



# Pharmacy & Stores System



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## **Introduction**

In this project, the process of building a complete system to facilitate the exchange of medicines through the patient and the pharmacy, and to provide the missing medicine through the warehouse connected to the pharmacy, is addressed, with the aim of helping the patient obtain medicine quickly, easily, and also available.

## **Problem definition**

Providing medicine to patients, especially the elderly, in order to facilitate the process of obtaining medicine without finding it in separate places and making effort without benefit. Through the special system, the patient can obtain medicine and purchase and complete the registration and purchase process and obtain medicine directly to the home.

## **Project goal**

the aim of helping the patient obtain medicine quickly, easily, and also available, the patient can obtain medicine and purchase and complete the registration and purchase process and obtain medicine directly to the home.

## **Requirements**

### **Functional requirements**

In these function , it is determined that the patient must have a password of his own, represented in

### **Non \_ Functional requirements**

The pharmacy can store information that includes both the price and the name of 50 medicines through which the patient can order the medicine and search for it

### **Domain requirements**

The domain of our system includes the Ministry of Health, which includes the imperative to preserve the information of both the patient and the medicines and to confirm the validity date of the drug carried by the pharmacy, provided that the patient's information is strictly confidential, while the information about the medicine is general and clear

information for everyone who will register on the system to ensure the health of the medicine

### **Operating software & hardware requirements**

#### **Hardware**

No hardware

#### **Software**

Make a desktop application with java using my sequel .

### **Project Overview**

The summary of the project is to facilitate the process of buying the drug, through the patient's basic interaction with the pharmacy and obtaining sufficient information to prove and facilitate the process of purchasing the drug if it is available, or obtaining an alternative to it if it is not available and based on its availability or not, this will help the pharmacy to deal with the store and work Request to provide medicine if it is not available .

### **Scope on the system users**

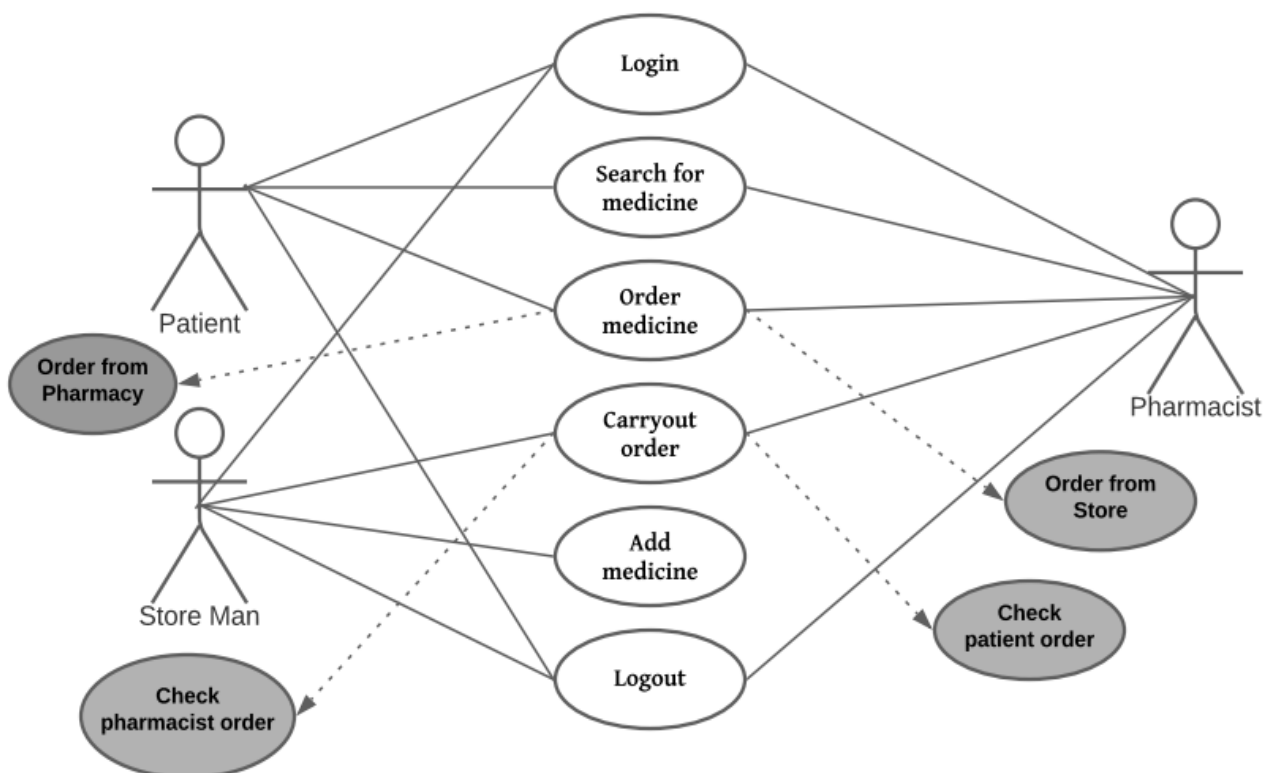
Patient

Pharmacy

Store men .

## Use case diagram

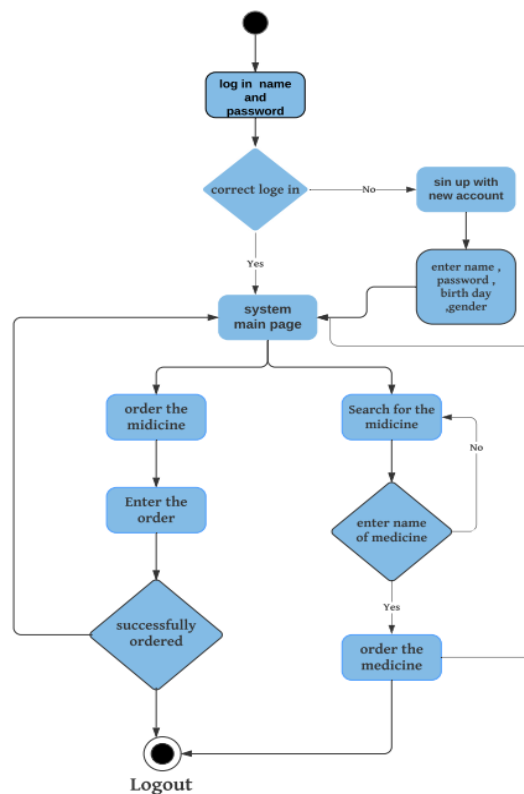
In this diagram, the people who will be dealt with the system and the role of each person are clarified, and the processes in general within the system are clarified .



## Activity diagrams

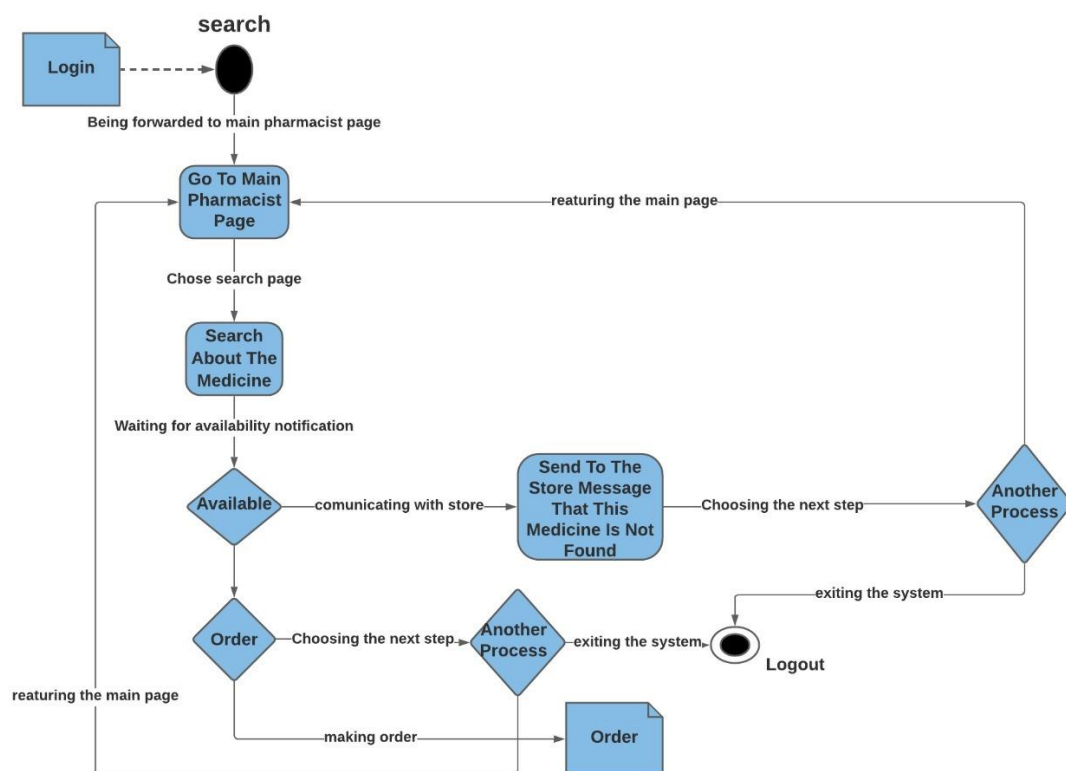
### Patient Activity :-

In this form, it is clarified what the patient does when entering the system, where he makes a registration by entering his name and password and clarifying whether this data was sufficient and correct. He enters the main page of the system through which he can make an application for the drug required for him or Doing a search on a specific drug and discovering whether it is present or not, then it exits the system permanently.

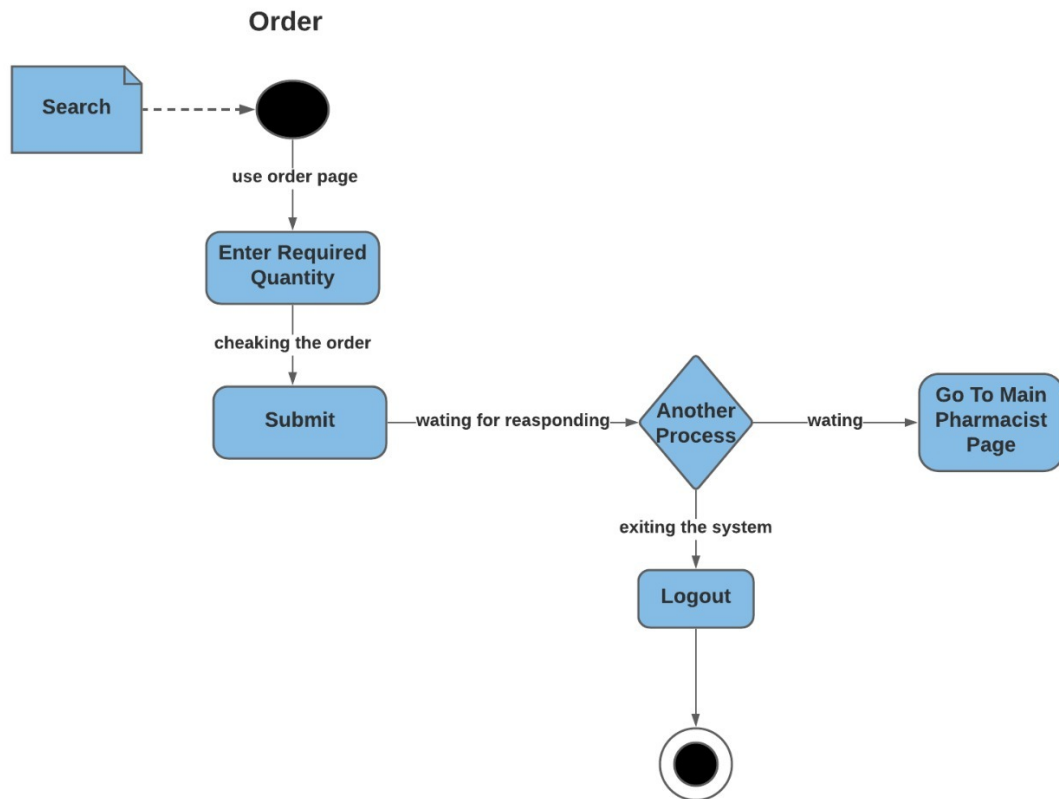


## pharmacy Activity :-

You are afraid of the main page, and the user will make a search for the medicine that he wants, so after that the system will not be there or not. The system says that this medicine is incomplete, and after that, it will see someone who needs another operation, or no, if he wants to return it to main page then in the order bage ask the patient if he want to have any another order or not , then he sent to the main page .



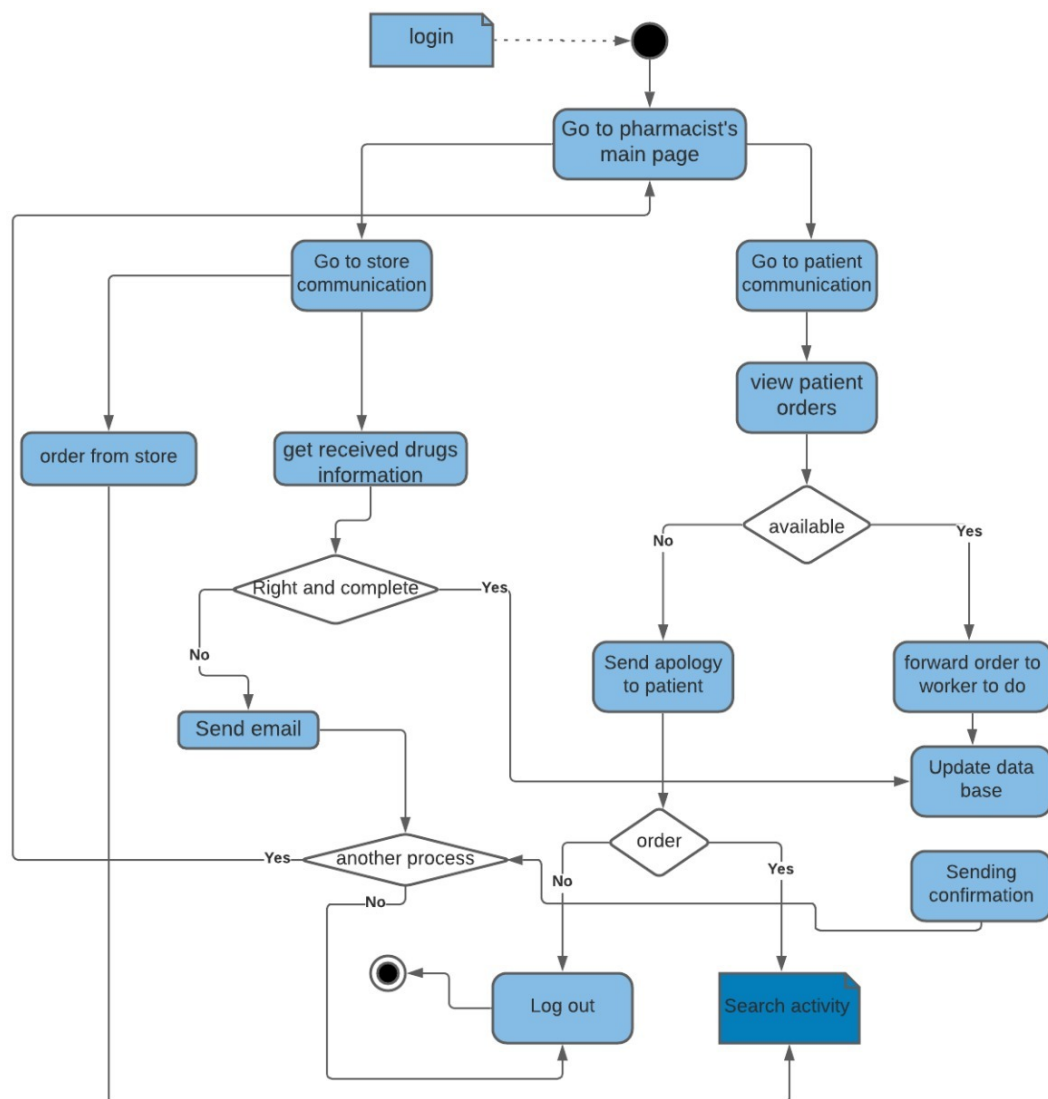




### Store men Activity :-

In the activity stage of the pharmacist, After the pharmacist is logged into the system, the home page of the system appears for him, in which he has to search for a drug in his drug data, and either the pharmacist deals with the patient or with the store, And when he chooses to deal with the patient, a list of requests that he must deal with and implement appears to him, and when he finishes executing these requests, he appears to choose whether he wants to carry out another operation or

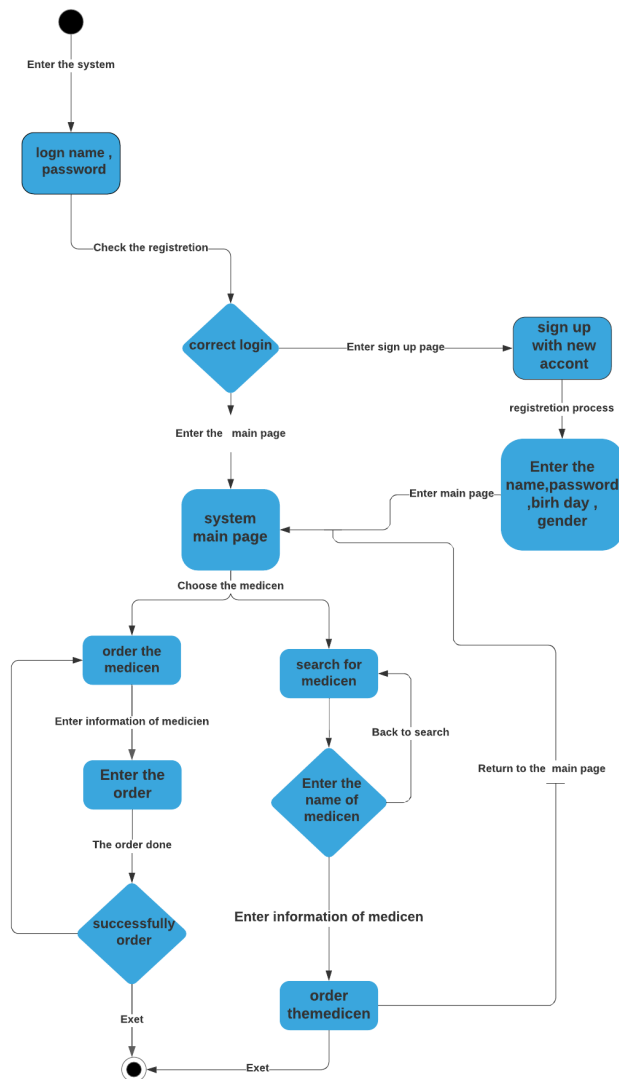
suffice with this and register his exit from the system, And if he chooses to deal with the store, he here wants to request medicines from the store, so he records the request data in terms of the names of medicines and the quantity he wants. Through the system, the request reaches the store and implements it to facilitate them and save time.



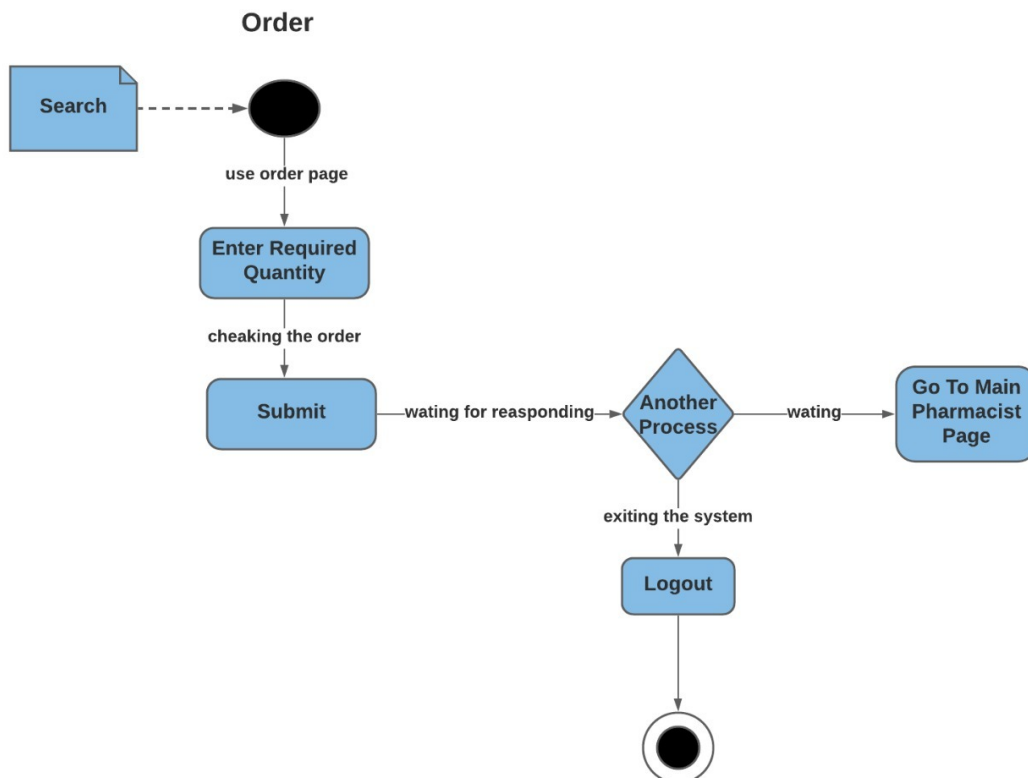
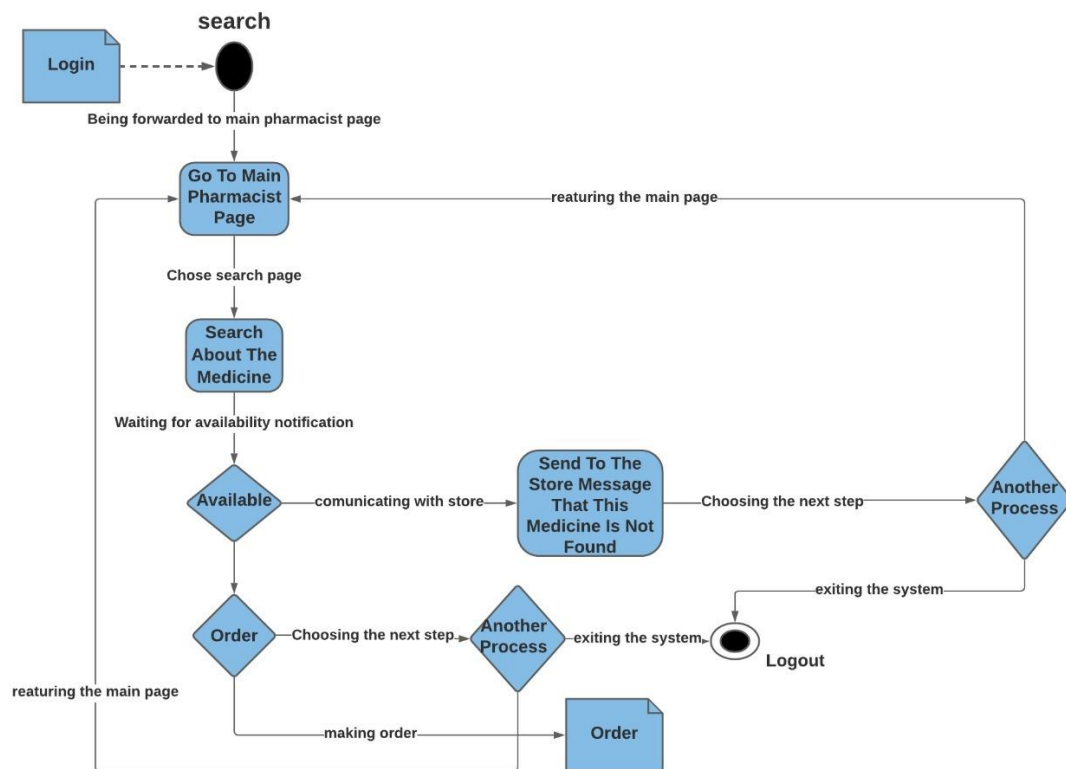
## State diagrams

In this diagram we explain the Action that happened in the Activity diagram , for the patient , pharmacy and store men

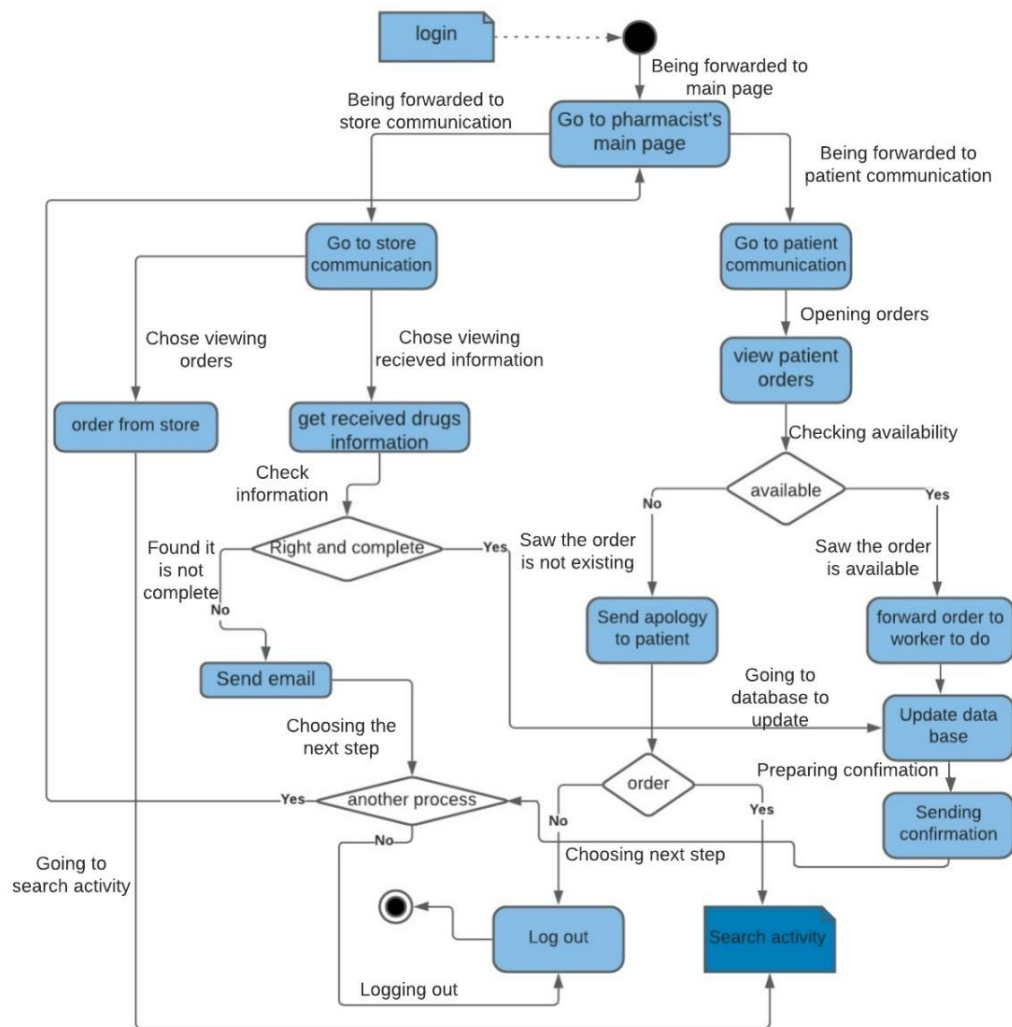
### Patient state



## Pharmacy state



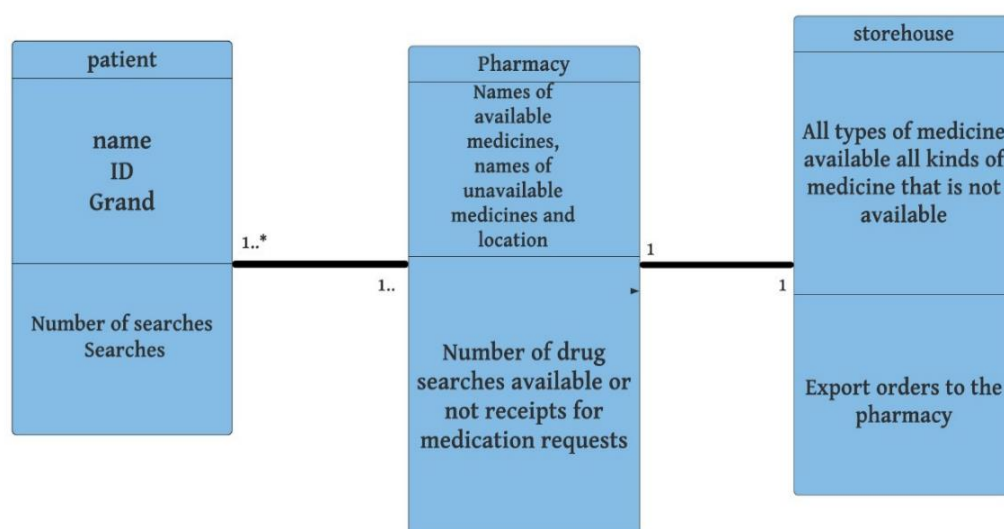
## Store men state



## Sequence diagram

### Patient sequence

The relationship is explained in dealing with the one-way relationship (many-to-one) while the relationship between the pharmacy and the store is a one-way reciprocal relationship.



### Pharmacy & Store men sequence

In the **pharmacist** sequence diagram

We can note that the user is active and running the system from start to finish

As for the first user interface, its role starts from the beginning of the user's use of the system, as it gives him two options: browse store communication or browse patient communication Then her role is disrupted As for the Medicine interface, it starts shortly after the user interface,

allowing the user two options: view patient orders or view store messages, then its role is delayed for a while, as it returns to work to receive the confirm order or discard order and display the confirmation message to user And for the pharmacy database

It activates shortly after the medicine interface where you can: search availability or update database.

In the **store man** sequence diagram

We can note that the user is active and running the system from start to finish

As for the first user interface, its role starts from the beginning of the user's use of the system, as it gives him two options: browse medicines or browse pharmacy requests

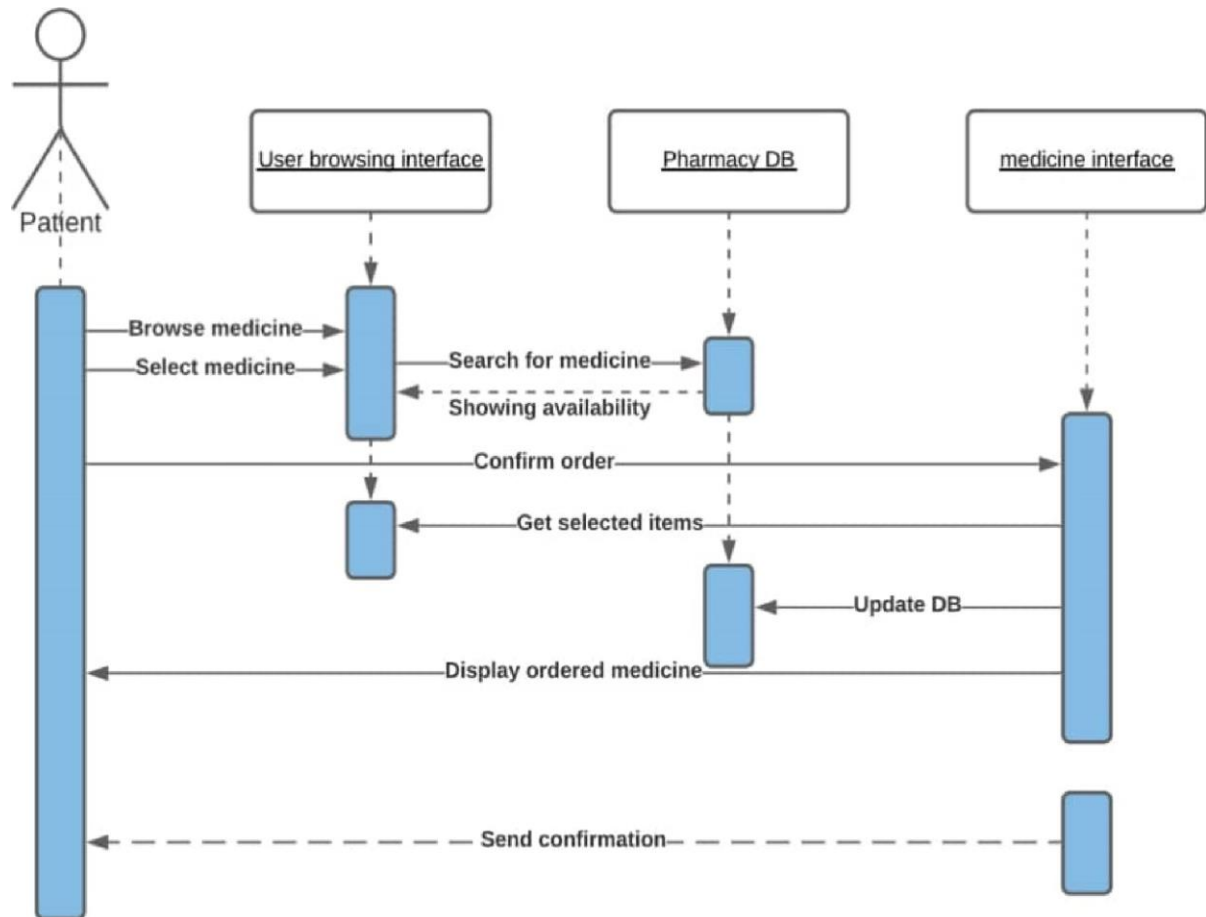
Then her role is disrupted

As for the Medicine database, it starts shortly after the user interface, allowing the user two options: add medicines or remove medicines, then its role is delayed for a while, as it returns to work to receive updates from orders interface

And for orders interface

It activates shortly after the Medicine database where it sends current orders to the store man and receives confirm order or discard order then it sends the updates to the medicine database sends

the updates to the medicine database finally it displays required medicine to the store man.





## Data Flow Diagram

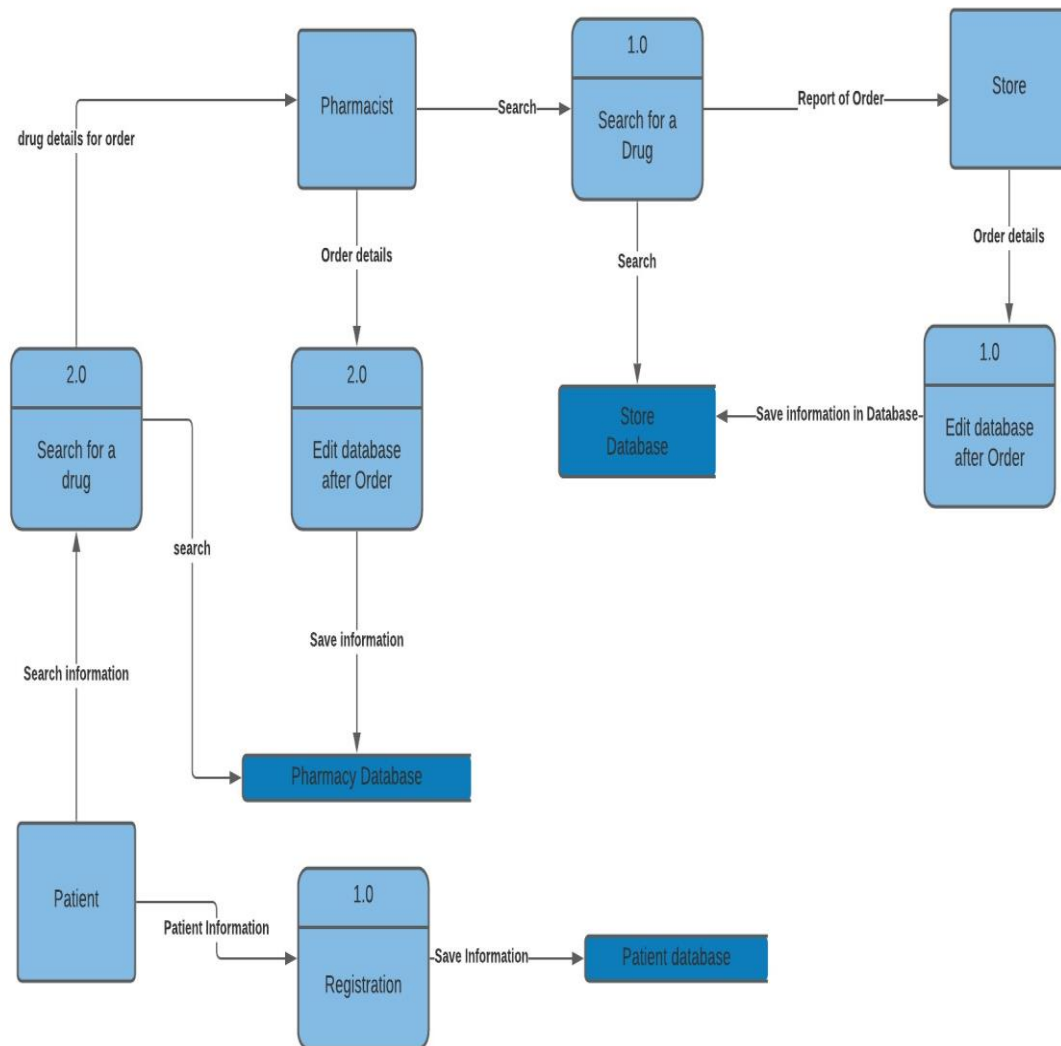
The data flow diagram is divided into two parts:

### Level 0

The first section, called Level 0, in which we explain a simplified context diagram that explains the operations that each user of this system performs. We will talk about the first and most important user of this system, which is the pharmacist who does a search for the things he wants, through which he determines the quantities he needs, and then orders these quantities of the types that have been identified.

The second user, who is the store, who will modify his private data after ordering the quantity you want, so that when the pharmacist does a search again, he finds the quantities and items prepared in an orderly manner so that there is no malfunction in the system

The third user, who is people, will do a search in the pharmacy database in order to search for the items that will benefit most of the elderly, which will make him search for what he wants without fatigue or effort, and when he finds the type he wants, he will have two options, either to order it from the pharmacy directly or go to it to buy this type and this will help the elderly a lot .



## Level 1

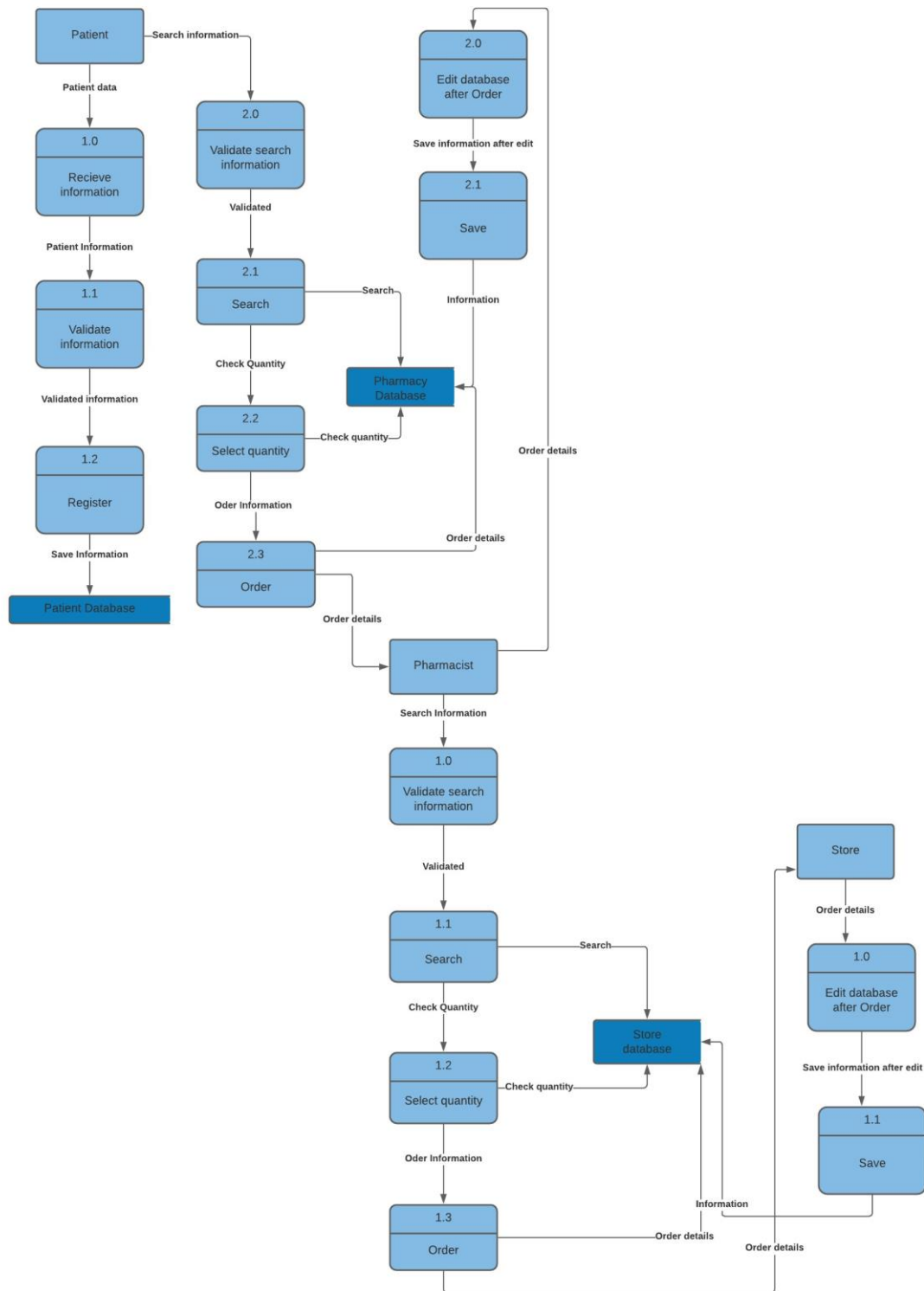
The second Section, which is called level 1, and at this level we will explain in detail level 0 and we will explain the operations in very detail

The first user is the pharmacist who does a search in the database of the store and searches for the items he wants and the quantities as well. He will make an order for these items and quantities as well, and then make an adjustment in the pharmacy database in order to adjust his quantities so that when he searches People in the database find the exact quantities .

The second user, who is the store, who will modify his private data after ordering the quantity you want, so that when the pharmacist does a search again, he finds the quantities and items prepared in an orderly manner so that there is no malfunction in the system .

The third user, who is people, begins with the person registering his data on the system, and he will record the data, whether for the first time, or if he has his own code, he will enter the system directly and then register his information.

Then he searches for the types he wants and also searches for quantities, then shows him the place of the pharmacy that contains the items he wants, then he makes an order to get the request he wants, and the pharmacy will modify its data after this request .



## System Interface

for patient :



Register

Name

Username

ID

Age

Gender ☐ Male ☐ Female

Register



Login

User name

ID

Register Login



Order

Drug name : Multi-relax 10mg

Drug price : 20.0

Quantity :

Order

Back Logout



Patient main

Search

Anoxicam is available with quantity of : '195'

Order Search

for pharmacist:

Login

User name

ID

Register Login

Order

Drug name : Multi-relax 10mg

Drug price : 20.0

Quantity :

Order

Back Logout

Pharmacist

Patient communication Store communication

patient communication

Patient_name	Ordered_drug	Drug_quantity	Order_date
ahmed	Nitora	2	2021-12-31
ahmed	Nitora	5	2021-12-31
ahmed	Antodin 40 mg	4	2021-12-31
ahmed	Nitora	3	2021-12-31

Perform the selected Order

Back Logout

Store communication

Search :

Availability

Order Search



## For Store :



Login

User name

ID



Store service

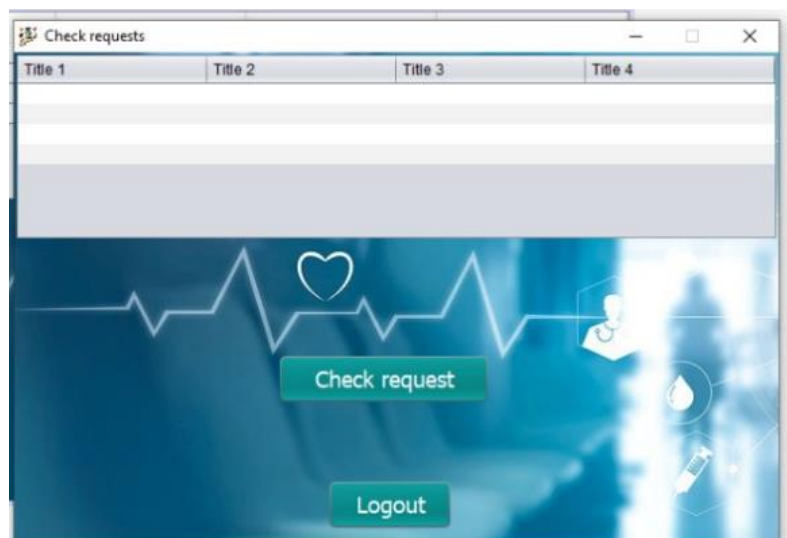


Add medicine

Drug name :

Drug quantity :

Drug expiry date :



Check requests

Title 1	Title 2	Title 3	Title 4

## Conclusion

At the end of displaying the system with all the details, we will be able to obtain many advantages through the use of this system, especially if the user is sick. Medicines, knowing what is available, determining their quantity, determining what is not available, and students in cooperation with the store.