

A trigger is a named database object that is associated with a table, and that activates when a particular event occurs for the table. Some uses for triggers are to perform checks of values to be inserted into a table or to perform calculations on values involved in an update.

A trigger is defined to activate when a statement inserts, update, or delete rows in the associated table. These row operations are trigger events. For example, rows can be inserted by INSERT

OR LOAD DATA statements, and an insert trigger activates for each inserted row. A trigger can be set to activate either before or after the trigger event. For example, you can have a trigger activate before each row that is inserted into a table or after each row that is updated. The Trigger used in the project is to show the update status of the patient table. Whenever the patient table is updated the trigger updates the records of up_pat table indicating the patient record that are updated.

4.4 Stored Procedure

A procedure is a subroutine like a subprogram in a regular computing language, stored in database. A procedure has a name, a parameter list, and SQL statement. All most all relational database system supports stored procedure, MYSQL 5 introduce stored procedure. In the following sections we have discussed MYSQL procedure in details and used MYSQL 5.6 under windows 7. MYSQL 5.6 supports routines and there are two kinds of routines: stored procedures which you call, or functions whose return values you use in other SQL statements the same way that you use pre-installed MYSQL functions like pi ().

The major difference is that UDFs can be used like any other expression within the SQL statements, whereas stored procedure must be invoked using a call state.

The Stored Procedure used in this project is used to add admin login credentials to out database. It inserts the username and password of the admin into the user's table.

4.5 Code Snippet

Stored procedure code snippet

```
CREATE PROCEDURE SelectAdmin()

BEGIN

Select * from pharmadb.admintbl order by AId;

END
```

Front end implementation

```
try{
```

```
        Class.forName("com.mysql.cj.jdbc.Driver");
Con=DriverManager.getConnection("jdbc:mysql://localhost:3306/pharmadb
","root","Raj2002");
        St=Con.createStatement();
        Rs=St.executeQuery("call SelectAdmin()");
        AdminTable.setModel(DbUtils.resultSetToTableModel(Rs));
        Aid.setText(String.valueOf(rand.nextInt(1, 10000)));
    }catch(Exception e)
    {
        e.printStackTrace();
    }
```

Triggers:

```
delimiter //
create trigger med_del
after delete on medicinetbl
for each row begin
insert into medicine_delete_tbl
select * from medicinetbl;
end //
```

Chapter 5

TESTING

Software testing is an investigation conducted to provide stake holders with information about the quality of the software product or service under test. Software testing can also provide an objective, independent view of the software to allow the business to appreciate and understand the risks of software implementation. Test technique include the process of executing a program or application with the intent of finding software bugs (errors and defects) and verifying that the software product is fit for use.

Stages in the implementation of testing

1. Unit Testing

During this first round of resting, the program is submitted to assessments that focus on specific units or components of the software to determine whether each one is fully functional. Unit testing, a testing technique using which individual modules are tested to determine if there are any issues by the developer himself.

Test for Admin module

- Testing Admin login -This form is used for log in of administrator of the system. In this we enter the username and password of admin if both are correct administration page will open respectively. Otherwise, if any of data is wrong it will get redirected back to the login page and again ask for username and password
- Testing Admin add- In this section the admin can add Admin, Pharmacist and Customer details respectively to main database it contains add if user click add button data will be added to database. If any of the credentials are not entered an “empty field” message is displayed. If the data is invalid then the ‘invalid entry’ label will be displayed when invalid data is entered.
- Testing Admin update- In this section all of the user details updates must be updated when the update button is clicked.

- Testing Admin delete- In this section the details of the particular record of the delete key attribute must be deleted as soon as the delete button is clicked and after the changes are made these changes must be updated in the respective table in the database on clicking the delete button.
- Testing Admin clear- In this section all the record of the tables is cleared on clicking on clear button.

Test for Pharmacist module

- Testing Pharmacist login -This form is used for log in of Pharmacist of the system. In this we enter the username and password of pharmacist if both are correct pharmacist page will open. Otherwise, if any of data is wrong it will get redirected back to the login page and again ask for username and password
- Testing pharmacist add medicine - In this section the pharmacist can add new arrived medicine details to main database it contains add if user click add button data will be added to database. If any of the credentials are not entered an "empty field" message is displayed. If the data is invalid then the 'invalid entry' label will be displayed when invalid data is entered.
- Testing Admin update- In this section all of the medicine details must be updated when the update button is clicked.
- Testing Admin delete- In this section the details of the particular record of the delete key attribute must be deleted as soon as the delete button is clicked and after the changes are made these changes must be updated in the respective table in the database on clicking the delete button.
- Testing Admin clear- In this section all the record of the tables is cleared on clicking on clear button.
- Testing Generation of Bill – In this section pharmacist can generate the bill for the medicines which are ordered by customer.

Test for Customer module

- Testing customer sign up - In this section customer should create the account using login credentials.
- Testing customer Login - In this section customer should login using the user id and password.

- Testing customer view medicine - In this section customer can view the available medicine.
- Testing customer add cart - In this section customer can add the required medicine by clicking the add to card button and checking the available medicine quantity.
- Testing customer cancel- In this section customer can cancel the selected medicines by clicking the cancel button.
- Testing customer Place Order- In this section customer can place the order of required medicines by clicking place order button.

2. Integration testing

Integration testing allows individuals the opportunity to combine all the units within a program and test them as a group. This testing level is designed to find interfaces defects between the modules. This is beneficial because it determines how efficiently the units are running together. Keep in mind that no matter how efficiently each unit is running, if they aren't properly integrated, it will affect the functionality of the software program.

The purpose of integration testing is to verify the functional, performance, and reliability between the modules that are integrated.

The purpose of integration testing is to verify the functional, performance, and reliability between the modules that are integrated.

3. System testing

System testing is the first level in which the complete application is tested as a whole. The goal at this level is to evaluate whether the system has complied with all of the outlined requirements and to see that it meets quality standards. System testing is undertaken by independent testers who haven't played a role in developing the program. This testing is performed in an environment that closely mirrors production. System testing is very important because it verifies that the application meets the technical, functional and business requirements that were set by the customer.

4. Acceptance testing

The final level, acceptance testing is conducted to determine whether the system is ready for release. During the software development life cycle, requirements changes can sometimes be misinterpreted in a fashion that does not meet the intended needs of the users. During this final phase, the user will test the system to find out whether the application meets their business needs. Once this process has been completed and the software has passed, the program will then be delivered to production.

5.3 Result

Sl no	Test case	Input Data	Steps to executed test case	Expected result	Pass / Fail
1	Correct username or password	After entering the data click the login button	After successful login, the user should enter the home page	The user enters the homepage	pass
2	Any of the attribute buttons are clicked	Click on the product button	The user should see the details of the product	The user see the details of product	pass
3	Values are given to each field	Click on save, update or delete buttons for execution	When clicked on save button, should save the data	A message is displayed that the data has been saved.	pass
4	Values are given to each field	Click on save, update or delete button	When clicked on delete button, should delete the data	A message is displayed that the data has been deleted	pass
5	Values are given to each field	Click on save or delete or update button	When clicked on update button the values are should be updated	A message is displayed that the data has been updated	pass
6	Values are given to each field	Click on save, update, compute or delete button	When clicked on compute button, the value field must be update.	value field is computed and updated	pass
7	Values are given to each field	Click on save, update or delete button	When clicked on delete button, should delete the data	A message is displayed the data has been deleted	pass

Several errors were detected and rectified and the whole project is working as it should with proper output and high efficiency.

5.4 SNAPSHOTS

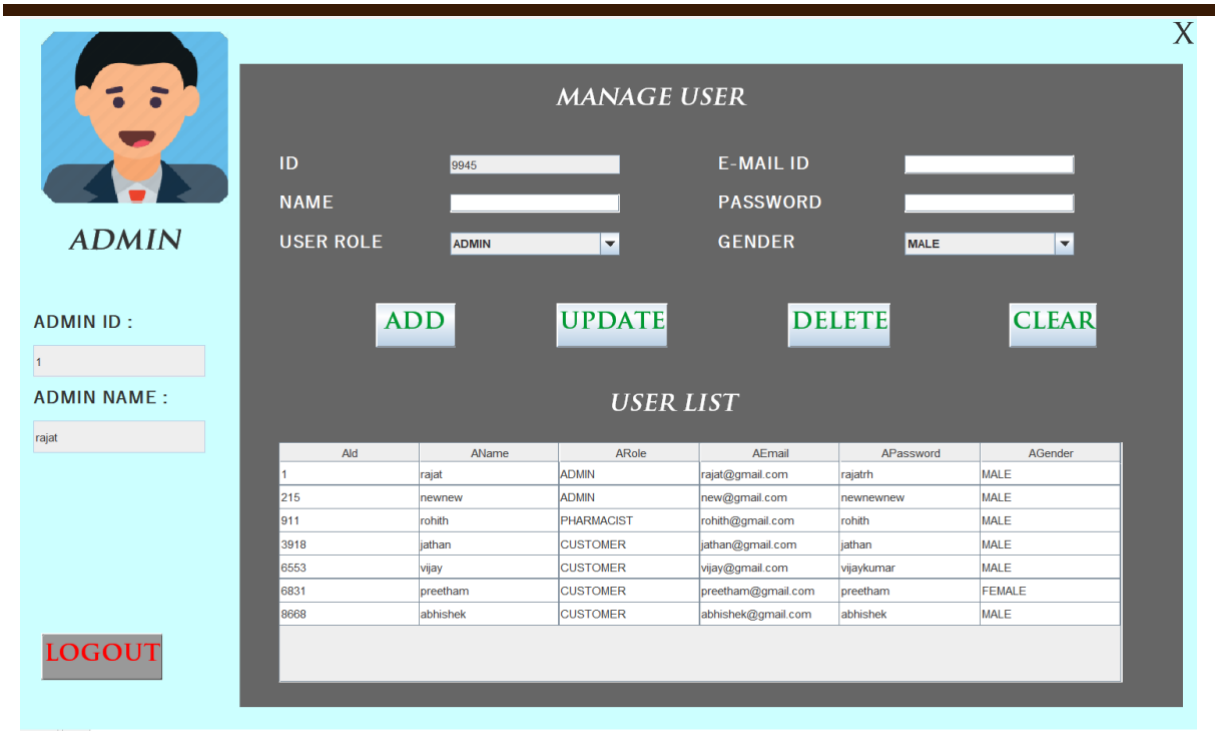
Snapshot 1: Admin / Pharmacist Login

Admin can login using the correct username and password by clicking LOGIN button and the corresponding message will be displayed for the correct login.

Snapshot 2: Incorrect Login

In case of incorrect UserId or Password the corresponding error message will be displayed.

The user can login again using correct UserId and Password.



Snapshot 3 : Admin panel

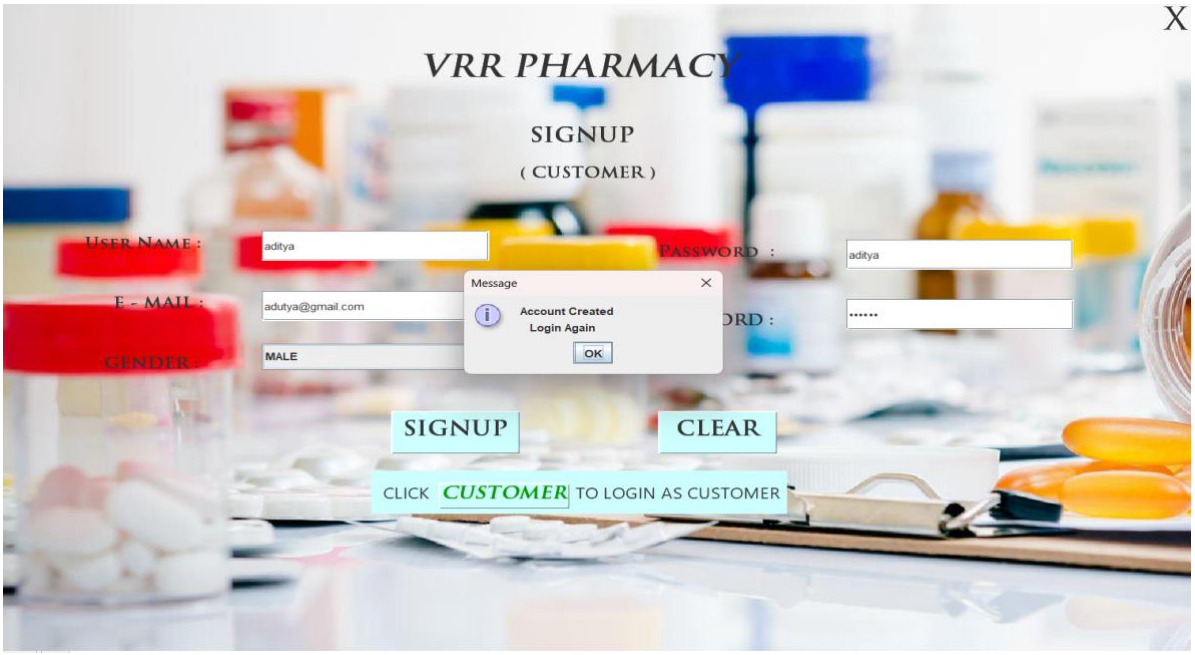
After the successful admin login, admin will entered into the admin panel, where the admin can add, update, and delete the pharmacists details. Admin panel consists of all the details of Existing pharmacists and customers.

Snapshot 4: Pharmacist login successful

Pharmacist can login using the correct username and password by clicking LOGIN button and the corresponding message will be displayed for the correct login.

Snapshot 5: Pharmacist Panel

After the successful Pharmacist login, Pharmacist will entered into the Pharmacist panel where Pharmacist will maintain the details of all the available medicines and he will also Update about newly arrival medicines.



Snapshot 6: Customer Sign up Successful

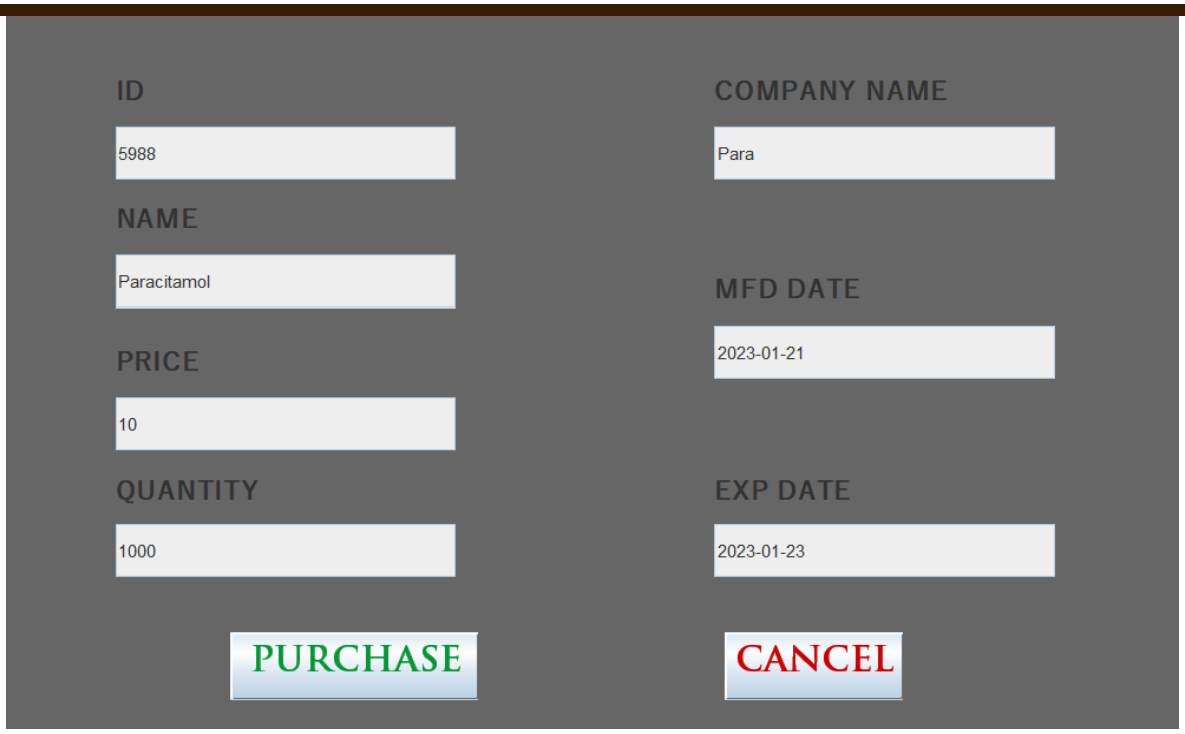
In the customer sign up page the customer have to sign up using the required details like Name,E-mail, Gender, and Password. If the customer give correct details then the account will be created successfully. Then the Details will be stored in the database.

Snapshot 7: Customer Login Successful

Once the customer sign up successfully, then he/she have to login using the required credentials. If the login is successful then corresponding message will be displayed.

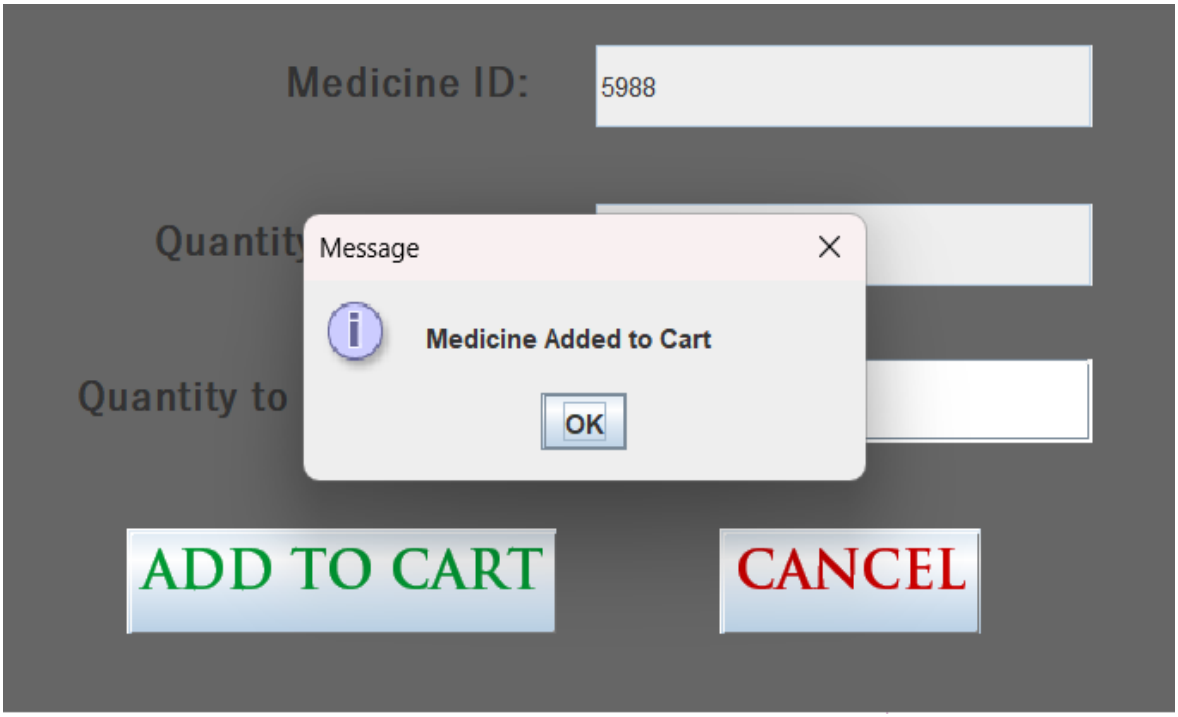
Snapshot 8: Customer Panel

After the successful login customer get the details of all the available medicines like medicine name, price, quantity etc. He /She has to select the required medicines.



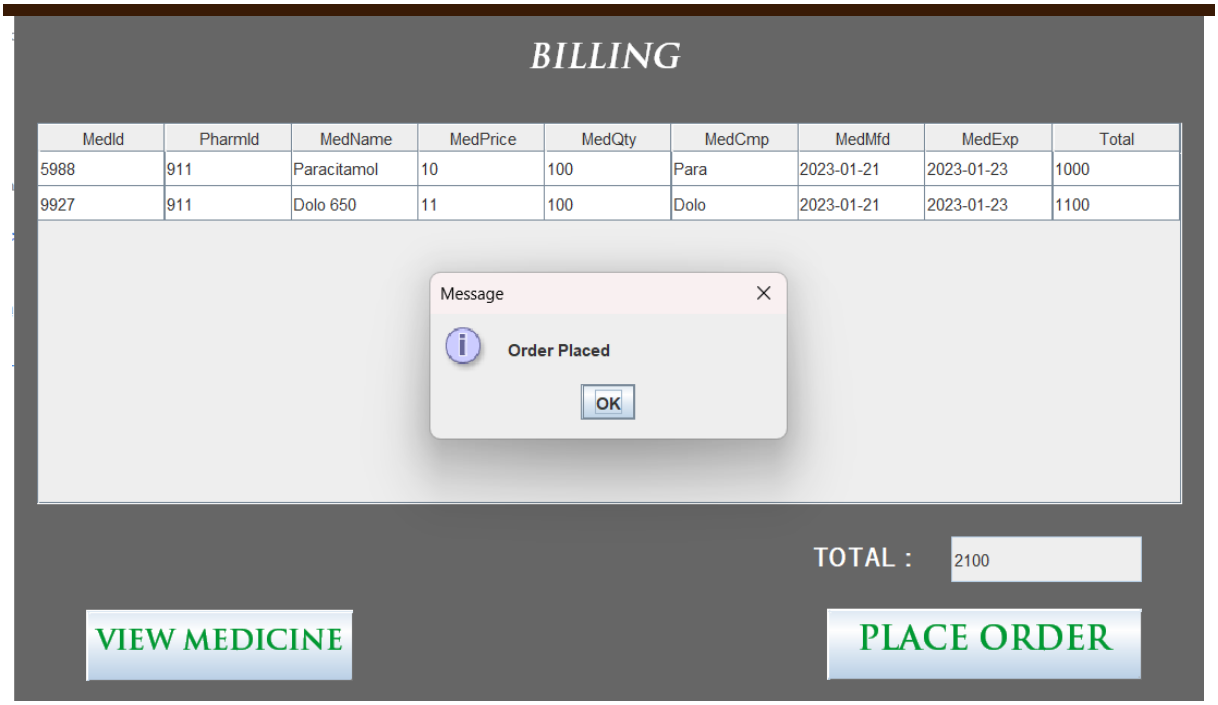
Snapshot 9: Medicine Details

After selecting the particular medicine it will show the details of that selected medicine the customer have to click on the purchase button to continue the order.



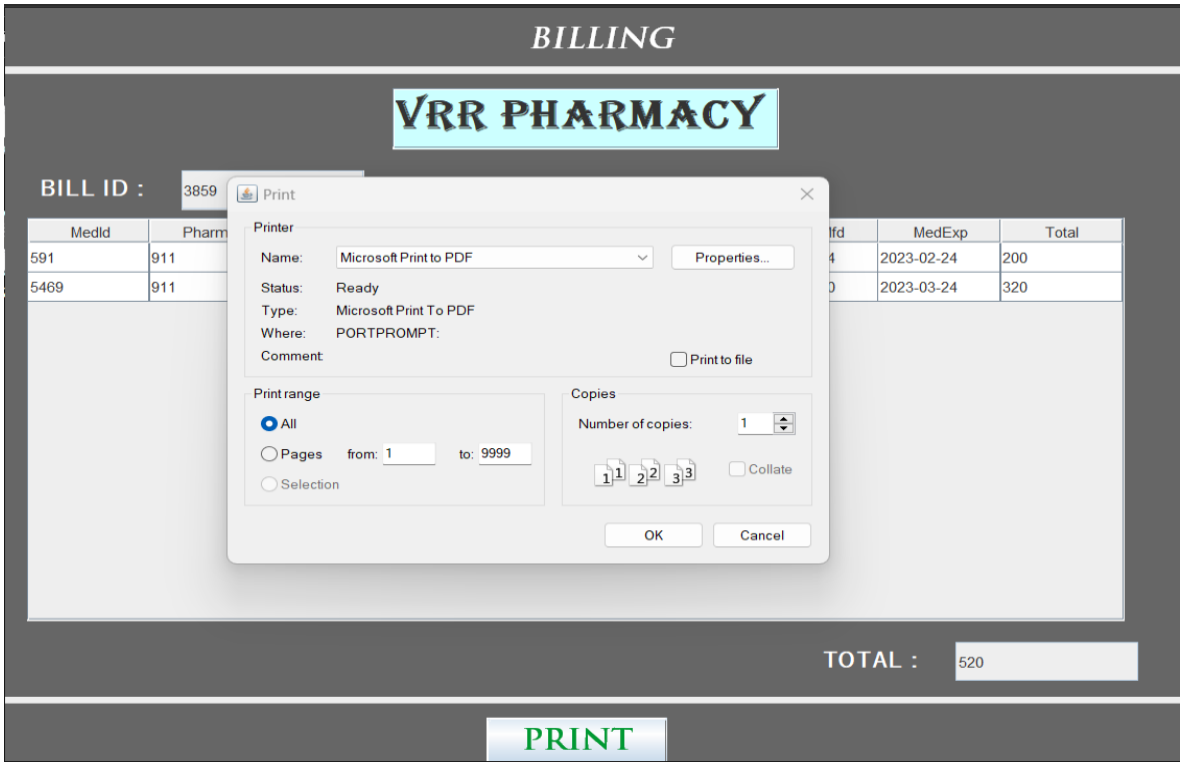
Snapshot 10: Add Medicine To Cart

After clicking the purchase button it will ask for Quantity to purchase customer has to enter required quantity and while entering he has to make sure that the entered quantity should be less than available quantity.



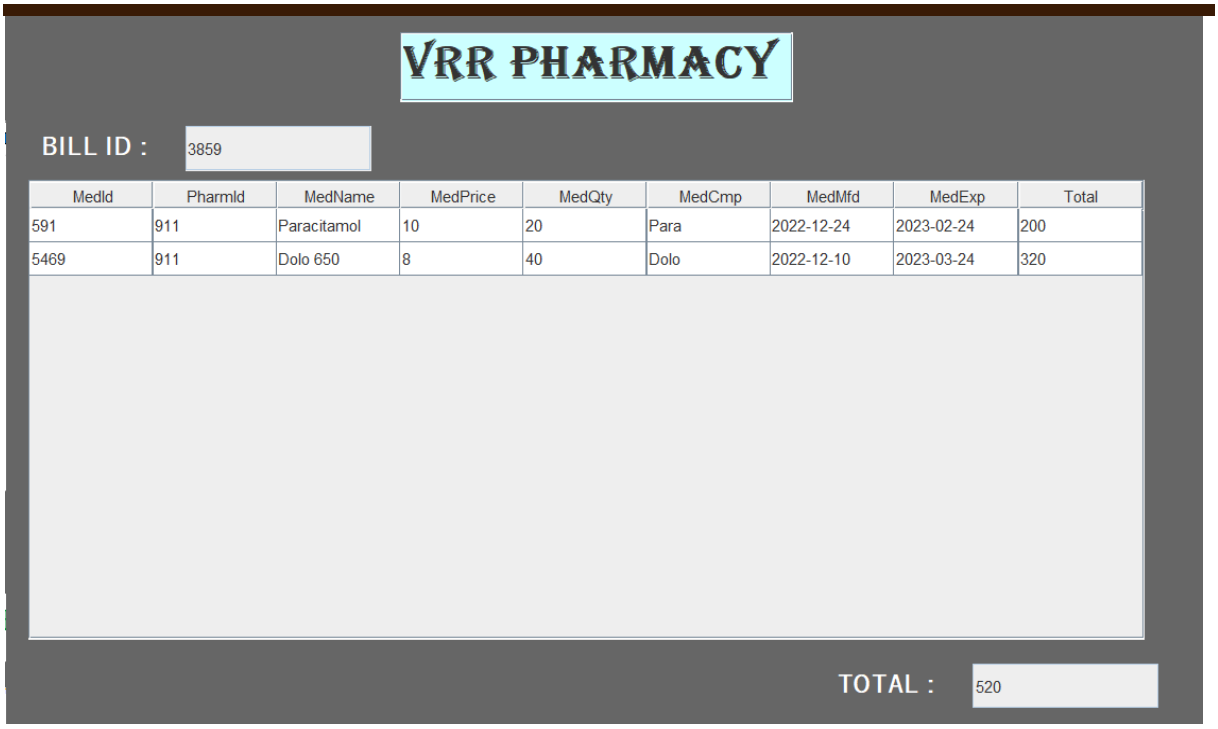
Snapshot 11 : Order Placed Successfully

After adding of medicines to cart it Billing table shows the total amount along with medicines details which are selected, and if customer want to buy he can place the order. On successful placing of order it will display corresponding message.



Snapshot 18:Printing The Bill

If customer able to successfully place the order then it will updated in the pharmacist panel then pharmacist will generate the bill.



Snapshot 19: Final Bill For Customer

The bill consist of all the details like bill id, medicine id,medicine name, quantity selected etc.

Conclusion

Our project Pharmacy management system is for explicit computerization the medicines of all the pharmacy stores. It is great improvement over the manual system. The system speeds up the process of getting details of medicines and pharmacist can easily monitor the medicines details using this system. This software is capable to provide easy effective storage of information related to medicines that come up to the pharmacy store.

Future Enhancement

The future Enhancement can be made include

- Including more facilities like admin can see details of at what time users are logged in and logged out.
- In future we will allow for sending mails to the users automatically when there is any changes in the condition or when the test results are updated.
- Notification sent to customer when there will be arrival of required medicine for customer.

Bibliography

1. Database systems models, languages Design and application Programming, Ramez Elmasri and Shamakant B. Navarthe, 7th edition ,2017, Pearson
2. Database Management Systems, Ramakrishna And Gerkhe, 3rd Edition ,2014, Mc Graw Hill.

Websites

https://www.youtube.com/watch?v=EGzjNRfRt0U&feature=youtu.be

https://www.youtube.com/watch?v=i2zdosCTaEU&feature=youtu.be

https://www.youtube.com/watch?v=pux1p52ZaQw&feature=youtu.be

https://youtu.be/Kmgo00avvEw

https://stackoverflow.com/questions/5307283/exception-in-thread-awt-eventqueue-0