



INSTITUTE FOR ADVANCED
COMPUTING AND
SOFTWARE DEVELOPMENT
AKURDI, PUNE

Documentation On

“PHARMA CARE SYSTEM”
PG-DAC FEB-2020

Submitted By:

Group No: 76

1.Ankita Arjun Shirke 1195
2.Sunita Dadaso Patil 1210

Prashant Karhale
Centre Coordinator

Mr.
Project Guide

Table of Contents

1. Introduction	1
Document Purpose.....	1
Problem Statement	2
Product Scope	2
Aim & Objectives	2
2. Overall Description	3
Product Perspective.....	3
Benefits Pharma Care System	4
User and Characteristics	4
Operating Environment	4
Design and Implementation Constraints	5
3. Requirements Specification	5
External Interface Requirements	6
3.3 Non-Functional Requirements	6
4. System Diagram.....	7
Activity Diagram	7
Data Flow Diagram	8
Class Diagram	10
Use Case Diagram	11
ER Diagram	11
5. Table Structure	12
Role	12
Medicine.....	12
Disease.....	12
User.....	12
6. Conclusion	13
Future Scope	13
7. References	14

List of Figures

Figure 1 Admin Activity Diagram	07
Figure 2 Use Activity Diagram	08
Figure 3 Level 0 Data Flow Diagram	08
Figure 4 Level 1 Data Flow Diagram	09
Figure 5 Level 2 Data Flow Diagram for Admin	09
Figure 6 Level 2 Data Flow Diagram for User	10
Figure 7 Class Diagram	10
Figure 8 Use Case Diagram	11
Figure 9 ER Diagram	11

Introduction

This document is meant to delineate the features of Pharma Care System, so as to serve as a guide to the developers on one hand and a software validation document for the prospective client on the other. system is a complete web based application for managing a pharma cares entire operation. No need to own any computer for this specific ordering of medicine, it just require user to register with the system. It provides easy to use and user friendly interface for the users. The system provides freedom to the users. The user can view the diseases ,enquire about medicine availability and the administrator can login into the system ,admin can add the medicine, view the medicines and update the medicine information,delete the medicine if it is expired or out of date .

Document Purpose

The advancement in Information Technology and internet penetration has greatly enhanced various business processes and Pharma Care helps to save time go and visit to the medical store. This Pharma Care System is developed to provide the following services:

Enhance Business Processes:

To be able to use internet technology to project to the global world instead of limiting their services to their local domain alone, thus increase their return on investment (ROI).

Pharma Care System:

A tool through which admin can login into the system and provide many functionalities to user. The admin also receives some set of functionalities which help in managing the system properly.

Total amount Calculation:

This system helps in calculating the total cost as per quantities and the price of that particular product conveniently.

Problem Statement

Existing system for a pharma is based on our traditional way of going to the pharmacy shop and enquire about the medicine and then purchase that particular medicine according to the diseases if available and if not available then again go to next shop and again repeat the entire process. It takes lots of time. Hence this system is proposed to overcome the flaws of the existing system and giving power to the admin of the system so that he/she will be able to manage the system easily.

Product Scope

This project traverses a lot of areas ranging from business concept to computing field, and required to perform several researches to be able to achieve the project objectives. The area covers include:

- Pharma industry: This includes study on the usage of medicine, when they can be given, what is best medicine for particular disease. Is it harmful or not. For what purpose they are used etc.
- J2EE Technology used for the development of the application.
- General users as well as the new user will be able to use the system effectively after the successful registration into the system.
- Web-platform means that the system will be available for access 24/7 except when there is a temporary server issue which is expected to be minimal.

Aims & Objectives

Specific aims are: -

- To produce a web-based system that allow the admin to add medicine, delete medicine, update medicine, add disease and provide functionalities to its role.
- To ease users by providing different functionalities to it.

Specific objectives are: -

- To gain practical experience by modeling a software based on real World problem.
- To develop an application that deals with the day to day requirement of any pharmacy.
- To develop the easy management of the medicines.

Overall Description

Product Perspective:

2.1.1 Existing system function:

Existing system for a pharma is based on our traditional way of going to the pharmacy shop and enquire about the medicine and then purchase that particular medicine according to the diseases if available and if not available then again go to next shop and again repeat the entire process. It takes lots of time.

III. PROPOSED SYSTEM

Product functionality:

Pharma Care System provides the features for admin and user. It includes several functionalities describes as below:

Medicine Management:

It provides facility to add, update and delete a particular flat medicine. We can view their details and also update it if that particular medicine is out of date.

Disease Management:

The user can enquire about particular medicine as per the disease and if it is new user then it first register into the system and then view that particular medicine availability.

Generating Email:

If user can have any query regarding the product purchased then he/she can send a particular query through the email .

Security:

Security is provide through the AES Algorithm to avoid the misbehavior.

Benefits of Pharma Care System

- This Pharma Care System solution is fully functional and flexible.
- It is very easy to use.
- It saves a lot of time.
- The application acts as an office that is open 24/7.
- It increases the efficiency of the management at offering quality services to the customers.
- It provides custom features development and support with the application.

Users and Characteristics:

Admin:

- Admin can login to the system.
- Add new medicine.
- Delete medicine.
- Update update medicine.
- Add disease
- View the list of all Diseases.
- Display all details
- logout from the system

User:

- User can login to the system.
- Enquiry about medicine..
- Register into System.
- View Disease
- Logout from the System

Operating Environment:

Server Side:

Processor: Intel® Xeon® processor 3500 series

HDD: Minimum 500GB Disk Space

RAM: Minimum 2GB

OS: Windows 8.1, Linux 6

Database: Mysql

Client Side (minimum requirement):

Processor: Intel Dual Core or above.

HDD: Minimum 80GB Disk Space

RAM: Minimum 1GB

OS: Windows 7, Linux

Design and Implementation Constraints:

- The application will use JSP, HTML, jQuery, Bootstrap and CSS as main web technologies.
- HTTP and FTP protocols are used as communication protocols. FTP is used to upload the web application in live domain and the client can access it via HTTP protocol.
- Several types of validations make this web application a secured one and SQL Injections can also be prevented.
- Since Pharma Care is a web-based application, internet connection must be established.
- The Pharma Care will be used on PCs and will function via internet or intranet in any web browser.

Specific Requirement

External Interface Requirements:

User Interfaces:

- All the users will see the same page when they enter in this website. The first page is displayed as 'Login as per role' & 'New

Registration' ,If the user already Registered then This page asks the users a username and a password.

- If new user is coming then register first & then login.
- After being authenticated by correct username and password, Role is admin then it goes to the Admin panel and if Role is user will be redirect to their User Enquiry page.
- The user interface will be simple and consistence, using terminology commonly understood by intended users of the system. The system will have simple interface, consistence with standard interface, to eliminate need for user training of infrequent users.

Hardware Interfaces:

- No extra hardware interfaces are needed.
- The system will use the standard hardware and data communication resources.
- This includes, but not limited to, general network connection at the server/hosting site, network server and network management tools.

Application Interfaces:

OS: Windows 7, Linux

Web Browser:

The system is a web-based application; clients need a modern web browser such as Mozilla Firebox, Internet Explorer, Opera, and Chrome. The computer must have an Internet connection in order to be able to access the system.

Communications Interfaces:

- This system uses communication resources which includes but not limited to, HTTP protocol for communication with the web browser and web server and TCP/IP network protocol with HTTP protocol.
- This application will communicate with the database that holds all the pharma related information. Users can contact with server side through HTTP protocol by means of a function that is called HTTP Service. This function allows the application to use the data retrieved by server to fulfil the request fired by the user.

System Design

Activity Diagram

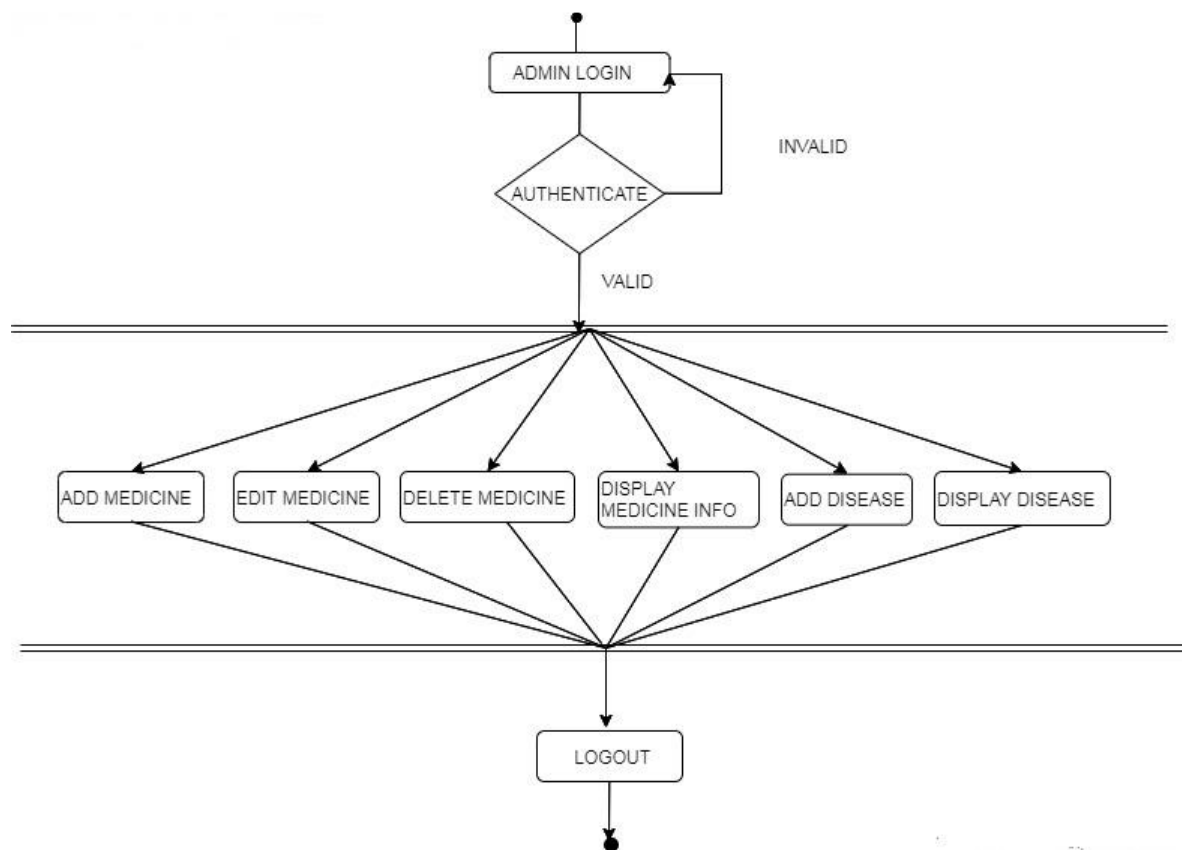


Figure 1: Admin Activity Diagram

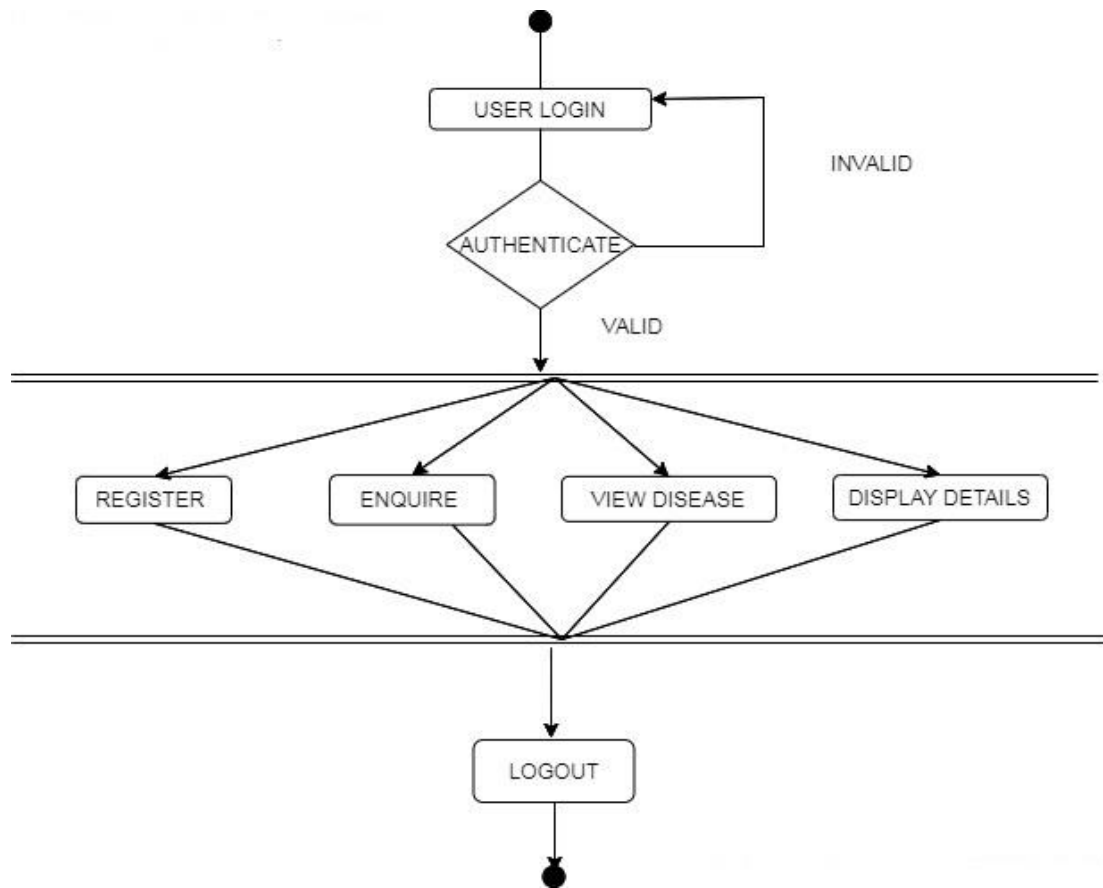


Figure 2: User Activity Diagram

Data Flow Diagram

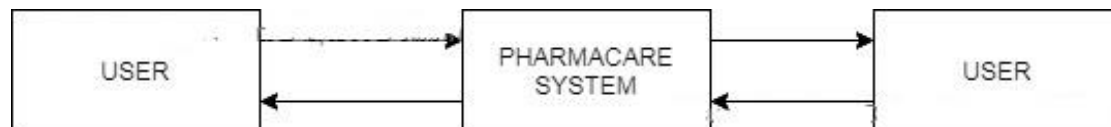


Figure 3: Level 0 Data Flow Diagram

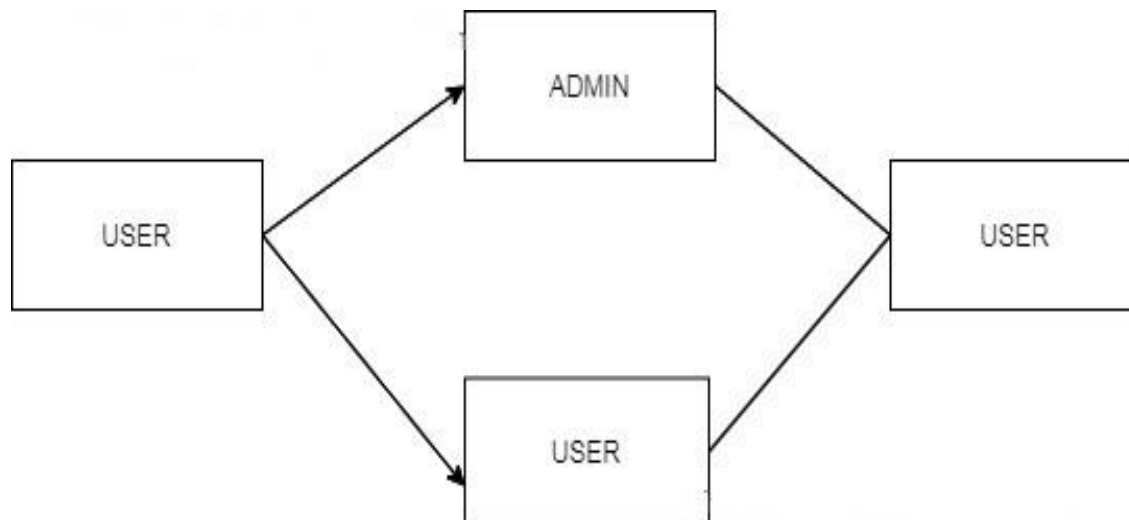
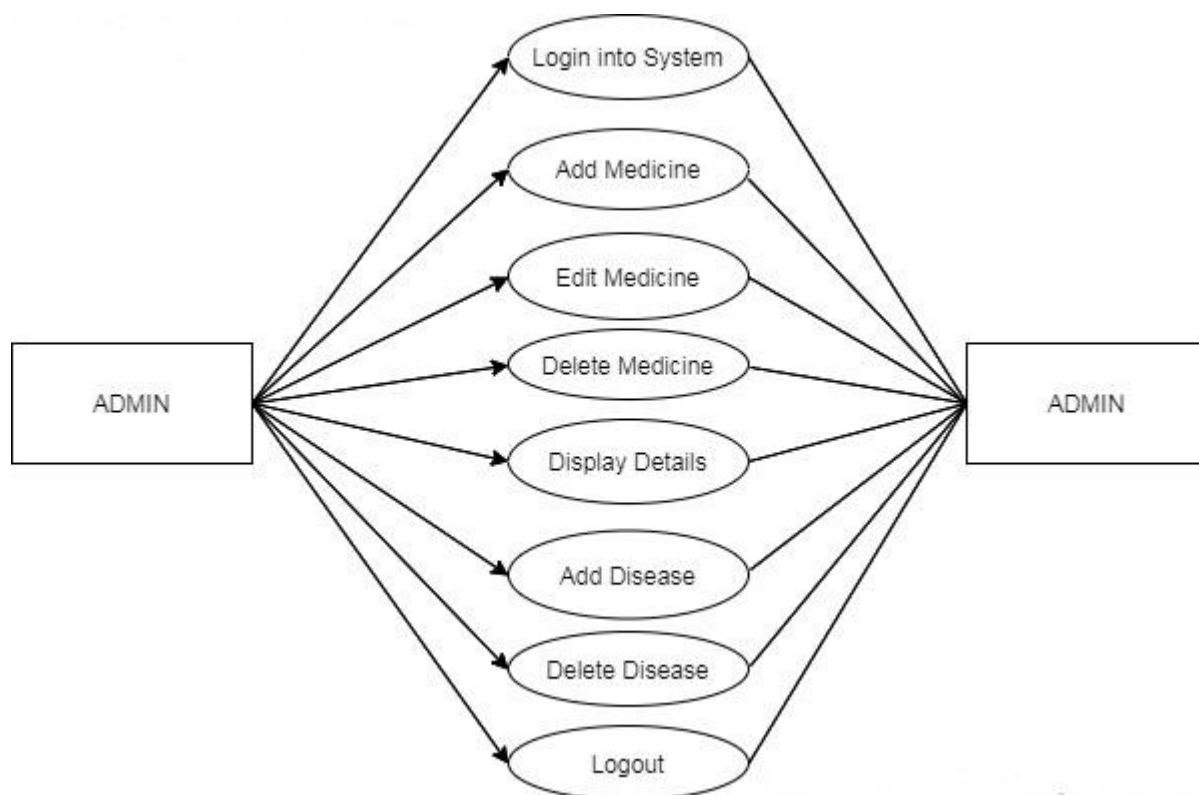


Figure 4: Level 1 Data Flow Diagram



**Figure 5: Level 2 Data Flow Diagram
for Admin**

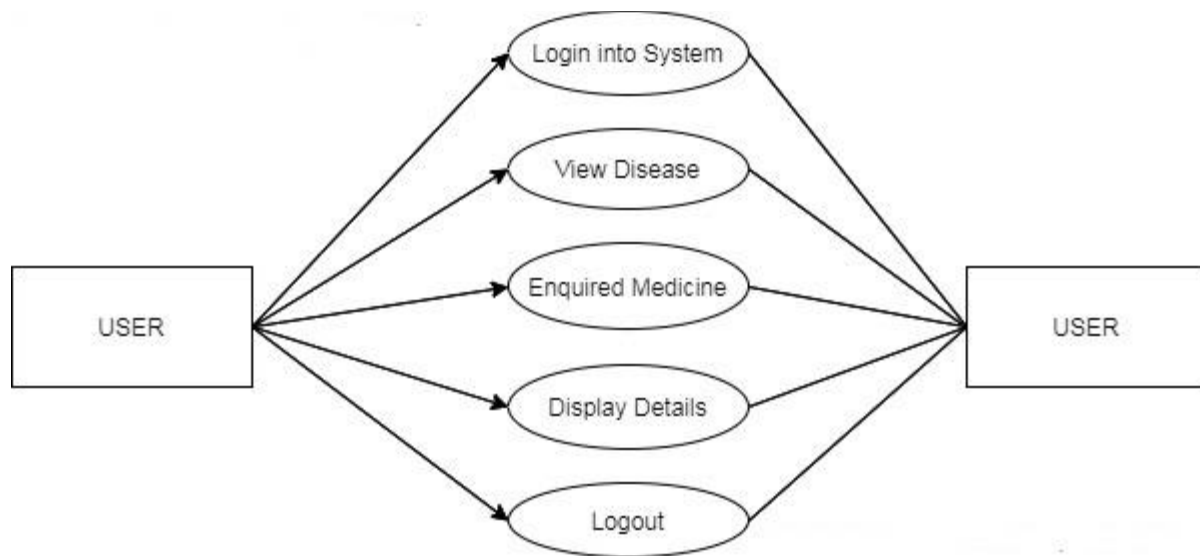


Figure 6: Level 2 Data Flow Diagram for User

Class Diagram

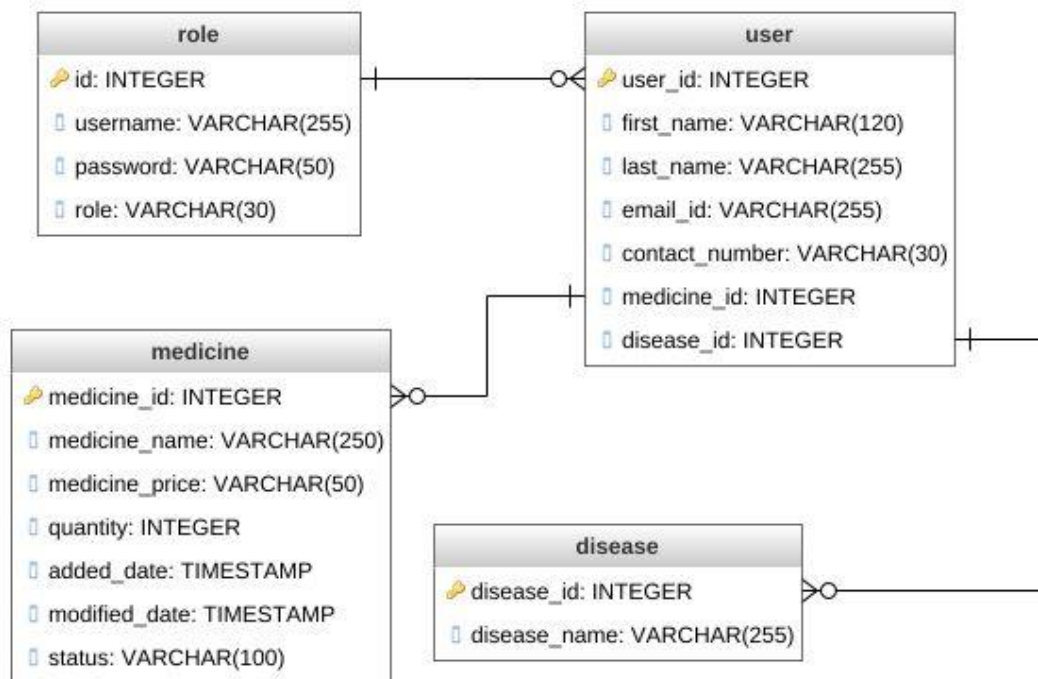


Figure 7: Class Diagram

Use Case Diagram

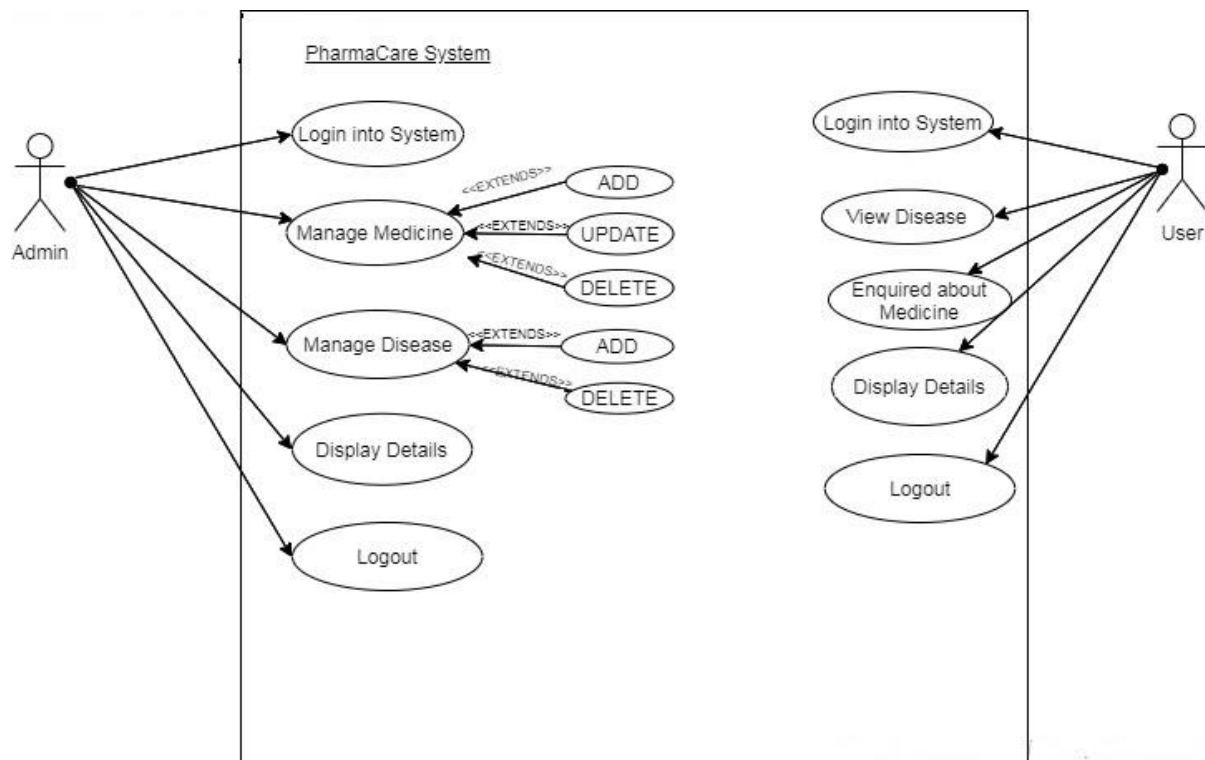


Figure 8: Use Case Diagram

ER Diagram

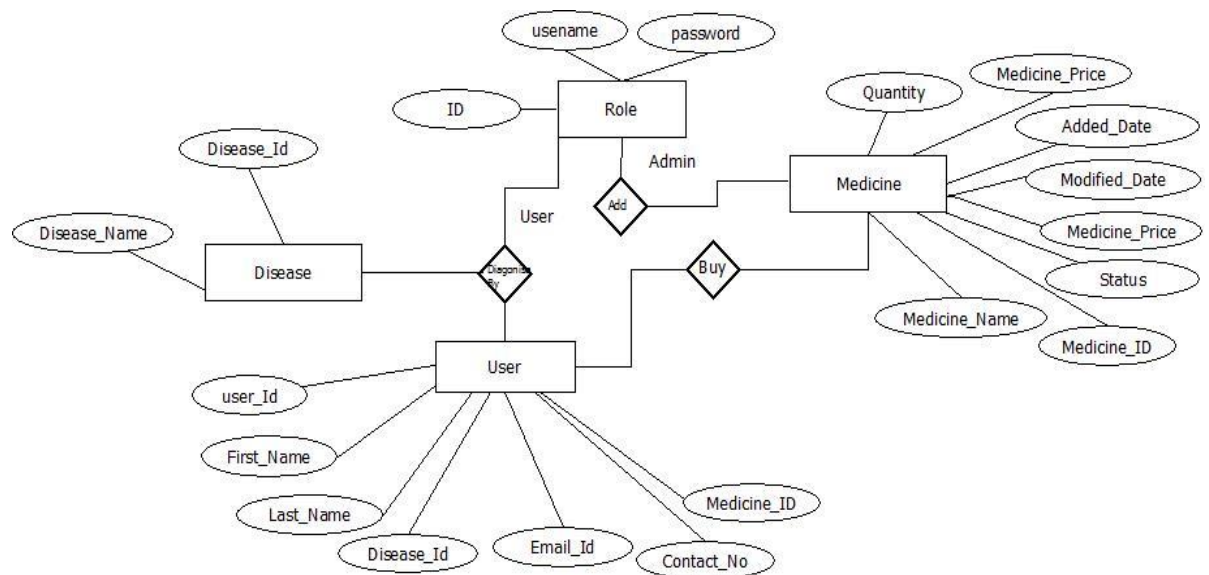


Fig 9 : ER Diagram

Table Structure

role:

<u>Field</u>	<u>Type</u>	<u>Null</u>	<u>Key</u>	<u>Default</u>	<u>Extra</u>
<u>id</u>	int(11)	NO	PRI	NULL	Auto_increment
<u>username</u>	varchar(400)	YES		NULL	
<u>password</u>	varchar(50)	YES		NULL	
<u>role</u>	varchar(30)	YES		NULL	

tbl_medicine:

<u>Field</u>	<u>Type</u>	<u>Null</u>	<u>Key</u>	<u>Default</u>	<u>Extra</u>
<u>medicine_id</u>	int	NO	PRI	NULL	Auto_increment
<u>medicine_name</u>	varchar(250)	NO		NULL	
<u>medicine_price</u>	varchar(50)	NO		NULL	
<u>quantity</u>	int	NO		NULL	
<u>added_date</u>	date	YES		NULL	
<u>modified_date</u>	timestamp	YES		NULL	
<u>status</u>	tinyint(1)	NO		NULL	

tbl_disease:

<u>Field</u>	<u>Type</u>	<u>Null</u>	<u>Key</u>	<u>Default</u>	<u>Extra</u>
<u>disease_id</u>	int	NO	PRI	NULL	Auto_increment
<u>disease_name</u>	varchar(255)	NO		NULL	

tbl_user:

<u>Field</u>	<u>Type</u>	<u>Null</u>	<u>Key</u>	<u>Default</u>	<u>Extra</u>
<u>user_id</u>	int	NO	PRI	NULL	Auto_increment
<u>first_name</u>	varchar(250)	NO		NULL	
<u>last_name</u>	varchar(50)	NO		NULL	

<u>email_id</u>	varchar(50)	NO		NULL	
<u>contact_number</u>	varchar(30)	NO		NULL	
<u>medicine_id</u>	int(11)	NO	MUL	NULL	
<u>disease_id</u>	int(11)	NO	MUL	NULL	

Conclusion

This system provides an easy solution for Users to purchase the medicine without going to the shop .This proposed system can be used by any users and it does not require any educational level,experience or technical expertise in computer field but it will be of good use if user has the good knowledge of how to operate a computer.

Future Scope

The software is flexible enough to be modified and implemented as per future requirements. We have tried our best to present this free and user-friendly website to Users. Message alerts for various functionality can be added to the system so that users that helps the user works as user-friendly.In this application we can also include BAR CODE facility using the bar code reader, which will detect the expiry date and the other information about the related medicines. The application can be made more robust by including biometric verification.

7.0 References

ONLINE REFERENCE

- <https://docs.oracle.com/javaee/7/api/toc.htm>
- <https://docs.oracle.com/javase/7/docs/api/>
- <https://getbootstrap.com/docs/3.3/>
- <https://www.javatpoint.com/jsp-tutorial>

<https://www.researchgate.net/publication/305426561> Online Pharmaceutical Management System