# My Pharmacy

**SRS** 

Submitted by:

Group **Z** 

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# Introduction

### **Executive Summary**

My pharmacy is offering new solutions for finding your suitable drugs and getting it easily either by buying it online and delivering it to your home or to know where you can buy it from.

My pharmacy can be used by doctors, pharmacists or patients in need of some medicine, where they can build their own profiles and ease themselves to reach to each other and get their medical prescription the fastest way possible.

#### **Document Overview**

This document introduces "My pharmacy" product study plan. It introduce general description, technical description, development plan, operation plan, cost analysis and marketing study.

#### References

### **Drug table:**

http://apps.who.int/medicinedocs/documents/s22355en/s22355en.pdf

# **System Description**

#### Introduction

The system consists of 5 sub-systems aside to the main system "Pharmacy System". Each sub-system has its functionalities to which the system responds.

The five subsystems are:

- 1. Administrator
- 2. End user
- 3. Marketing
- 4. Finance
- 5. Delivery team

#### **★** The Administrator:

The administrator functionalities are:

1. Signup into the page.

System response: save administrator's data into database for later sign in

2. Sign in into the page.

System response: log the administrator in the page.

3. Access user account.

System response: Display user account's info for viewing or editing.

4. Adding products or medicine.

System response: Adds the item inserted into the database.

5. Editing products or medicine.

System response: Display products or medicine for updating or deleting.

6. Adding price to products or medicine.

System response: Adds the price to the item.

7. Editing price for products or medicine.

System response: Display item's price for editing.

8. Adding info about the product or medicine.

System response: Adds the information to the desired product or medicine.

9. Edit info about the product or medicine.

System response: Displays the items info for editing.

10. Check product or medicine availability.

System response: Display status of that item.

11. Post onto Homepage.

System response: Displays a text area for the administrator to write the desire text in.

#### **★** The End-user:

The End user functionalities are:

1. Create account.

System response: Display new account forum.

2. Log in.

System response: Logs user into the system.

3. Edit profile.

System response: allows user to perform changes to his profile

4. Search for product or medicine.

System response: allows user to enter a text to search and displays the search results.

5. View product and medicine list.

System response: Display product and medicine list.

6. View product or medicine price.

System response: displays the price of the product or medicine.

7. Selecting item to buy.

System response: adds item selected to the basket

8. Purchasing an item.

System response: enables user to enter his location & phone number then confirm the purchase

9. Give feedback.

System response: Display feedback forum and enables user to enter feedback.

10. Contacting and help.

System response: Displays text area to write the desired enquiry.

#### **★**The Finance team:

The Pharmacy System sends its financial reports to the finance team.

## **★** The Marketing:

The Pharmacy System sends its full report to the marketing team.

### **★** The Delivery team:

The Pharmacy System sends its full report to the Delivery team.

#### **Users**

End-users (normal user): They can signup and login into the page, edit their profiles including their accounts' info ,access the medicine and product list , buy a medicine/product , contact for enquiries or personal help.

Administrators (pharmacy owner/pharmacists): They can access the medicine and product list as well as entering new data, changing prices, accessing users' accounts, giving important alerts and news.

#### **Modules**

#### 1. Sign up and login for Administrator

<u>Description:</u> Administrator fills up a form with his info when he first sign ups then he logs in whenever he needs to use the system

#### 2. Sign up and login for End user

<u>Description</u>: user fills up a form with his info when he first sign ups then he logs in whenever he needs to use the system

## 3. Search for Drug and check its availability in pharmacy

<u>Description</u>: On writing drug name in search grid it's name and same drugs appear, On clicking on one of them, system displays drug page which contains its price, sort of drug(tablets,syrup,..etc) and availability in pharmacy branches or inform that the drug is missing.

### 4. Online purchasing and shipping

<u>Description:</u> When user search for a drug and click on it and it appears to be available, he can choose the quantity and type then, "add to cart" button can be clicked which are in drug page, the site takes the user to cart page where he can decide the payment method, whether he wants

to pay in cash or by using a credit card in this case he need to give his card info behind his name, address and mobile number in both cases

#### 5. Drug prescription

<u>Description:</u> Display all the informations the customer need to know about the drug(ingredients, uses, side-effects,...etc) when customer click on "drug prescription" button found in drug page.

#### 6. Drug Interaction

<u>Description:</u> When two drugs are added to the same cart and they contain active substances which negatively react with each other and affect patient health, the website warn the customer and tell him about this negative interaction.

#### 7. Missing and incomplete drug list

<u>Description:</u> This list is only accessible by Admins and pharmacy staff and not available to users, when a drug is not available in the pharmacy or became less than a certain limit it is recorded in this list with the number of items on the system.

## 8. Drug updates

<u>Description:</u> This function is only accessible by admins and pharmacy staff, it allows them to edit drug name, price, prescription,.. etc even add or remove drug from the database or any something else.

## 9. Inventory management

<u>Description:</u> This function is only accessible by admins and pharmacy staff, it allows them to know how many items and type of each item they paid per day, months, year or even from starting time and calculate the remaining item in the system to compare it with actual no. of items in pharmacy and calculate the profit per specified duration.

# **System Users**

## **End Users(normal user):**

The system shall provide the user the ability to sign up for the system.

The system shall provide the user the ability to log in.

The system shall provide the user the ability to edit their profiles including their info.

The system shall enable user to enter the search text on the screen.

The system shall display all the available components of the product.

The system shall display detailed information of the selected products.

The system shall provide browsing options to see product details.

The system shall display to the user the product's prescription.

The system shall display to the user the product's price and further info.

The system shall provide the user the option to buy single or multiple products.

The system provides the user the option to add products to the basket to be purchased.

The system shall provide support to the user by contacting or sending emails.

The system provides the user the ability to see news feed of the system.

The system shall display all the matching products based on the search.

# Administrator (pharmacy owner/pharmacists)

The system shall provide the admin the ability to sign up for the system.

The system shall provide the admin the ability to log in.

The system shall provide the admin the option of adding products to the database.

The system shall provide the admin the ability to add info about the product.

The system shall provide the admin the ability to add or update the products' prices.

The system shall provide the admin the ability to post in the home page of the system.

The system shall provide the admin the ability to update the database.

The system shall provide the admin the option of posting missing products.

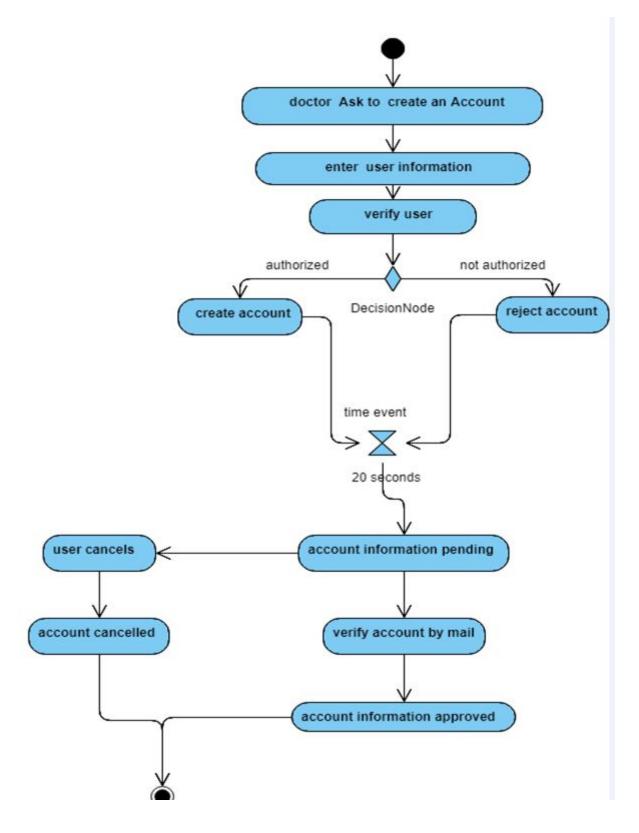
The system shall provide the admin the ability to access the normal users' profiles.

The system shall provide the admin the ability to add and remove products.

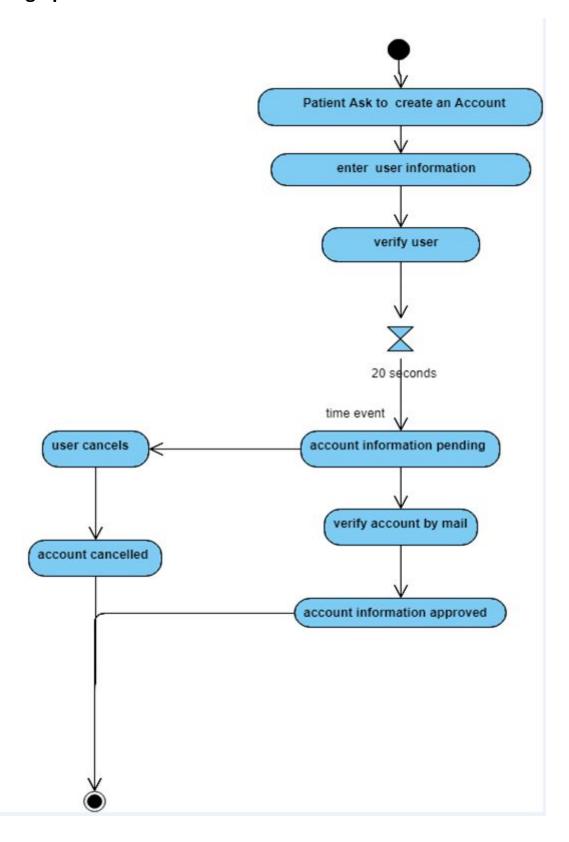
The system displays to the admin the number of users having accounts in the system.

# **System Modules**

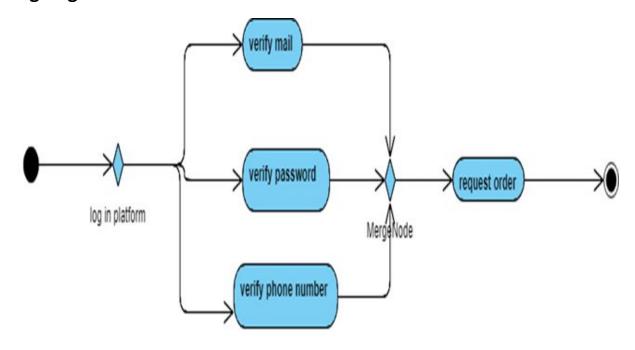
# ➤ Signing up with doctors with accounts



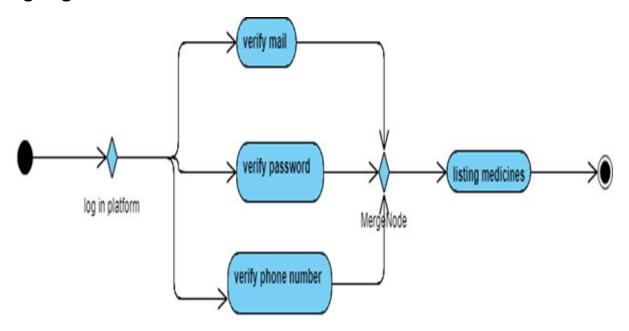
# ➤ Signing up with Patients accounts



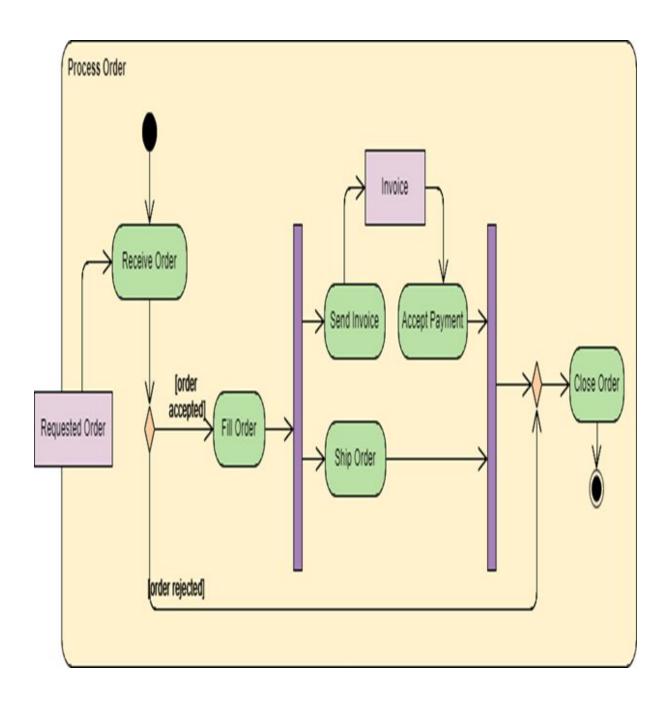
# ➤ Signing in with Patients accounts



# ➤ Signing in with doctors accounts



# ➤ Patients ordering drugs



# **System Functions**

# **Functional requirements**

#### 1. Search for Drug and check its availability in pharmacy

<u>Description:</u> On writing drug name in search grid it's name and same drugs appear, On clicking on one of them, system displays drug page which contains its price, sort of drug(tablets,syrup,..etc) and availability in pharmacy branches or inform that the drug is missing.

**Inputs**: Drug name.

**Outputs:** Drug price, type and availability or missing alert.

**<u>Pre-conditions</u>**: The website is displayed with grids for searching.

**Post-conditions:** The drug name is added to search history.

### 2. Online purchasing and shipping

**Description:** When user search for a drug and click on it and it appears to be available, he can choose the quantity and type then, "add to cart" button can be clicked which are in drug page, the site takes the user to cart page where he can decide the payment method, whether he wants to pay in cash or by using a credit card in this case he need to give his card info behind his name, address and mobile number in both cases.

**Inputs:** Drug name, payment method and user info.

**Outputs:** Drug price, type and availability.

<u>Pre-conditions:</u> The website is supported by Search grid, add to cart button, Cart page and database to hold customer's info.

**Post-conditions:** The delivery man takes the drug to the customer.

#### 3. Drug prescription

<u>Description:</u> Display all the informations the customer need to know about the drug(ingredients, uses, side-effects,...etc) when customer click on "drug prescription" button found in drug page.

**Inputs**: Drug name, choose drug prescription

**Outputs**: The website displays all informations about the drug.

<u>**Pre-conditions**</u>: Drug page and Drug prescription button.

**<u>Post-conditions</u>**: All information about the drug is displayed.

#### 4. Drug Interaction

<u>Description</u>: When two drugs are added to the same cart and they contain active substances which negatively react with each other and affect patient health, the website warn the customer and tell him about this negative interaction.

**Inputs**: Two drugs are added to the cart.

**Outputs**: The website displays Warning message to the user.

<u>Pre-conditions</u>:" Add to cart" button and database holds all types of active substance interactions.

**<u>Post-conditions</u>**: Offer the user to ask the doctor for a drug instead of one of them.

### 5. Missing and incomplete drug list

<u>Description</u>: This list is only accessible by Admins and pharmacy staff and not available to users, when a drug is not available in the pharmacy or became less than a certain limit it is recorded in this list with the number of items on the system.

**Inputs:** Clicking on "Missing Drugs" button.

<u>Outputs:</u> The website displays a list containing the missing and incomplete drugs.

<u>Pre-conditions:</u> "Missing Drugs" button and Database holding the quantities of drugs and system calculating the quantities after each purchase.

<u>Post-conditions:</u> Make an Order to drug companies to supply the pharmacy with the missing drugs.

#### 6. Drug updates

**Description:** This function is only accessible by admins and pharmacy staff, it allows them to edit drug name, price, prescription,.. etc even add or remove drug from the database or any something else.

**Inputs**: Clicking "update" button and enter new data and submit.

**Outputs:** Drugs informations get updated.

<u>Pre-conditions</u>: "update button" behind each drug in the database tables and "add", "remove" buttons.

**Post-conditions:** Mark Drugs as recently added or recently modified.

## 7. Inventory management

**Description:** This function is only accessible by admins and pharmacy staff, it allows them to know how many items and type of each item they paid per day, months, year or even from starting time and calculate the remaining item in the system to compare it with actual no. of items in pharmacy and calculate the profit per specified duration.

<u>Inputs:</u> Press on "Inventory" button and choose the duration from dropdown box. Admin can click on "profit" button if he want to calculate the profit.

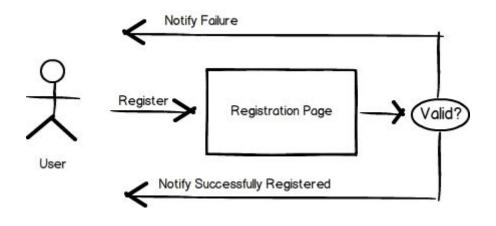
**Outputs:** Number of remaining items and profit.

<u>Pre-conditions</u>: "Inventory" button, "profit" button and database holding the paid items.

<u>Post-conditions:</u> Make a chart displays profit growth with time and give bonus to staff if there is no shortfall.

# **System Models**

# Register



| Primary Actor   | User   |
|-----------------|--|
| Goal in context | Purpose of this feature is to register user to the system. |
| Trigger         | User wants to register to the system                       |

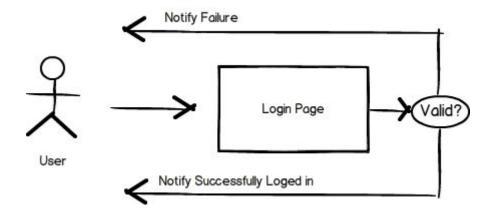
#### Normal Flow of Events

- 1. User opens the registration page
- 2. User specifies his information
- 3. System validate the specified information
- 4. User is registered to the system

#### Alternative Event Flow 1

4. User can not registered to the system due to inappropriate information

# Login



| Primary<br>Actor   | User  |
|--------------------|---|
| Goal in<br>context | Purpose of this feature is to login to the system with user credentials in order to use system. |
| Trigger            | User wants to login to the system   |

#### Normal Flow of Events

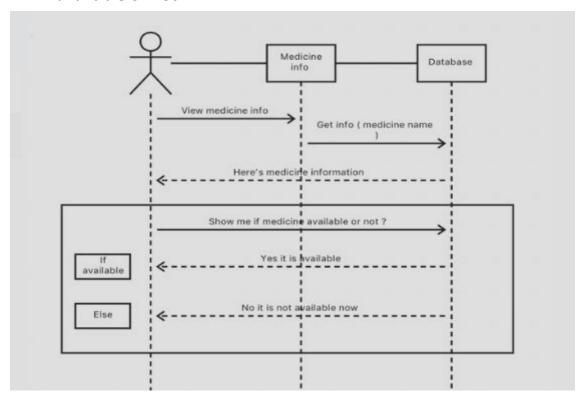
- 1. User opens the login page
- 2. User tries to login to the system with his credentials
- 3. System validate the specified information
- 4. User is logged into the system

#### Alternative Event Flow 1

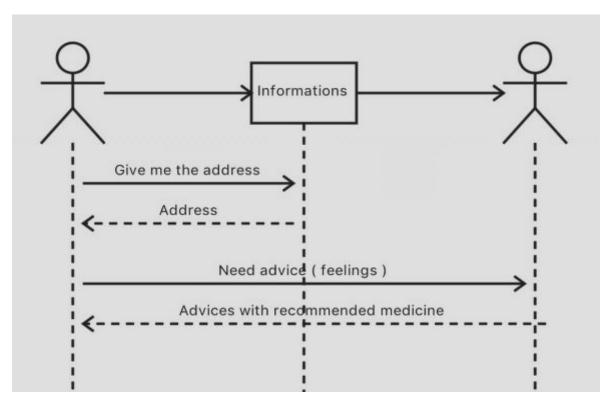
4. User cannot log into the system due to incorrect credentials

# **Sequence Diagrams**

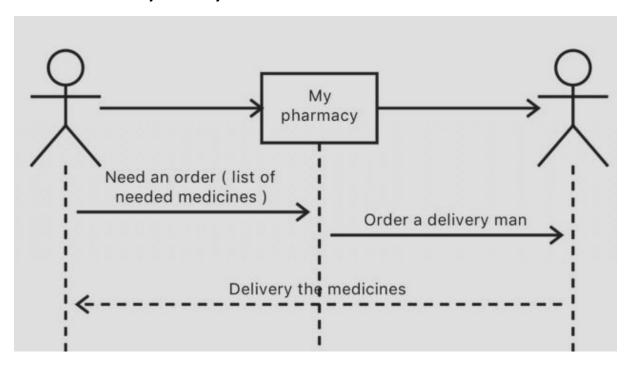
• Offer effective way of searching and knowing whether it's available or not.



• Offer a free personal consultation with a pharmacist or doctor.



• Offer an easy delivery service with the covered location .



# **Non-Functional Requirements**

## **Availability**

The system is fully available for the users working for 24 hours a day and 365 days a year so that the users can go to the system anytime they want.

### **Security**

The system is secure due to the huge importance of the data and the possible damages that can be caused by incorrect or incomplete data.

The security validations and process will all be a part in our coding techniques. So no need for any external program or tool.

## **Usability**

The system allow the users to access the system from the Internet through any browser like google chrome or Firefox. The system is user friendly which makes it easy using system does not need a sort of external help or tutorial to know how to use.

#### **Performance**

- -The product shall be based on web and has to be run from a web server.
- -The product shall take initial load time depending on internet connection strength which also depends on the media from which the product is run.
- -The performance shall depend upon hardware components of the client/customer.

## **Technology**

The webpage doesn't depend on a specific OS or browser. So any of them won't be a problem to run our webpage

We'll use different types of technologies and methods to achieve the most neat, easy usable final form .

#### We'll use:

- MySQL database for the different information
- Php , Ajax and any other side tool if needed for backend coding
- HTML, CSS and any other side tool if needed for frontend coding

# **Development**

A development team of 10 developers will work on this web page. Four of them will be responsible for the web page's design and style, those are the front end developers. They will be using HTML, CSS, JQuery mostly but they can use other methods if they need to.

The other six will be responsible for the functionality and usability of the page, those are the back end developers. They will be using Php and Ajax mostly but they can use other methods if they need to. They will be working with a MySQL database to save the accounts' info, all tables and data entering the web page.

# **Delivery**

The delivery of each version depends on an agreed time period that will suit the development time of the functions of this web page.

# **Domain Requirements**

The provider should be familiar with the types of the medicines:

- 1) OTC (Over the counter), which doesn't need doctor's description.
- 2) Described medicines, which should have doctor's description.
- 3) Restricted medicines, which can't be medicated.

Also we will feature an online doctor facility, which allows customers to complete an online consultation with a doctor and obtain a private prescription for a wide range of conditions.

The site will also have a professional pharmacist that will read the customers medicine's descriptions to make explanation of it and assure that it's not restricted.

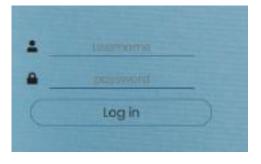
# **System Interfaces**

# **User Interfaces**

When user first signs up to the page they're asked to enter their firstname, lastname, username desired 'as long as it's not previously taken', a valid email, an acceptable password, then confirm it. Then they should click on sign up to confirm the process if everything went fine.



When the user clicks on sign in they'll see this two input panels where they can enter their username and password.



When the user enters the web page they'll be able to choose from one of these and it'll send them to the desired destination.

Home About Services Contact us feedback Team

#### **Communication Interfaces**

The communication between the different parts of the system is important since they depend on each other. However, in what way the communication is achieved is not important for the system and is therefore handled by the underlying operating systems and the web page. It supports all kind of web browsers.

#### **Hardware Interfaces**

Since web portal doesn't have any designated hardware, it does not have any direct hardware interfaces. The physical web page is managed by the web server and the hardware connection to the database server is managed by the underlying operating system on the web server.