

# Software Requirements Specification

## Version 1.2

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Pharmacy Management System

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# Table of Contents

<b>Table of Contents</b>	<b>ii</b>
<b>Revision History</b>	<b>ii</b>
<b>1. Introduction</b>	<b>3</b>
1.1 Purpose	3
1.2 Document Conventions	3
1.3 Intended Audience and Reading Suggestions	4
1.4 Product Scope	4
1.5 References	4
<b>2. Overall Description</b>	<b>5</b>
2.1 Product Perspective	5
2.2 Product Functions	5
2.3 User Classes and Characteristics	6
2.4 Operating Environment	6
2.5 Design and Implementation Constraints	6
2.6 User Documentation	7
2.7 Assumptions and Dependencies	7
<b>3. External Interface Requirements</b>	<b>8</b>
3.1 User Interfaces	8
3.2 Hardware Interfaces	8
3.3 Software Interfaces	8
3.4 Communications Interfaces	8
<b>4. System Features</b>	<b>9</b>
4.1 System Feature 1	9
<b>5. Other Nonfunctional Requirements</b>	<b>9</b>
5.1 Safety Requirements	9
5.2 Security Requirements	9
<b>6. Use case</b>	<b>10</b>
6.1 Use case Descriptions	11-28
<b>7. Software Architecture</b>	<b>28</b>

## Revision History

Name	Date	Reason For Changes	Version
SRS	08.11.2020		Version1.0

SRS	15.11.2020	For use case	Version1.1

# 1. Introduction

## 1.1 Purpose

A Pharmacy Management System provides a fully integrated, user friendly and customized solution designed to address all the practicality in a Pharmacy company. The system provides Pharmacy company with a robust and efficient solution, which manages to see their movement of all products, check their balance and also see order of medicines and sell it from the shopkeeper. The solution provides vital medicine and cash data where it is necessary at the point of services. Therefore, the purpose of our project is to build a platform for selling and buying some important medicines from a pharmacy.

## 1.2 Document Conventions

This document uses the following conventions.

DB	Database
JS	JavaScript

## **1.3 Intended Audience and Reading Suggestions**

This Software Requirements Specification document is intended for software engineers, system testers, software designers in developing, testing, and producing the pharmacy management system and is for everyone who is somehow related with this project. It is suggested to read the sections sequentially, and to reference the appendices as one progresses, in order to clarify jargon terms and definitions and reach out the basic requirements. The developer or admin can read this documentation for future use or maintenance. Users and other external entities can read this documentation to know its terms and conditions. The system is also open to the general public.

## **1.4 Product Scope**

The main objective of this project is

1. Through this project, the super admin of the pharmacy will be able to easily keep records, data and all the accounts of cash very easily. He will have all the ability to operate the system.
2. Through the project, shopkeepers will be able to keep an eye on all types of stocks and stay informed about which medicines are available and which are not. Also be able to create bills very easily.
3. Using this project, people will be able to order all kinds of medicine from far and wide. This will reduce their many difficulties. They will be aware of the price of the medicine in advance and will be able to give their feedback.

## **1.5 References**

- [https://www.tutorialspoint.com/software\\_engineering/software\\_requirements.htm](https://www.tutorialspoint.com/software_engineering/software_requirements.htm)

## 2. Overall Description

### 2.1 Product Perspective

This system will be free for all. It will be a web-based system that will support all types of operating systems. Super admin will be able to control everything very easily through this. This system will provide a simple mechanism for users who can buy medicines from this system and can give a feedback also. The following are the other features that will be included in this system:

- 1 . Cross-platform Support: Will Offer operating support for most of the known and commercial operating systems.
- 2 . User account: The system will need an account to order medicines, buy medicines and make a comment .
3. Update Profile: Super admin, moderator,shopkeeper and customers can update their profile also.
4. Search: Searching medicine will be simply a local search engine based on keywords.
5. Change Password: They will be able to change their profile passwords as well as update their profiles.

### 2.2 Product Functions

Some main functions of the system are:

- 1) Controlling information and data about the pharmacy management system for super admin. Also the super admin will be able to easily monitor the pros and cons of this system.
- 2) Managing buyers, keeping stock straight and making cash memo for customers easily.
- 3) If a customer finds a medicine worth buying, he/she can add this product to their purchase list.
- 4) Review feedback among them.
- 5) Software feedback for next update.

## 2.3 User Classes and Characteristics

Functionality for both type of users like super admin,shopkeeper and customer:

- a. T  
They must be logged in to the system in order to interact with the system.
- b. S  
See all the other medicines and prices offered by the super admin .

Functionality for Super Admin:

- A. Control the whole System.
- B. Manage the users and full applications.
- C. Determining the profit and loss of the system.
- D. Manage Stocks & Inventory.
- E. View Cash Records.

Functionality for Shopkeeper:

- A. Take Orders.
- B. Accept Orders.
- C. Reject Orders.
- D. Approve Transactions.
- E. Manage Cash Memo.

Functionality for Customers:

- A. Search for medicines.
- B. Add a medicine to the purchase list.
- C. View bills.
- D. Accept the preferable price to the seller.
- E. Give a feedback.

## 2.4 Operating Environment

Operating environment for the pharmacy management system is as listed below.

- Relational Database

- Model, view, controller system
- Operating system : Any
- Database : Mysql
- Platform : C#, JavaScript,HTML,CSS

## **2.5 Design and Implementation Constraints**

- 1) SQL commands for above queries/applications
- 2) The global schema, fragmentation schema, and allocation schema.
- 3) Implement the database at least using a centralized database management system.
- 4) A good web hosting platform may not always be available. This can make test deployment and debugging difficult.

## **2.6 User Documentation**

To use the product properly, there will be various components to help the user. Some of them are:

- User Manual: Will be attached
- Online Help: There will be a report option and an FAQ in the product.
- Tutorial Link: A tutorial will be uploaded for the user in the website.

## **2.7 Assumptions and Dependencies**

- 1) In bill making there may occur some problems.
- 2) Database server errors may occur
- 3) User may give false feedback.

## 3. External Interface Requirements

### 3.1 User Interfaces

Front- end language: HTML,CSS,BOOTSTRAP,JAVASCRIPT

Back-end language:C#,MYSQL

### 3.2 Hardware Interfaces

A browser which supports CGI, HTML & JavaScript.

### 3.3 Software Interfaces

Software used	Description
Operating System	We have chosen Windows operating system for its best support and user-friendliness.
Database	To save the medicine records, customers records, inventory records, cash records we have chosen mysql database.
asp.net	To implement the project we have chosen C#, JavaScript language for its more interactive support.



### **3.4 Communications Interfaces**

The project will support all types of web browser. We are using metro UI for the license, billing forms etc.

## **4. System Features**

### **4.1 System Feature**

The main objective of our project is to bring a pharmacy store to the online platform so that everyone can enjoy this facility online. Everyone in our system will be able to log in like super admins, shopkeepers and customers. The super admin will have all the power to manage the system. The shopkeeper will assist the super admin in all cases and the shopkeeper will also assist the customers for finding their goods. Which will make the whole system run much better. Customers will be able to easily find the medicines according to their need and order from afar. Everyone will have their own account here. They will be able to log in, update their profile, place orders and so on. The shopkeeper will be able to use the system to inform the super admin about all the information such as whether there is medicine in the store, how much is needed, whether it is okay to bill, whether any new medicine needs to be exported.

## **5.**

### **5.1 Safety Requirements**

If there is extensive damage to a wide portion of the database due to a disk crash. Therefore, administration panel should be careful in this case.

### **5.2 Security Requirements**

Security systems need database storage just like many other applications. However, the requirements of the security means that administration panel must work carefully.

## 6. Use case

Use case of Pharmacy Management System :



**Figure :Use case Diagram Of Pharmacy Management System**

## 6.1 Use case Descriptions:

### 6.1.1 Manage Users and Full Applications

<b>Use Case Name:</b>	Manage Users and Full Applications.
<b>Brief Description:</b>	This operation permits Super Admin to approve the user request from the shopkeeper and customers.
<b>Priority</b>	Essential
<b>Trigger</b>	Super Admin choose to create a new entry.
<b>Precondition</b>	Super Admin must be connected to the Internet and on the Entries page.
<b>Basic Path</b>	1.Super Admin click on approval request or decline. 2.The server send the result to the owner.
<b>Alternate Path</b>	N/A
<b>Post condition</b>	A record is created in the Super Admin Table of The Super Admin Database
<b>Exception Path</b>	1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.

### 6.1.2 Manage Stocks

<b>Use Case Name:</b>	<b>Manage Stocks</b>
<b>Brief Description:</b>	This operation permits Super Admin to input the data .
<b>Priority</b>	Essential
<b>Trigger</b>	Super admin chooses to create a new entry.
<b>Precondition</b>	Super Admin must be connected to the Internet and on the Entries page.
<b>Basic Path</b>	<ol style="list-style-type: none"><li>1. Super admin can check the database and takes necessary steps for the shop.</li><li>2. Super admin will click the Ok button to confirm they have taken the necessary steps.</li></ol>
<b>Alternate Path</b>	N/A
<b>Post condition</b>	A record is created in the Super Admin Table of the Admin Database
<b>Exception Path</b>	<ol style="list-style-type: none"><li>1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.</li></ol>

### 6.1.3 Manage Inventory

<b>Use Case Name:</b>	Manage Inventory
<b>Brief Description:</b>	This operation permits Super Admin to input the data and check the data.
<b>Priority</b>	Essential
<b>Trigger</b>	Super admin chooses to create a new entry.
<b>Precondition</b>	Super admin must be connected to the Internet and on the Entries page.
<b>Basic Path</b>	1. Super admin can check the database and takes necessary steps for the shop. 2. Super admin will click the Ok button to confirm they have taken the necessary steps.
<b>Alternate Path</b>	N/A
<b>Post condition</b>	A record is created in the Table of the super admin Database.
<b>Exception Path</b>	1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.

#### 6.1.4 View Cash Records

<b>Use Case Name:</b>	View Cash Records.
<b>Brief Description:</b>	This operation permits super admin to check the cash records.
<b>Priority</b>	Essential
<b>Trigger</b>	Super admin choose to create a new entry.
<b>Precondition</b>	Super admin must be connected to the Internet and on the Entries page.
<b>Basic Path</b>	1.Super admin can check the database and takes necessary steps for the shop. 2.Super admin will click the Ok button to confirm they have taken the necessary steps.
<b>Alternate Path</b>	N/A
<b>Post condition</b>	A record is created in the Cash Records Table of the Super Admin Database
<b>Exception Path</b>	1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.

### 6.1.5 Profit/Loss

<b>Use Case Name:</b>	Profit/Loss.
<b>Brief Description:</b>	This operation permits super admin to count the profits and losses.
<b>Priority</b>	Essential
<b>Trigger</b>	Super admin choose to create a new entry.
<b>Post condition</b>	A record is created in the Profit/Loss Table of the Super Admin Database
<b>Basic Path</b>	1.Super admin can check the database and takes necessary steps for the shop. 2.Super admin will click the Ok button to confirm they have taken the necessary steps.
<b>Alternate Path</b>	N/A
<b>Post condition</b>	If the username is unique, then the user will be activated. Otherwise, the server will send an error message that the username is not unique.
<b>Exception Path</b>	1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.

### 6.1.6 Login and Logout From System

<b>Use Case Name:</b>	<b>Login and Logout From System</b>
<b>Brief Description:</b>	This operation permits Super admin,Shopkeeper and Customer to login and logout from the system.
<b>Priority</b>	Essential
<b>Trigger</b>	Everyone choose to create a new entry.
<b>Precondition</b>	Everyone must be connected to the Internet and on the Entries page.
<b>Basic Path</b>	1.Everyone will click login button. 2. If anyone wants to logout from the table,he/she must click the logout button.
<b>Alternate Path</b>	N/A
<b>Post condition</b>	A record is created in the Data Table of the Super Admin Database
<b>Exception Path</b>	1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.



### 6.1.7 Update My Profile

<b>Use Case Name:</b>	Update My Profile
<b>Brief Description:</b>	Users can update an account to see the stock of the medicines, order medicines, confirm transaction, see the offers of the medicines, price of the medicines and so on.
<b>Priority</b>	Essential
<b>Trigger</b>	A new user account will be updated and that user can access the site using the user account.
<b>Precondition</b>	Users are connected to the internet and on Budget.
<b>Basic Path</b>	a.Server sends a user a registration form.  b.User will provide his/her photo,firstname ,lastname, username, email,phone number and password.
<b>Alternate Path</b>	N/A
<b>Post condition</b>	If the username is unique, then the user will be activated. Otherwise, the server will send an error message that the username is not unique.
<b>Exception Path</b>	1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.

### 6.1.8 Change Account Password

<b>Use Case Name:</b>	Change Account Password
<b>Brief Description:</b>	Users can Change Account Password for account safety <b>and</b> to see the stock of the medicines, order medicines, confirm transaction, see the offers of the medicines, price of the medicines and so on.
<b>Priority</b>	Essential
<b>Trigger</b>	A new user account will be changed and that user can access the site using the user account.
<b>Precondition</b>	Users are connected to the internet and on Budget.
<b>Basic Path</b>	a.Server sends a user a registration form.  b.User will provide his/her photo,firstname ,lastname, username, email,phone number and password.
<b>Alternate Path</b>	N/A
<b>Post condition</b>	If the password is unique, then the user will be activated. Otherwise, the server will send an error message that the username is not unique.
<b>Exception Path</b>	1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.

### 6.1.9 View Stocks

<b>Use Case Name:</b>	<b>View Stocks</b>
<b>Brief Description:</b>	This operation permits the shopkeeper to view the stocks of the medicines in the shop.
<b>Priority</b>	Essential
<b>Trigger</b>	Shopkeeper chooses to create a new entry.
<b>Precondition</b>	Shopkeeper will be connected to the internet and on Budget
<b>Basic Path</b>	1.Shopkeeper can check the database table of medicine stocks and takes necessary steps for the shop. 2.Shopkeeper will click the Ok button to confirm they have taken the necessary steps.
<b>Alternate Path</b>	N/A
<b>Post condition</b>	A record is created in the Medicine Stocks Table of the Super Admin Database.
<b>Exception Path</b>	1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.

#### 6.1.10 Add Medicines

<b>Use Case Name:</b>	<b>Add Medicines</b>
<b>Brief Description:</b>	This operation permits Shopkeeper to add medicines into the data sheet. He will also see which medicine is much less in the store and what medicine to buy.
<b>Priority</b>	Essential.
<b>Trigger</b>	Shopkeeper chooses to create a new entry.
<b>Precondition</b>	Shopkeeper must be connected to the Internet and on the Entries page.
<b>Basic Path</b>	1. Shopkeeper can check the database table of Add Medicines and takes necessary steps for the shop. 2.Shopkeeper will click the Ok button to confirm they have taken the necessary steps.
<b>Alternate Path</b>	N/A
<b>Post condition</b>	A record is created in the Super Admin Table of the Admin Database
<b>Exception Path</b>	1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state

### 6.1.11 Online Order Accept/Reject

<b>Use Case Name:</b>	<b>Online Order Accept/Reject</b>
<b>Brief Description:</b>	This operation permits Shopkeeper to accept or reject online orders .Because users can order medicine through online in this management system and the shopkeeper will do all the work whether the order will be accepted or not.
<b>Priority</b>	Essential
<b>Trigger</b>	Shopkeeper chooses to create a new entry.
<b>Precondition</b>	Shopkeeper must be connected to the Internet and on the Entries page.
<b>Basic Path</b>	If the “Accept Offer” option is selected, the server will send a popup message to the shopkeeper whether he/she wants to sell the medicine to the customer at the given price. Otherwise, if the customer selects the “Reject Offer” option, the offer will be rejected.
<b>Alternate Path</b>	N/A
<b>Post condition</b>	A record is created in the Super Admin Table of the Admin Database
<b>Exception Path</b>	1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.

### 6.1.12 Create Bills

<b>Use Case Name:</b>	<b>Create Bills</b>
<b>Brief Description:</b>	This operation permits the shopkeeper to make a bill so that he has an account of everything and the customer will also see what he has bought and how much it is worth.
<b>Priority</b>	Essential
<b>Trigger</b>	Shopkeeper chooses to create a new entry.
<b>Precondition</b>	Shopkeeper must be connected to the Internet and on the Entries page.
<b>Basic Path</b>	<ol style="list-style-type: none"><li>1. Shopkeeper click the button cash memo.</li><li>2. The server send him a form of cash memo with his the price of medicines.</li><li>3. 3.Owner fill it up for the customers.</li></ol>
<b>Alternate Path</b>	N/A
<b>Post condition</b>	A record is created in the Super Admin Table of the Admin Database
<b>Exception Path</b>	<ol style="list-style-type: none"><li>1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.</li></ol>

### 6.1.13 Confirm Transactions

<b>Use Case Name:</b>	<b>Confirm Transactions</b>
<b>Brief Description:</b>	This operation permits Shopkeeper to confirm the transaction .
<b>Priority</b>	Essential
<b>Trigger</b>	Shopkeeper chooses to create a new entry.
<b>Precondition</b>	Shopkeeper must be connected to the Internet and on the Entries page.
<b>Basic Path</b>	1.Shopkeeper can check the database and takes necessary steps for the shop. 2.Shopkeeper will click the Ok button to confirm they have taken the necessary steps
<b>Alternate Path</b>	N/A
<b>Post condition</b>	A record is created in the Super Admin Table of the Admin Database
<b>Exception Path</b>	1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.

#### 6.1.14 Search Medicines

<b>Use Case Name:</b>	<b>Search Medicines</b>
<b>Brief Description:</b>	This operation allows the customer to find the medicine in the system to see if the medicine is available and if not, to bring it.
<b>Priority</b>	Essential
<b>Trigger</b>	Customers choose to create a new entry.
<b>Precondition</b>	Customers must be connected to the Internet and on the Entries page.
<b>Basic Path</b>	<ol style="list-style-type: none"><li>1. The customer will have to search for medicine first.</li><li>2. If he finds it in his medicine store, he will have to click the button to buy it.</li><li>3. If there is no medicine in the store, they will find out if they have to bring it.</li></ol>
<b>Alternate Path</b>	N/A
<b>Post condition</b>	The customer must have an account and by logging in to that account he will learn about everything.
<b>Exception Path</b>	<ol style="list-style-type: none"><li>1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.</li></ol>



#### 6.1.15 Order Medicines

<b>Use Case Name:</b>	<b>Order Medicines</b>
<b>Brief Description:</b>	This operation permits Customer to order medicines from the system.
<b>Priority</b>	Essential.
<b>Trigger</b>	Customers choose to create a new entry.
<b>Precondition</b>	Customers must be connected to the Internet and on the Entries page.
<b>Basic Path</b>	<ol style="list-style-type: none"><li>1. The customer will have to search for medicine first.</li><li>2. If he finds it in his medicine store, he will have to click the button to buy it.</li><li>3. If there is no medicine in the store, they will find out if they have to bring it.</li></ol>
<b>Alternate Path</b>	N/A
<b>Post condition</b>	The customer must have an account and by logging in to that account he will learn about everything.
<b>Exception Path</b>	<ol style="list-style-type: none"><li>1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.</li></ol>

### 6.1.16 View Bills

<b>Use Case Name:</b>	<b>View Bills</b>
<b>Brief Description:</b>	This operation permits Customer to check the bills from the system.
<b>Priority</b>	Essential
<b>Trigger</b>	Customer choose to create a new entry.
<b>Precondition</b>	Customers must be connected to the Internet and on the Entries page.
<b>Basic Path</b>	<ol style="list-style-type: none"><li>1. Whether it is medicine or not, the customer will have to see his own bill from his account and how much he has to pay.</li><li>2. Once the bill is paid, he will be able to complete the work by clicking on the OK button.</li></ol>
<b>Alternate Path</b>	N/A
<b>Post condition</b>	The customer must have an account and by logging in to that account he will learn about everything.
<b>Exception Path</b>	<ol style="list-style-type: none"><li>1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.</li></ol>

### 6.1.17 Make Payment

<b>Use Case Name:</b>	<b>Make Payment</b>
<b>Brief Description:</b>	This operation permits Customer to make payments from the system.
<b>Priority</b>	Essential
<b>Trigger</b>	Customer choose to create a new entry.
<b>Precondition</b>	Customers must be connected to the Internet and on the Entries page.
<b>Basic Path</b>	<ol style="list-style-type: none"><li>1. Whether it is medicine or not, the customer will have to see his own bill from his account and how much he has to pay.</li><li>2. Once the bill is paid, he will be able to complete the work by clicking on the OK button.</li></ol>
<b>Alternate Path</b>	N/A
<b>Post condition</b>	The customer must have an account and by logging in to that account he will learn about everything.
<b>Exception Path</b>	<ol style="list-style-type: none"><li>1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.</li></ol>

#### 6.1.18 Feedback

<b>Use Case Name:</b>	Giving feedback.
<b>Brief Description:</b>	This operation permits Customer to give feedback to super admin about the shop and the system.
<b>Priority</b>	Essential
<b>Trigger</b>	Customer chooses to create a new entry.
<b>Precondition</b>	Customer must be connected to the Internet and on the Entries page.
<b>Basic Path</b>	1.Customer will click feedback button. 2.Then server will show him page where he can give feedback to the admin.
<b>Alternate Path</b>	N/A
<b>Post condition</b>	A record is created in the Customer Table of the Customer Database
<b>Exception Path</b>	1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.

The process of defining a collection of hardware and software components and their interfaces to establish the framework for the development of a computer system.

- User Interface :
- Facade
- Business Access Layer
- Data Access Layer
- Database

### Class diagram :

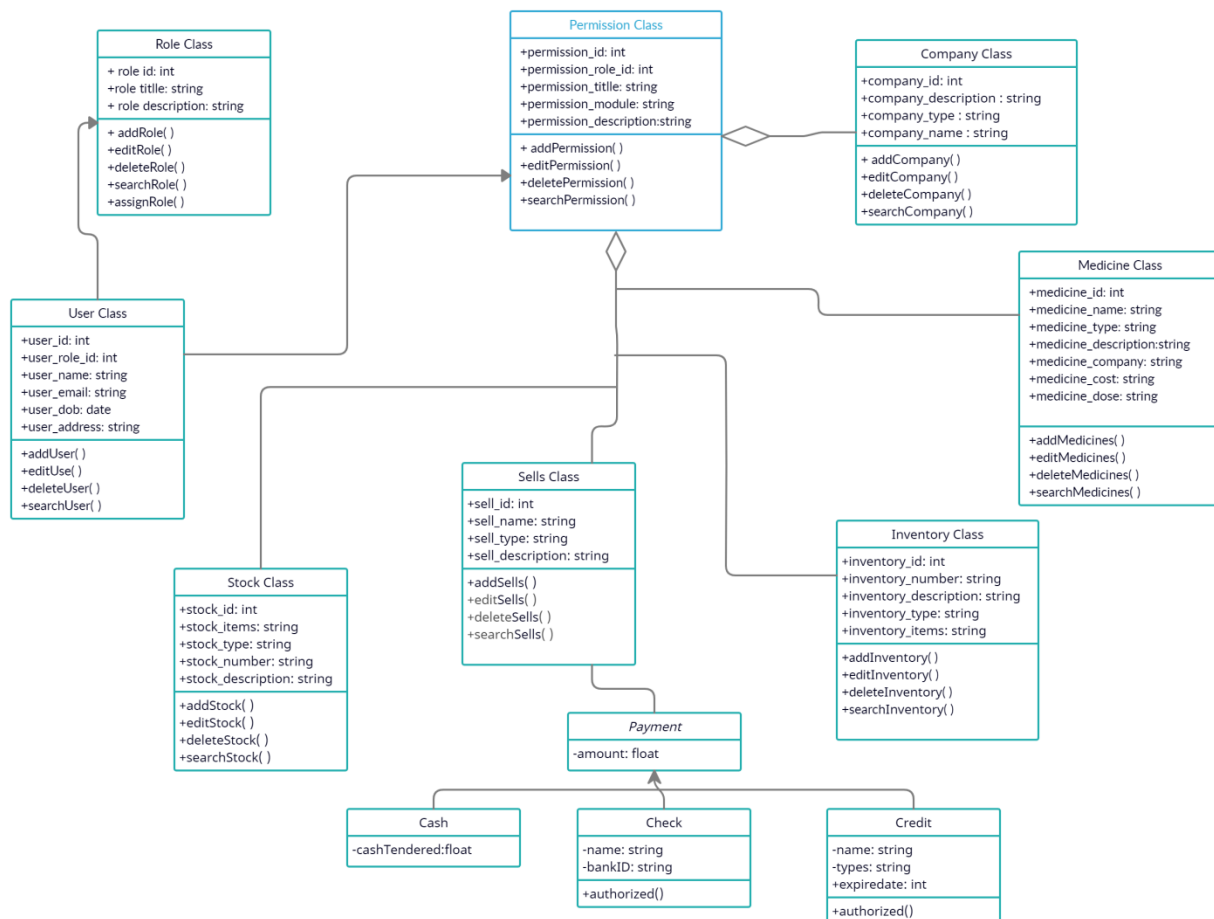


Figure:-class diagram of Pharmacy Management System

## ER diagram :

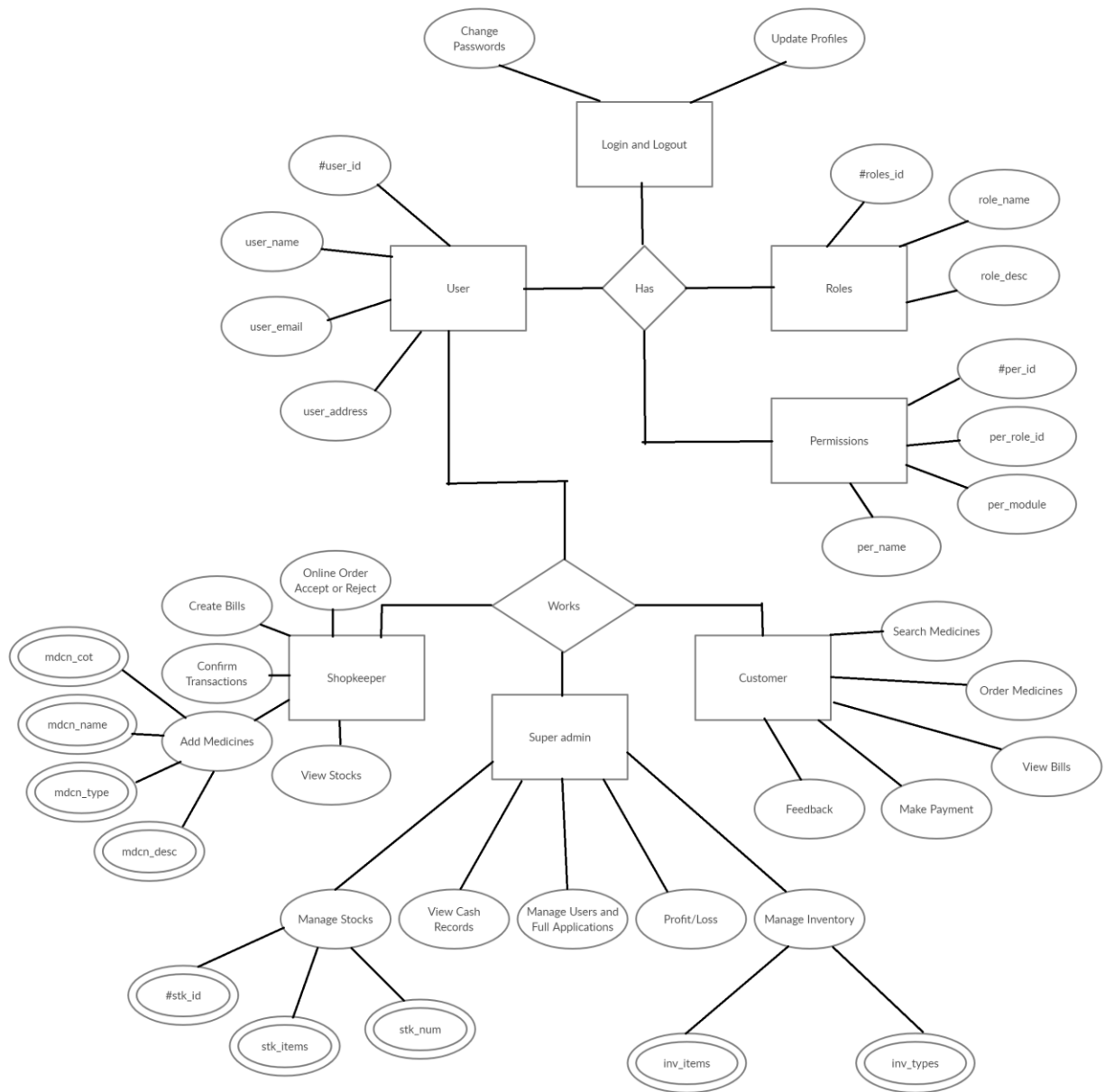


Figure:-ER diagram of Pharmacy Management System