

Software Requirements Specification

Version 1.0

May 20 2021

Pharmacy Management System

Ahmad Teamleader

Farah Alabbas

Zena Melad

This document(srs) explains
the pharmacy management
system

Table of Contents.....	i
List of Figures.....	ii
1.0. Introduction.....	3
1.1. Purpose.....	3
1.2. Scope of Project.....	3
1.3. Glossary.....	4
1.4. References.....	5
1.5. Overview of Document.....	5
2.0. Overall Description	6
2.1 System Environment	6
2.2 Functional Requirements Specification	6
2.2.1 customer Use Case	7
2.2.2 pharmacy manger.....	8
2.3 User Characteristics	9
2.4 Non-Functional Requirements	10
3.0. Requirements Specification.....	11
3.1 External Interface Requirements	11
3.2 Functional Requirements	11
3.2.1 Get Information About Pharmacy.....	11
3.2.2 managepharmacy(AddNewMedicineData).....	13
3.2.3 managepharmacy(UpdateMedicineData).....	14
3.2.4 managepharmacy(DeleteMedicineData).....	15
3.2.5 managepharmacy(ReceiveNotification).....	16
3.2.6 managepharmacy(changeLoginPassword).....	17
3.2.7 managepharmacy(prepareBillForMedicine).....	18
3.2.8 managepharmacy(SearchMedicineData).....	19
3.2.9 managepharmacy(SeaHowToUseTheSystem).....	20
3.2.10 managepharmacy(getReportOnMedicine).....	21
3.3 Detailed Non-Functional Requirements	22
3.3.1 Usability.....	22
3.3.2 User interface.....	22
3.3.3 Operation.....	22
3.3.4 Implementation.....	22
List of Figures	
Figure1-A chart of the general condition of the pharmacy manger.....	23
Figure2-Entity Diagram.....	24

1.0 Introduction

1.1 Purposp

The purpose of this document is to present a detailed description of the Pharmacy Management System this system is built for the sake of ensuring effective and clear data saving and manipulating. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli. This document is intended for both the stakeholders and the developers of the system and will be proposed to the Regional Historical Society for its approval.

1.2. Scope of Project

Pharmacists are employed in regulatory control and drug management, community pharmacy, hospital pharmacy, the pharmaceutical industry, academic activities, training of other health workers, and research. In all these fields, their aim is to ensure optimum drug therapy, both by contributing to the preparation, supply and control of medicines and associated products, and by providing information and advice to those who prescribe or use pharmaceutical products.

1.3. Glossary

Term	Definition
Pharmacist:	The profession who have knowledge on the medicine usage, instruction for use those medicines for the particular diseases and other related things.
Management system:	A system in which manage, organize, formulate data's through a technical data structure arrangement.
Billing:	The way in which generating paper which store information about some specific data containing details explanation.
Pharmacy Manager:	Human who control the pharmacy management system.
Use case:	an action implemented by the computer system.
User interface:	the computerized implementation of graphical user interface that represents menu's, frames and related components in one.

1.4 Reference

- Prentice Object Oriented Software Engineering Using UML Patterns and Java 3rd 2012

-

Cambridge.Press.Software.Modeling.and.Design.Feb.2011

1.5 Overview

The next chapter, the Overall Description section, of this document gives an overview of the functionality of the product. It describes the informal requirements and is used to establish a context for the technical requirements specification in the next chapter.

The third chapter, Requirements Specification section, of this document is written primarily for the developers and describes in technical terms the details of the functionality of the product.

Both sections of the document describe the same software product in its entirety, but are intended for different audiences and thus use different language.

2.0. Overall Description:

2.1. *System Environment*

the pharmacy management system contains two actors, the pharmacy manager and the customer, and one collaborative system.

the pharmacy manager accesses the entire system directly and the customer interacts with the system by recording customer information on the system.

2.2 *Functional Requirements Specification*

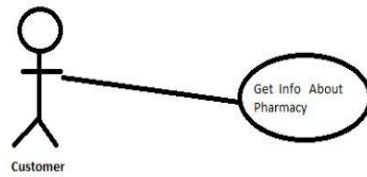
This section outlines the use cases for each of the actors separately.

The customer only has one use case, while the manager is the main actor in this system.

2.2.1 Customer Use Case

In case of multiple customers, this term refers to the *principal customer*, with whom all communication is made.

Use case: Get Information About Pharmacy



Brief Description :the customer gets information about the drugs and the pharmacy.

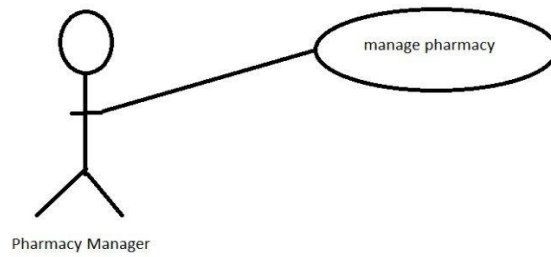
Initial Step-By-Step Description:

- 1-the customer asks questions to the pharmacy manger regarding the medicine and the pharmacy.
- 2-the pharmacy manger answers general questions about the pharmacy.
- 3- with regard to medicine ,the director answers these questions with the help of the information recorded on the system.

Xref: Section 3.2.1, Search Get Information About Pharmacy.

2.2.2 Pharmacy manager Use Case

Use case:manage pharmacy



Brief Description:

Managing all pharmacy tasks.

Initial Step-By-Step Description:

- 1- Before this use case the pharmacy manger logs into the system.
- 2- It manages the system of recording ,modifying and deleting data.

Xref: Section 3.2.2, manage pharmacy

2.3 User Characteristics

The user should have a minimum experience of interacting with the system.

The customer must be over the age of eighteen.

2.4 Non-Functional Requirements

This system will be easy to use and deal with according to the capabilities of the device in addition to the way the database is organized,(meaning that the speed of customer service will depend on the quality of the devices instead of the system characteristics.

The manger will be working on his computer and have windows access installed while he is running on the database mysql.

3.0. Requirements Specification

3.1 External Interface Requirements

The only link to an external system is the link to the Historical Society (HS) Database to verify the membership of a Reviewer. For every drug that has its own code, the system reads this code through a device and then communicates with the base to fetch and update the drug information.

3.2 Functional Requirements

The Logical Structure of the Data is contained in Section 3.3.1.

3.2.1 Get Information About Pharmacy.

Use Case Name	Search Get Information About Pharmacy
XRef	Section 2.2.1, Search Get Information About Pharmacy
Trigger	Makes the user to understand about the pharmacy.
Precondition	The pharmacy manager system must be on process or opened.
Basic Path	<ol style="list-style-type: none">1. The pharmacy manager initiates the system.2. The system displays the first page.3. The first page consists of menu's Medicine , and About pharmacy4. The customer or the pharmacy manager enters Medicine menu5. System displays the medicine available on the pharmacy with cost and purpose.6. The customer or the pharmacy manager enters About pharmacy establishment.

	7. System displays about the organization services and establishment.
Alternative Paths	Step 5-7: if the user enters cancel the pharmacy management system will Stop the operation.
Postcondition	GetInformationAboutPharmacy
Exception Paths	The pharmacy manager making Transaction could not be processed.
Other	None

3.2.2 manage pharmacy(**Add New Medicine Data**)

Use Case Name	Add New Medicine Data
XRef	Section 2.2.2, Search manage pharmacy
Trigger	successfully record new medicine data
Precondition	The pharmacy manager system must Be on process and login to the system.
Basic Path	<ol style="list-style-type: none">1. The pharmacy manager login into the system.2. Go to the system settings and menus.3. Select on new medicine record option.4. The system display record form5. Then the pharmacy manager fills the form that the medicine data has.6. Then save the medicine that fills in step 5.7. System checks the data entered whether correct or not8. If the data's input were correct then system saved it into the disks.
Alternative Paths	<p>Step 7: If the input form have error the system displays "Saving error" message</p> <p>Step 1-7: if the user enters cancel the pharmacy management system will</p> <p>Stop the operation.</p>
Postcondition	Add New Medicine Data and database update
Exception Paths	The pharmacy manager making transaction could not be processed.
Other	None

3.2.3 manage pharmacy(Update Medicine Data)

Use Case Name	Update Medicine Data
XRef	Section 2.2.2, Search manage pharmacy
Trigger	successfully updated medicine data
Precondition	The pharmacy manager system must be on process and login to the system.
Basic Path	<ol style="list-style-type: none">1. The pharmacy manager login into the system.2. Go to the system settings and menus.3. Select on medicine records option.4. The system display the available medicines that is recorded before5. Then the pharmacy manager selects the medicine that he/she wants update.6. Then press the update from available options.7. The system displays the medicine data that is recorded before.8. The pharmacy manager change the data that displayed in the form9. Save the updated fill form.10. System checks the data entered whether correct or not11. If the data's input is correct then system saved it into the disks.
Alternative Paths	<p>Step 10: If the input form have error the system displays "Updating error" message</p> <p>Step 1-10: if the user enters cancel the pharmacy management system will Stop the operation.</p>
Postcondition	Update Medicine Data and save modifications within the base.
Exception Paths	The pharmacy manager making transaction could not be processed.

Other	None
--------------	------

3.2.4 manage pharmacy(**Delete Medicine Data**)

Use Case Name	Delete Medicine Data
XRef	Section 2.2.2, Search manage pharmacy
Trigger	successfully updated medicine data
Precondition	The pharmacy manager system must Be on process and login to the system.
Basic Path	<ol style="list-style-type: none"> 1. The pharmacy manager login into the system. 2. Go to the system settings and menus. 3. Select on medicine records option. 4. The system display the available medicines that is recorded before 5. Then the pharmacy manager selects the medicine that he/she wants to delete. 6. Then press the delete from available options. 7. If the system can successfully delete then displays the message “successfully deleted”. 8. The system removes the medicine data form disk.
Alternative Paths	<p>Step 7: If the system cannot successfully delete the medicine then system displays “not delete” message</p> <p>Step 1-7: if the user enters cancel the pharmacy management system will Stop the operation.</p>
Postcondition	Delete medicine information from the database.
Exception Paths	The pharmacy manager making transaction could not be processed.
Other	None

3.2.5 manage pharmacy(**Receive notification**)

Use Case Name	Receive Notification For Each Medicine Data
XRef	Section 2.2.2, Search manage pharmacy
Trigger	Giving alert for low medicines in time
Precondition	include login into the system
Basic Path	1. The pharmacy manager login into the system. 2. System checks for the medicine items 3. If medicine items are less than 5 then system displays the message by indicating The medicine "Medicine Name + is Running out please add."
Alternative Paths	Step 3: If the system silent no message for the user
Postcondition	The director obtains information about validity and number of drugs.
Exception Paths	.The pharmacy manager making transaction could not be processed.
Other	None

3.2.6 manage pharmacy(change login password)

Use Case Name	ChangeLogin
XRef	Section 2.2.2, Search manage pharmacy
Trigger	change password for system successfully.
Precondition	include login into the system
Basic Path	<ol style="list-style-type: none"> 1. Include login to the system 2. The pharmacy manager navigate settings 3. the pharmacy manager select change password 4. the system displays change password form. 5. enter the old password 6. enter the new password 7. re-enter the new password 8. Then press the change login password option. 9. If old password and new password entry were valid then system changes the login password.
Alternative Paths	<p>Step 9: If the input old password is not correct then system displays “Error in changing password” message [- 21 -]</p> <p>Step 9: if the input for new password did not match then system displays “Error in changing password” message</p> <p>Step 1-8: if the user enters cancel the pharmacy management system will stop the operation.</p>
Postcondition	The system password is changed by the pharmacy manger.

Exception paths	.The pharmacy manager making transaction could not be processed.
Other	None

3.2.7 manage pharmacy(**prepare bill for medicine**)

Use Case Name	Prepare Bill
XRef	Section 2.2.2, Search manage pharmacy
Trigger	Give Bill for sold medicine
Precondition	include login into the system
Basic Path	<ol style="list-style-type: none"> 1. The pharmacy manager login 2. The pharmacy manager use option prepare bill. 3. The system displays bill form 4. The pharmacy manager fill the form 5. The pharmacy manager use option either saves or prints . 6. If the pharmacy manager press on these options 7. System checks weather the input data were correct or not 8. If it is correct the system saves into the disks if the bill maker press on option saves and sends to printer if bill maker were use option print bill. 9. The system closes the bill form.
Alternative Paths	<p>Step 7: If the input data is not correct then system displays “Error in preparing bill” message</p> <p>Step 1-8: if the user enters cancel the pharmacy management system will stop the operation.</p>
Postcondition	The bill of medicines are preparing.
Exception Paths	The pharmacy manager making transaction could not be processed.

other	None
-------	------

3.2.8 manage pharmacy(Search Medicine Data)

Use Case Name	Use Case Name
XRef	Section 2.2.2, Search manage pharmacy
Trigger	Display the searched medicine data efficiently
Precondition	The pharmacy manager system must be on process and login to the system.
Basic Path	<ol style="list-style-type: none"> 1. The pharmacy manager login to the system 2. The pharmacy manager use option of the search medicine. 3. Click on search medicine. 4. Prompt the name of the medicine or the identification of the medicine. 5. Press GO button to see the data of medicine 6. If exist it display on the screen
Alternative Paths	<p>Step 6: If the medicine data is not available then system displays "Not exist" message</p> <p>Step 1-8: if the user enters cancel the pharmacy management system will stop the operation.</p>
Postcondition	The process of researching is completing successfully.
Exception Paths	.The pharmacy manager making transaction could not be processed.
Other	None

3.2.9 manage pharmacy(Sea How to use the system)

Use Case Name	SeeHowToUseTheSystem
XRef	Section 2.2.2, Search manage pharmacy
Trigger	Give brief Document for the user
Precondition	The pharmacy manager system must be on process and login to the system.
Basic Path	<ol style="list-style-type: none">1. The pharmacy manager login to the system2. The pharmacy manager use option of the “about” then “Help”.3. Click on what the user to know how to use the system.4. The system displays the manual for the user.
Alternative Paths	Step2:if the manger don't click "about",the way of using the system wont be showing.
Postcondition	Complete document is giving to the user about the way of system using.
Exception Paths	.The pharmacy manager making trans-action could not be processed.
Other	None

3.2.10 manage pharmacy(get report on medicine)

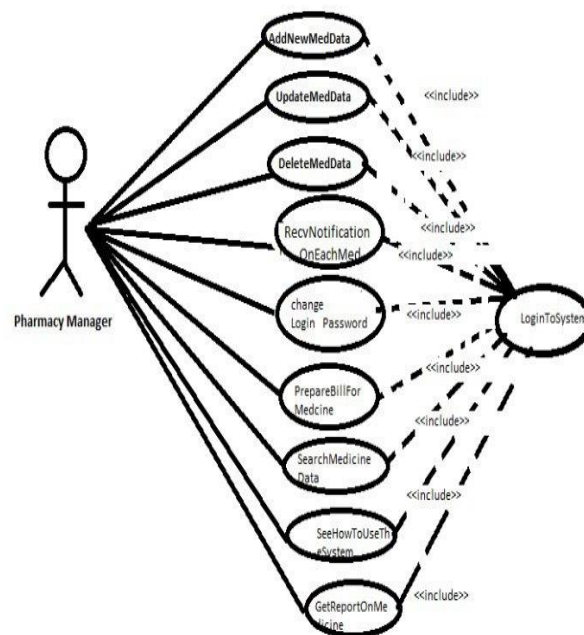
Use Case Name	GetReportOnMedicine
XRef	Section 2.2.2, Search manage pharmacy
Trigger	gives summarized report about sold medicine in the week end.
Precondition	The pharmacy manager system must be on process and login to the system.
Basic Path	1. The pharmacy manager login to the system 2. The pharmacy manager use option of the "report". 3 press on reports. 4. The system displays the summarized document.
Alternative Paths	Step2:if the manger don't click "report", He wont be able to take a report.
Postcondition	gives summarized report about sold medicine in the week end.
Exception Paths	The pharmacy manager making transaction could not be processed.
Other	None

3.3 Detailed Non-Functional Requirements

This pharmacy management system is able to operate in the following characteristics:

- ❖ **Usability:** Any familiar in using windows operation can operate the system since it have user friendly user interface. Which have the instruction menu's how to use it which self directive application then can be used the system without ambiguity.
- ❖ **User interface:** the user interface is friendly which is easy to use. And having attractive frame structure which is prepared in assumption with other related systems. Also the user can change him/her user favorite interfaces that is available in the system.
- ❖ **Operation:** the pharmacy management system is operated and controlled by the pharmacy manager for safe work.
- ❖ **Implementation :** The system is implemented in Intel(R) Core(TM) i3 processor with 2 GB RAM, 32 bit computer. And it is implemented through testing on both Black and White testing. The language we use implement the system is Netbeans IDE, JDK, MYSQL database.

Figure1-Achar to the general condition of the pharmacy manger



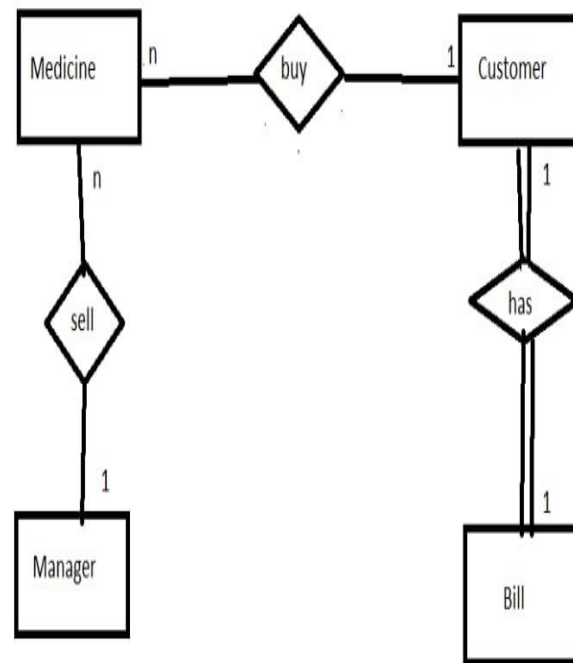


Figure2-Entity Digram

The data descriptions of each of these data entities is as follows:

Customer Data Entity

Data Item	Type	Description	Comment
Name	Text	Customer name	
Medicine name	Text	Medicine name	
Amount	number	Amount of medicine	
Price	money	thePrice of medicine	
Number	number	Customer number	It will be unique

MangerData Entity

Data Item	Type	Description	Comment
Number	number	Manger number	It will be unique
Name	text	Manger name	
Address	text	Manger address	May be several
Email	text	Manger email	

Medicine Data Entity

Data Item	Type	Description	Comment
Barcode number	number	Number for medicine	It will be unique
Name	text	Medicine name	
Regular price	money	The price of the drug	
Public price	money	The price is for the buyer	
Type	text	The type of medicine	
Size	number	The volume of the medicine	
Caliber	number	The volume of the drug substance	

BillData Entity

Data Item	Type	Description	Comment
Number	number	Bill number in the system	It will be unique
Release Date	date	The date on which the invoice was issued	
content	text	Medicines that have been soldwith price of medicine	