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# **Software Requirements Specification**

**for**  
**Pharmalogue**

**Version 1.0**

**Prepared by**

**Noven Grace Regahal  
Cobrado Usha Nicole  
Nina Eunice Sacala  
Suad Sharief**

**novengrace.regahal@g.msuiit.edu.ph  
ushanicole.cobrado@g.msuiit.edu.ph  
ninaeunice.sacala@g.msuiit.edu.ph  
suad.sharief@g.msuiit.edu.ph**

**Instructor:** Jerina Jean M. Ecloo  
**Course:** ISY108 Requirements Engineering  
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## Revision History

Name	Date	Reason For Changes	Version

## **Executive Summary**

Pharmalogue is an online-pharmacy catalog designed in order to manage and organize information related to pharmaceutical products and medications available in a pharmacy. Pharmalogue has collaborated with a prominent pharmaceutical business here in Iligan, known as Botika Yscobel who's been in the market for more than a decade. The business has 8 branches in total, located in 8 different barangays in Iligan. With Pharmalogue, Botica Ycsobel can have a comprehensive database containing the product offering they have - by using the system they can now market their product with the catalog feature of the system, and they can acquire efficient storage, retrieval, and management of product details, not limiting to drug names, dosages, strengths, formulations, prices, and availability.

The system is developed to address the current issues the business faces. Just like any other pharmaceutical brick-and-mortar store, line queuing is rampant and somehow affects the business negatively for if customers feel that the waiting times are too long or inefficient, it can negatively affect their overall perception of the business and its service quality - the main root cause of this problem is when customers flock into the pharmacy without knowing what medicine to purchase in the first place and whether that medicine is available in that particular store. With this, the system is also aiming to solve the pharmaceutical/medicine information gap that customers tend to have. The system is also developed to allow the administrative staff to be more efficient and effective in their administrative processes - with the system, they can have a centralized database where they could perform queries for improved data management and storage promoting data integrity and reliability. This can also be useful when the business is planning to scale up for the system is flexible enough and could integrate with other systems.

Pharmalogue can be used by any pharmacy in Iligan, which doesn't have a platform where they can market their products unlike other known pharmacies flocking to the cities. The system's functionalities vary per user. Can act as a semi-inventory for it shows the stocks availability of medicines each branch has on a daily basis, users can search for specific medications or browse the catalog to find the desired products through the keyword search feature, catalog system offers detailed information about each product allowing users to have access on the product information functionalities, allows the administrative staff to perform queries through the add, edit, delete features, and also the system offers a FAQs Message Box features that provide users with a concise and organized collection of commonly asked questions and their corresponding answers - allows users to quickly find answers to their queries without the need for extensive searching or contacting customer support.

Pharmalogue still has a lot of doors for improvement for it to be deployed in the competitive market, its current state can already perform CRUD functionalities which are termed to be the foundation of systems existing in the market today. With Pharmalogue, business ventures that will opt to collaborate with this system project can have a centralized database, and a catalog system, and allow administrative staff to perform effective data storing and data management.

# 1. Introduction

## 1.1 Purpose

This System Requirement Specification document is intended to outline and elaborate the requirements composed by the system Pharmalogue, a pharmaceutical catalogue aiming to fix the gap of misinformation of medicines between pharmacies and its customers. This document also entails all the functionalities and non-functionalities of the system, as well as the system's scope, description, and methodologies.

The primary aim of the project in this document is to present a pharmaceutical catalogue that is able to: (1) present medicine information of OTC drugs, (2) act as an inventory system with its quantity update feature, (3) communicate with the pharmacy's customers through its consultation feature, (4) edit and update medicine information, and (5) display a map of the pharmacy's branches. All the functions are expected to bring an ease to the pharmacy's end as well as to promote collaboration between pharmacy staff. Furthermore, the specific pharmacy in collaboration with this project is Botica Ycsobel pharmacy located in Iligan City operating in seven (7) barangays in the city.

## 1.2 Intended Audience and Reading Suggestions

**Patients and individuals.** Citizens looking for products may browse the web pharmacy catalogue app to search for specific medications, healthcare products, and related items. They can view detailed information about each product, including its uses, dosage instructions, side effects, and availability.

**Healthcare professionals.** Doctors, nurses, and pharmacists may find this web-based pharmacy app useful for accessing reliable drug information and references. The app provides comprehensive and up-to-date information about various medications, including indications, contraindications, dosage guidelines, and potential drug interactions. Healthcare professionals can search for specific drugs, view their pharmacological profiles, and access relevant clinical studies and research.

**Researchers and Students.** People in the field of pharmacy and related healthcare disciplines, especially students, may find this web-based application useful for their research and educational needs. Users can search for specific drugs or browse categories to explore different therapeutic classes and drug classes.

Reading suggestions for this paper includes: (1) safety information. This web-based pharmaceutical catalogue highlights the importance of consulting healthcare professionals before using any medications and provides guidelines for safe usage, (2) product description. This web-based pharmaceutical catalogue includes detailed information about each medication, including indications, dosage, side effects, and contraindications, (3) drug interactions. This web-based pharmaceutical catalogue educates users about potential interactions between different medications and the importance of consulting healthcare professionals; and (4) FAQs. This web-based pharmaceutical catalogue addresses common questions and concerns related to the usage of this web-based app as well as connecting users to pharmacists.

## 2. Project Description

At the height of the pandemic, individuals began placing more emphasis and concern over their health as the health risks of the COVID-19 virus began making itself more apparent amongst the masses. People were quick to develop varying vaccine formulations to combat the pandemic and while the medical campaigns undertaken by our respective governments has thus proved itself to be rather effective (considering 70.1% of the global population has received at least one (1) dose of the said vaccines [Mathieu et al., 2020]), many are still quite intimidated by the complexity and the sheer vastness of medicinal information.

As people often equate the experience of visiting a hospital or a medical professional with death, illnesses, and costly treatments, the population has grown apprehensive. This fear has compelled them to flock to the Internet for information instead, as this provides a sense of anonymity and safety. This is where the issue starts ballooning at epic proportions. In recent years, misinformation about medicines has proliferated at an astonishing rate. What individuals think as official, trusted information about medicines might actually be inaccurate or disapproved by our healthcare providers.

A prime example of these issues takes us back to 2021 where Ivermectin, an over-the-counter (OTC) “alternative treatment” to the COVID-19 virus, spread like wildfire across the Filipino community. Research reveals that the said medication is actually a treatment for heartworms and other parasitic diseases, where one kind is prescribed for humans and the other for animals. The initial stages of the surge of public interest in the medicine could be traced back to Peru where desperate physicians began administering Ivermectin to their patients due to a rumor that spread online (Robins-Early, 2021). Dr. Garcia, Peru’s former health minister, said that this desperation even led to the emergence of a black market specifically for Ivermectin, which then spiraled into veterinary ivermectin use. These rumors eventually reached international borders, which rattled Filipinos enough to begin clinical trials for the said drug. Although it has been confirmed that Ivermectin isn’t viable to cure COVID-19, we are able to see how the vast majority easily fell prey to medicinal misinformation.

Ivermectin wouldn’t have gained such crazed popularity if it were a drug that required a prescription. But because it was precisely an OTC medicine that the public was able to get ahold of the medicine in such a short time, which led to increased health risks and other medication errors.

This only highlights the need for an accessible user-friendly website or page where individuals can safely learn more about medicines without the anxiety of consuming the wrong information. As such, the project team is proposing the implementation of a pharmaceutical catalogue system, or Pharmalogue, for Botica Ycsobel in order to educate the public with verified information and to dispel any misconceptions about OTC drugs.

Pharmalogue consists of a catalogue where information about Botica Ycsobel’s OTC medicines are posted by the pharmacy’s own clerks for the public to browse through. Information such as product image, generic name, brand name, drug descriptions, medicine intake instructions, ingredients (active & inactive), side effects, storage instructions, price, stocks, and even branch availability across Botica Ycsobel branches are displayed in this catalogue.

End-users are also able to view the medicines according to a category of what illnesses they are able to treat. Not only is this convenient, but it’s also helpful in easily locating specific medicines that serve a specific purpose.

To ensure that the information uploaded in the system is credible, Botica Ycsobel's clerks and pharmacists are authorized to create their own respective accounts within the system. One (1) admin is assigned to add in the medicine supplied by the pharmacy, while the clerks hired in each branch are able to edit the quantity of the said medicines available in their own respective branches.

Generally, the admin role is assigned to the main branch's manager/owner since they have control over what medicines are being supplied to each branch on a daily, monthly, and annual basis. This procedure was implemented to ensure that the medicinal information couldn't be modified just by anyone who wishes to do so.

It has also been agreed upon that Pharmalogue wouldn't contain purchasing procedures to ensure that individuals interested in these medicines would actually be able to make the decision to come to Botica Ycsobel so that their purchasing decisions may be guided by the pharmacy clerks. Furthermore, this decreases the risk of medication errors.

As an alternative, Pharmalogue is equipped with PharmaKonsulta, a consultation feature that serves as a gate between the public and Botica Ycsobel's pharmacists. Through PharmaKonsulta, individuals are able to ask the pharmacist & clerks on duty regarding further information about the medication they're interested in. Due to the ease of communication, this feature offers the benefit of anonymity that some might've been looking for while simultaneously increasing their knowledge on OTC medications.

## **2.1 Overview of the Current System**

Botica Ycsobel's medicine order & purchasing system involves three (3) actors: the customer, the clerk/pharmacist, and the cashier. During peak hours, Botica Ycsobel's queues are swamped with customers who are all looking to purchase a particular medication / vitamin.

One of the reasons why the queue rarely budges is because of the customers who are still unsure of what medication they're supposed to purchase. Usually, these customers hold up the line since they tend to ask the clerk/pharmacist a myriad of questions regarding the supposed medication they need; whether what would be cheaper, which ones are appropriate to treat a specific illness, how to properly consume a particular medicine, and etc. Duty bound, the clerks/pharmacists themselves have no choice but to cater to their questions lest they run the risk of potentially omitting crucial medicinal information which could lead to serious health risks and consequences.

After the customers' questions have been answered, he/she then chooses the medication for purchase. Another reason as to why the queue takes too long to move is because the clerk/pharmacist has to comb through the entire medicine rack to look for the customers' order and if said medicine isn't in stock, then he/she must inform the customer, go through another round of Q&As with said customer, before repeating the process until a proper medication is in stock.

When the medicine order has been finalized, the customer places his/her payment onto a tray (if provided) before it is then passed to the cashier's section where a line of medicine orders are also placed in queue since two to three (2-3) pharmacists are usually serving a customer each. After the medicine order has been input into the POS and paid for by the customer, it is then packed by the cashier and taken by the clerk/pharmacist who'll pass it to the respective customer they were catering to.

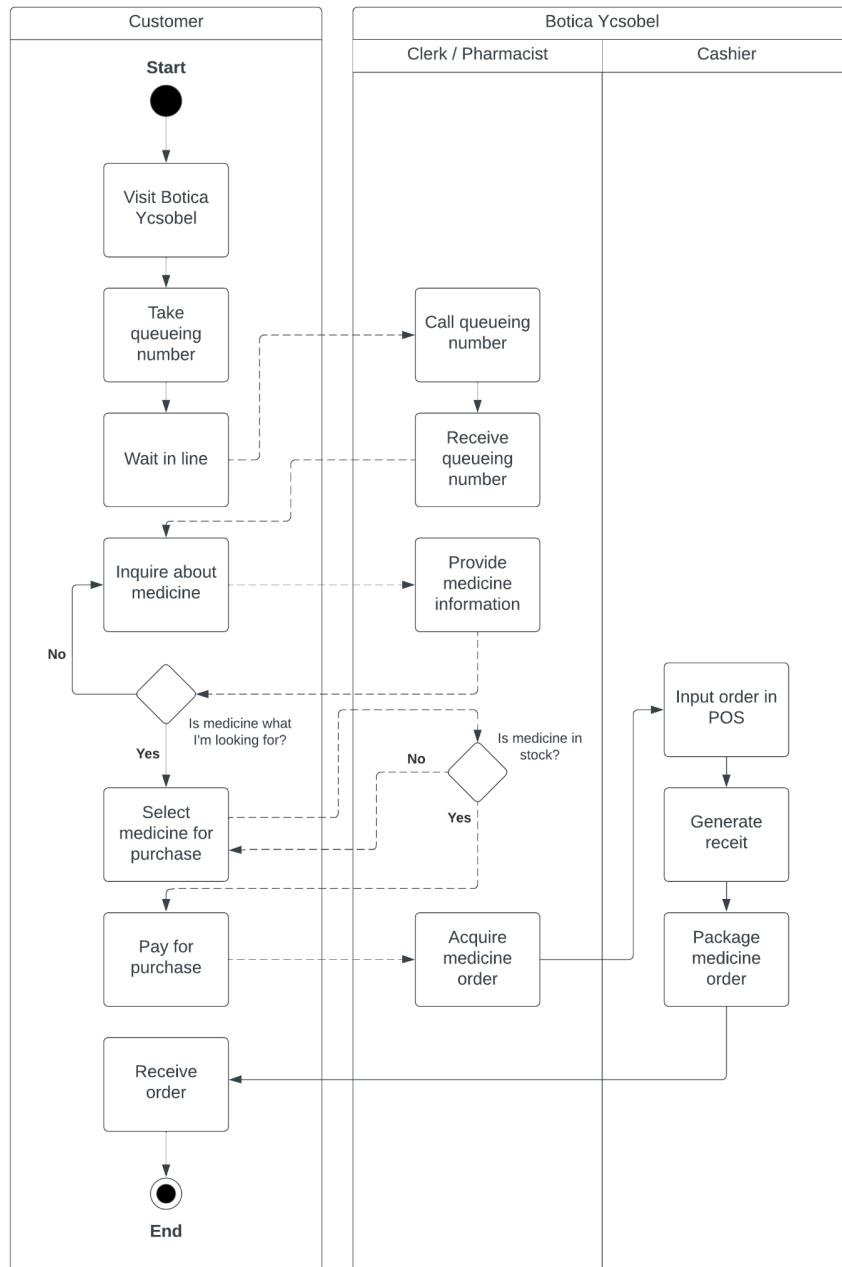


Figure 1. An Activity Diagram of Botica Ycsobel's Current Medicine Order &amp; Purchasing System

As aforementioned, Botica Ycsobel's activity diagram involves three (3) actors: the customer, the clerk/pharmacist, and the cashier. The process starts with the customer when he/she visits Botica Ycsobel and takes a queueing number. The process also ends with the customer when he/she finally receives his/her order from the cashier. There are only two (2) decisions to be made in this process: (1) when the customer determines if the medicine information provided by the clerk/pharmacist is the correct one he/she is looking for; and; (2) when the clerk/pharmacist determines if the said medicine is in available in stock or not.

The process is rather simple, which involves constant communication with the customers, but this is also one of the reasons why their queueing system is slow and inefficient. If customers already had

prior knowledge of the medication they're looking to purchase, then Botica Ycsobel's medicine order and purchasing system would be faster.

## 2.2 Problem Statement

The root cause of the issue isn't only the customers' ignorance of the supposed medicine they're looking to purchase, but it's also Botica Ycsobel's inaction to resolve this issue. They are already aware that their current medicine ordering and purchasing system is inefficient, but they aren't taking any necessary steps to bridge this gap. Additionally, Botica Ycsobel manually records their inventory and medicine stocks instead of automating the process. This increases the risk of loss of data or data alteration due to human error.

## 2.3 Objectives

### 2.3.1 General Objective

1. Improve Botica Ycsobel's customer satisfaction, medication ordering & purchasing system efficiency, and to educate the public on over-the-counter medications through development of Pharmalogue, an pharmaceutical catalogue system, that accurately meets the stakeholders' needs.

### 2.3.2 Specific Objective

1. Clearly determine what medicinal information is needed to cater to the stakeholders' needs and requirements
2. Accurately transform business needs into measurable, testable, traceable, complete, consistent, and stakeholder-approved requirements.
3. Conceptualize and design a system that is effective, has high performance, long-lasting, consistent, and meets stakeholder requirements.
4. To optimize system performance and to resolve system deficiencies through the implementation of technical standards, which must be met via system testing.

## 2.4 Significance of the System

The development of Pharmalogue would benefit the following individuals:

**Customers.** Pharmalogue provides a centralized system for viewing and consuming medicinal information which could later be referenced by the customers when making decisions that involve over-the-counter (OTC) medicines. Not only will customers benefit in terms of acquiring additional information, but they could also view what products Botica Ycsobel offers so that they may make their purchasing decisions in advance before having a face-to-face interaction with the pharmacy's clerks/pharmacists.

**Botica Ycsobel.** Pharmalogue considerably improves Botica Ycsobel's medication ordering & purchasing system by educating their customers on various OTC medications which reduces the time it

takes for the said customers to arrive at a decision on what medications to purchase. This lessens the constant communication between these two (2) individuals since Pharmalogue offers a consultation via PharmaKonsulta on top of an catalogue of Botica Ycsobel's OTC medications. Additionally, the system also automates Botica Ycsobel's inventory tracking system since they perform the said activities manually.

## 2.5 Scope and Limitation

This report focuses on the development and implementation of a pharmaceutical catalogue called Pharmalogue. Recent studies and research will be used as a reference in the designing and prototyping phase of this project. The report will focus on creating a system as a means of informing the public about over-the-counter (OTC) medications and automating Botica Ycsobel's inventory system.

This study involves the creation of a catalogue for the customers, a consultation feature where customers and clerks/pharmacists are able to interact and communicate, a login and a logout system for the clerks and an admin, a UI for clerks to edit the quantity of each medicine supplied to their respective branches, and a UI for the admin to add in the selection of OTC medications that Botica Ycseobel offers which includes the following information:

- Product Image
- Generic Name
- Generic Name Pronunciation
- Drug Brand
- Brand Pronunciation
- Drug Category
- Drug Description
- Direction for Usage
- Active Ingredients
- In-active Ingredients
- Side Effects
- Storage Instructions
- Drug Price
- Stocks / Quantity
- Branch Availability

## 2.6 Gantt Chart

The project lasted a total of 63 days, from April 18, 2023 to June 20, 2023. There are six (6) phases in total to this project: Initiation, Requirements Elicitation, System Design, System Construction & Development, Deployment, and Closing of the Project.

TABLE I. PHARMALOGUE'S GANTT CHART

WBS	Tasks	Start Date	End Date	Status
1	<b>Initiation</b>			
1.1	Kick-off meeting	04/18/2023	04/18/2023	FINISHED

1.2	Brainstorming of project ideas	04/18/2023	04/25/2023	FINISHED
1.3	Identify key stakeholders	04/18/2023	05/04/2023	FINISHED
1.4	Draft 3 initial system proposal presentation	04/25/2023	04/26/2023	FINISHED
1.5	Approval of the chosen system for web development	05/04/2023	05/04/2023	FINISHED
<b>2</b>	<b>Requirements Elicitation</b>			
2.1	Compose a request letter for data gathering	05/09/2023	05/10/2023	FINISHED
2.1.1	Draft the initial request letter	05/09/2023	05/09/2023	FINISHED
2.1.2	Approval of the final version of the request letter	05/10/2023	05/10/2023	FINISHED
2.2	Interview Stakeholders	05/12/2023	05/24/2023	FINISHED
<b>3</b>	<b>System Design</b>			
3.1	Draft initial presentation	05/09/2023	05/09/2023	FINISHED
3.1.1	Create initial use case diagram	05/09/2023	05/09/2023	FINISHED
3.1.2	Create initial entity-relationship diagram	05/09/2023	05/09/2023	FINISHED
3.2	Approval of the presentation	05/09/2023	05/09/2023	FINISHED
3.3	Draft initial system UI	05/13/2023	05/20/2023	FINISHED
3.2	Finalize the system design	05/13/2023	05/20/2023	FINISHED
3.4	Approval of the initial system UI	05/20/2023	05/20/2023	FINISHED
<b>4</b>	<b>System Construction &amp; Development</b>			
4.1	Create the Home page	05/13/2023	06/19/2023	FINISHED
4.2	Create the Customer UI	05/13/2023	06/19/2023	FINISHED
4.2.1	Create the Pharmaceutical Catalogue UI	05/13/2023	06/19/2023	FINISHED
4.2.1.1	Create Per Medicine UI	05/20/2023	06/19/2023	FINISHED
4.2.1.2	Create Search Bar	06/01/2023	06/19/2023	FINISHED
4.2.1.3	Create Categories	05/20/2023	06/19/2023	FINISHED
4.2.1.4	Create Comparison Feature	05/20/2023	06/19/2023	FINISHED

4.2.2	Develop the CRUD Operations of the PharmaKonsulta	06/01/2023	06/19/2023	FINISHED
4.2.2.1	Develop the Add Customer Message	06/01/2023	06/19/2023	FINISHED
4.2.2.2	Automate Clerk / Pharmacist Response	06/01/2023	06/19/2023	FINISHED
4.2.3	Make Maps / Store Locator functional	05/20/2023	05/20/2023	FINISHED
4.2.4	Create Log in	05/13/2023	05/29/2023	FINISHED
4.3	Create Log Out	05/20/2023	05/29/2023	FINISHED
4.4	Create Sign Up / Create Account	05/13/2023	05/29/2023	FINISHED
4.5	Create Admin UI	06/16/2023	06/19/2023	FINISHED
4.5.1	Develop the Medicine CRUD Operations	06/16/2023	06/19/2023	FINISHED
4.5.1.1	Develop the Add Medicine	06/16/2023	06/19/2023	FINISHED
4.5.1.2	Develop the Delete Medicine	06/16/2023	06/19/2023	FINISHED
4.5.1.3	Develop the Update Medicine	06/16/2023	06/19/2023	FINISHED
4.5.2	Develop the Category CRUD Operations	06/01/2023	06/19/2023	FINISHED
4.5.2.1	Develop the Add Category	06/01/2023	06/19/2023	FINISHED
4.5.2.2	Develop the Delete Category	06/01/2023	06/19/2023	FINISHED
4.5.2.3	Develop the Update Category	06/01/2023	06/19/2023	FINISHED
4.5.3	Create the Product Display	06/10/2023	06/19/2023	FINISHED
4.6	Create the Clerk UI	06/10/2023	06/19/2023	FINISHED
4.6.1	Develop the Product Display	06/10/2023	06/19/2023	FINISHED
4.6.2	Develop the Quantity CRUD Operations	06/10/2023	06/19/2023	FINISHED
4.6.2.1	Develop the Edit Quantity	06/10/2023	06/19/2023	FINISHED
5	<b>Deployment</b>			
5.1	Populate the database	06/10/2023	06/16/2023	FINISHED
5.2	System Deployment	06/19/2023	06/20/2023	FINISHED

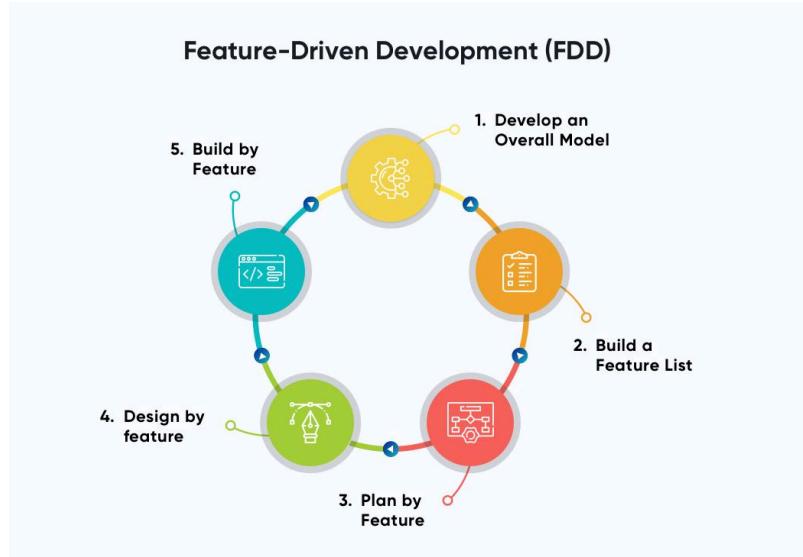
6	Closing of the Project			
6.1	Final presentation	06/20/2023	06/20/2023	FINISHED

### 3. Methodology

The full-stack development team uses Feature Driven Development to plan, design, execute, and monitor the output of the features developed while creating the system bit by bit. Feature Driven Development is a type of Agile Software Development Methodology in which it focuses on dividing the tasks into smaller tasks where teams focus on some specific features weekly and each of the members must finish the task assigned to them. Feature Driven Development Methodology is helpful as it targets to deliver tangible results in the form of working software features and the members cannot proceed to the next target features unless the current features are already approved by the team and the head of the team. The five basic activities involved in this methodology include developing an overall model, building a feature list, planning by feature, designing by feature, and building by feature. This structured and systematic approach emphasizes collaboration, domain modeling, and iterative feature delivery. In this section, it discusses the overview of the activities executed in each significant phase of the software development method including the requirements analysis and model, requirements specification, design, implementation, testing, and deployment and maintenance phase. In addition, the few principles that the Feature Driven Development Methodology includes:

- identifying key business entities, their relationships, and their behaviors,
- development process revolves around the concept of features,
- iterative and incremental development,
- each feature is assigned to a team member who takes responsibility of its development

**Figure 1. Feature Driven Development**



**Source:** Google Image, Accessed on June 14, 2023.

<https://www.netsolutions.com/insights/wp-content/uploads/2019/04/software-development-methodologies-net-solutions-feature-driven-development.jpg>

#### 3.1 Requirements Analysis and Model

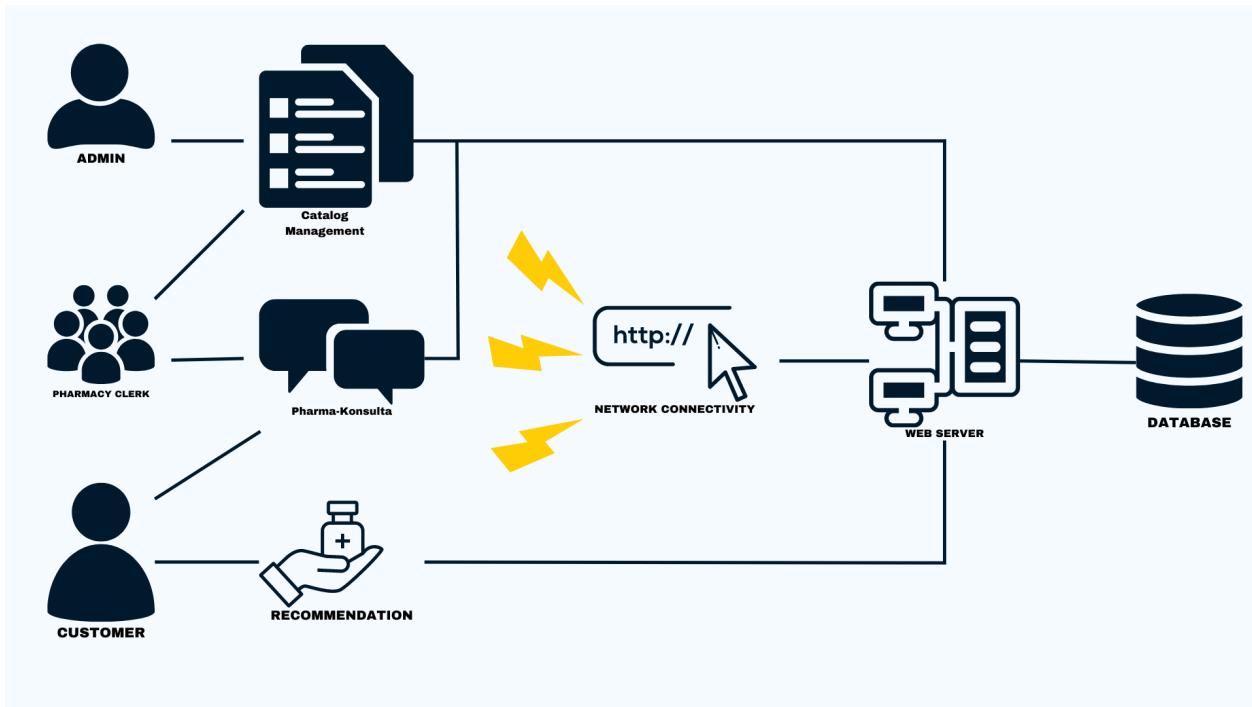
Under the Requirements Analysis and Model Phase, Pharmalogue is analyzed and modeled using a variety of activities. These activities are further discussed in the table below:

Methods	Tools	Purpose
1. Requirements Elicitation	Interview, Development Team Meetings, and Research	This activity involves gathering requirements and data from the pharmacy clerk representative through an interview, using an analogy approach through research to recognize the requirements needed, and development team meetings to collect information, identify constraints, recognize team capabilities, and finalize system functionalities and user needs.
2. Requirements Traceability Matrix	Googlesheets	Requirements Traceability Matrix involves the listing of use cases that specify the specific requirements needed in which the team uses it to keep track of the progress of use cases that already developed as part of the system with the assigned member indicated.
3. Use Case Diagram	LucidChart	Use Case Diagram aims to model the behavior of the system, the requirements needed in the system, the users that should be engaged with the system, the overall features and functionality of the system, and how the system and the actors interact with each other.
4. Use Case Description	Google Docs- Table format	Use Case Description aims to discuss the detailed description of each Use Case from the Use Case ID, Use Case Name, Actors, Description, Trigger, Preconditions, Normal Flows, Alternative Flows, Exceptions, and Postconditions.

Table 1, Activities for the Requirements and Analysis Model

### 3.2 Requirements Specification

Pharmalogue is employed under Greenfield Engineering in which this system aims as a catalog as well as a recommendation system is new for Botica Yscobel and is believed to be the needs of the user from the pharmacy. The requirements elicitation methods used include interviews with the pharmacy clerk, research for possible requirements, and observation of the needed system in Iligan City. To have a grasp of the overall requirements for the system, the team used Physical System Architecture with the assistance of Canva.com as a tool to create it and WRSPM Model to have a grasp of the subsystems of the Pharmalogue with the assistance of Canva.com as a tool to create it.



**Figure 3.** Pharmalogue's Physical System Architecture

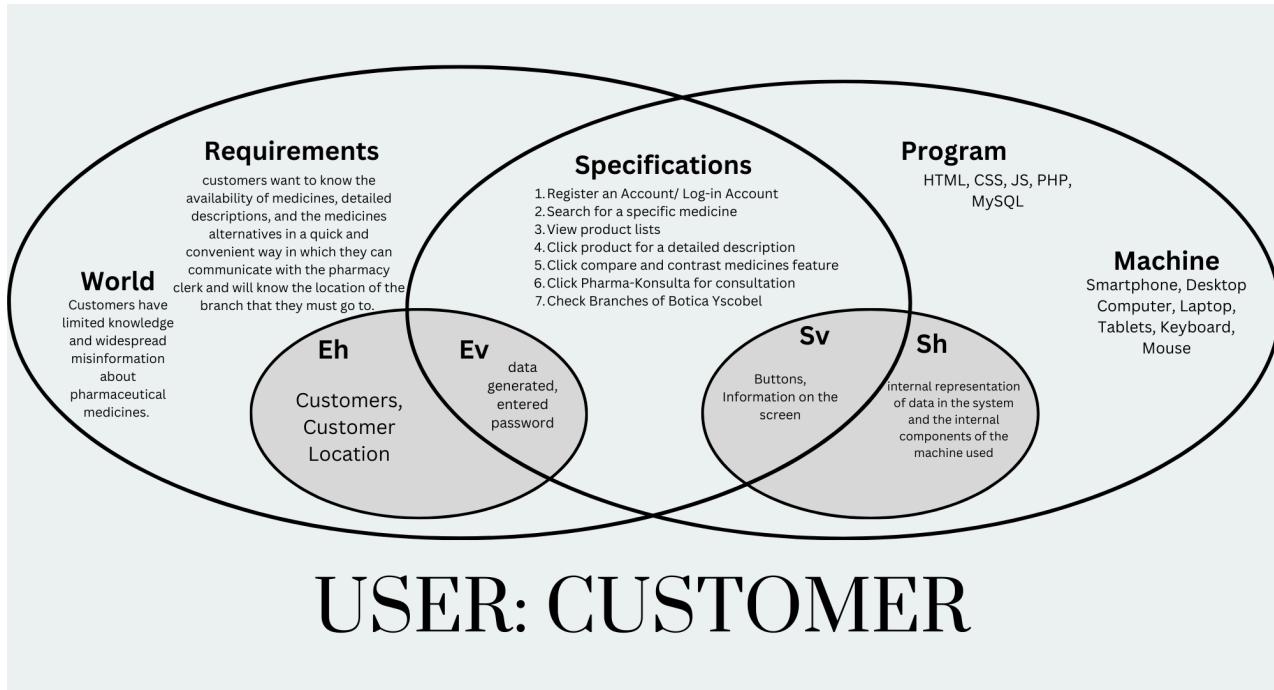


Figure 4. Pharmalogue's WRSPM Model Part 1

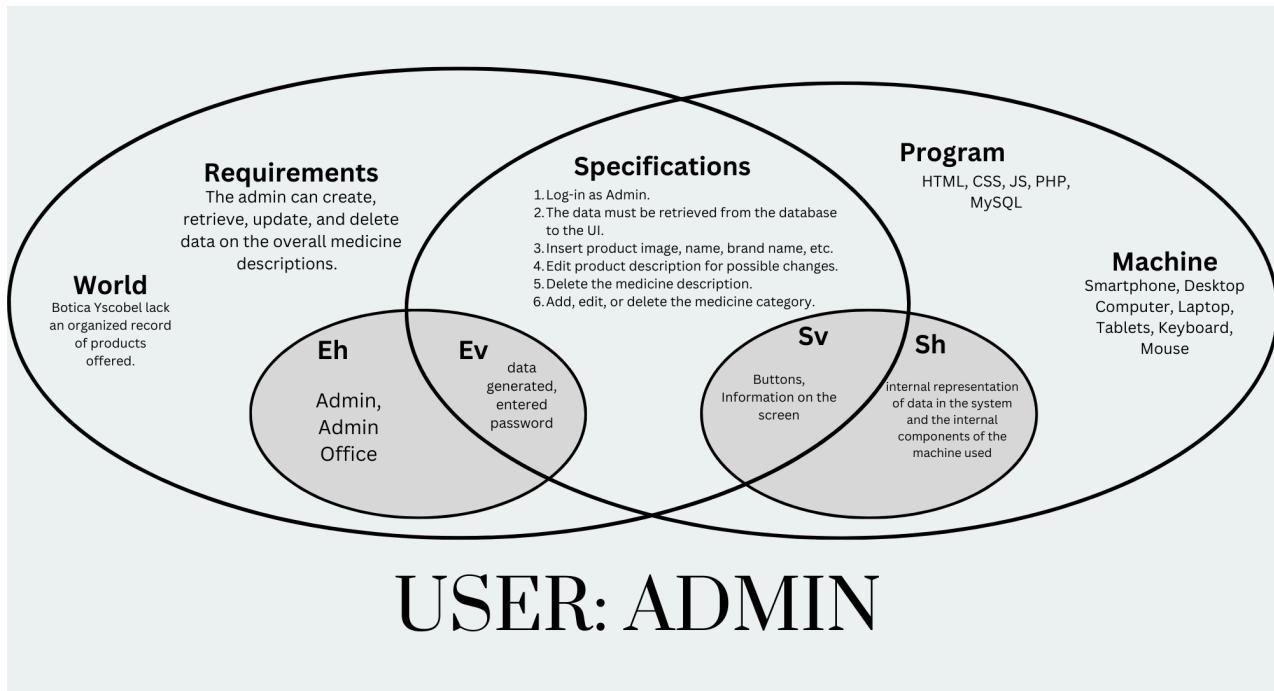


Figure 5. Pharmalogue's WRSPM Model Part 2

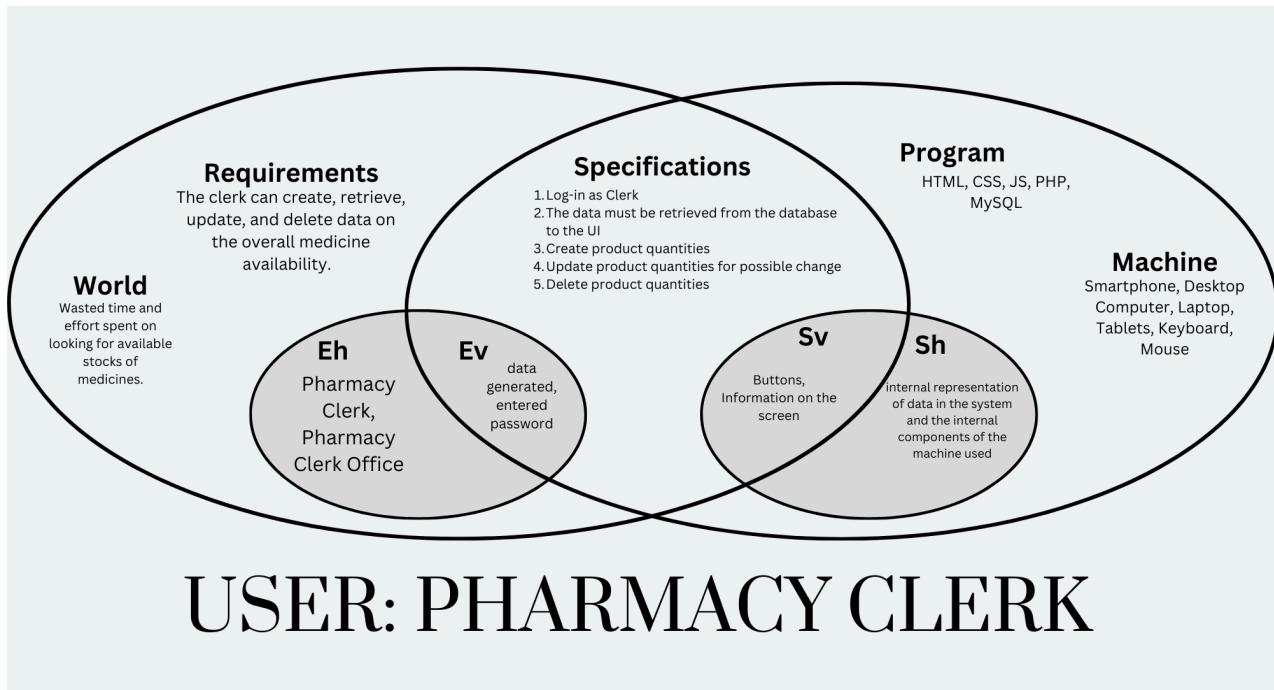


Figure 6. Pharmalogue's WRSPM Model Part 3

### 3.3 Design

Under the Design Phase, Pharmalogue is designed using a variety of activities. These activities are further discussed in the table below:

Methods	Tools	Purpose
1. Entity-Relationship Diagram		Entity-Relationship Diagram aims to provide a quick view for the developers of the overall data needed in the back end of the system. This is to make sure that the team keeps track of the needed entities engaged with the system with the data they need. In short, it provides a quick global reference to an organization's data structures in a database for the Catalogue-Recommendation system.
2. Sequence Diagram		Sequence Diagram helps in understanding the dynamic behavior, interaction flow, and

		dependencies within the system that further optimize performance and foster effective communication and collaboration among stakeholders and development teams.
3. Activity Diagram		Activity Diagram aims to provide a detailed structure of the Pharmalogue system and shows its attributes, operations, and interrelationships.

Table 2, Activities for the Design Phase

### 3.4 Implementation

Under the Implementation Phase, Pharmalogue is implemented using User Manual and System Constraints. This method guides users on how to seamlessly use the Pharmalogue system. The User Manual contains all the important information to enable the user to fully use the system. This guide describes system features and functions, contingencies and alternate modes of operation, and step-by-step instructions for accessing and using the system. In addition, constraints slow down and or prevent the system from accomplishing its goal and specification, and that leads to the existence of system constraints. System constraints are designed for the stable operation of the power system.

#### A. Customer Log-in

The Customer can access the web-based system using a browser with their phones, laptops, or tablets. One of the instructions indicates that the system requires the users to register before they can log in if they don't have an account. It will explain how the customer can login and the credentials needed to register or log in. It provides instructions also for possible known unknowns such as cases when the customers forgot their passwords and provides troubleshooting guidance for common login issues.

#### B. Admin and Clerk Log-in

The Admin and Clerk can access the web-based system using a browser with the pharmacy's desktop. It will explain how the customer can login and the credentials needed to log in. This is based on the requirements of the user accessibility. In addition, It provides instructions for possible known unknowns such as cases when users forgot their passwords, and provides troubleshooting guidance for common login issues. The system follows an Account Lockout Policy due to multiple failed login attempts. Furthermore, it provides instructions on how the system handles user sessions and the security and confidentiality of the pharmacy's data and database.

#### C. Go-Down Management

The User Manual explains the role of go-down management as an automatic storage facility of the important data that the pharmacy needs to consider. This helps users how to identify, compare, and locate specific items. It will guide some of the users on how to store items in

appropriate locations, update stock records, and monitor stock levels. Also, the manual will provide instructions on how to manage stock based on FIFO Management.

#### D. User Management for Admin and Clerks.

The User Manual explains the user roles and access levels with such permissions. It incorporates access control, password management, and best practices and guidelines that the users need to follow. The administrator can retrieve, edit, delete, and add medicines or categories from different branches. The clerk can check the quantity and the availability of medicines that the pharmacy has in that specific branch.

For the effective and efficient running of the system , listed below are the system constraints:

1. **English language provider**
2. **Browser Compatibility.** Pharmalogue needs to be compatible with multiple web browsers such as Chrome, Internet Explorer, etc.
3. **Device Responsiveness.** Pharmalogue should be designed to be responsive and adaptable to different screen sizes and devices, including desktops, laptops, tablets, and mobile phones.
4. **Security and Privacy.** Pharmalogue must be in the use of secure connections such as HTTPS and access control.
5. **Scalability.** Pharmalogue must be able to handle increasing numbers of catalog items in relation to database scalability and XAMPP server infrastructure.
6. **Data Integrity.** Pharmalogue must be able to maintain data accuracy and consistency by ensuring proper synchronization of the data to the database.
7. **Performance and Speed.** Pharmalogue should be designed and optimized for fast response times and efficient use of system resources including minimization of page load times and optimizing database queries.
8. **Easy-to-Use and User-Friendly.** Pharmalogue must be easy to use to any kind of users in terms of their generation or age. With this, the system should be simple and should have easy navigation ensuring that first time users will understand easily the features of the system at the first try.

### 3.5 Testing

Under the testing phase, Pharmalogue can be tested in the context of the System Requirement Specifications (SRS). In connection with the outputs created bit by bit, functional testing is used to validate the features of the system once developed. In terms of the feature-driven development methodology adapted as the software development methodology, the types of functional testing used are Unit Testing, Integration Testing, and System Testing.

#### a. Unit Testing

Unit testing begins at the earliest stages of development in which each use case produced is tested and approved. This is to ensure that the smallest functional and testable unit of code is tested to be able to realize problems, solutions, or opportunities.

#### b. Integration Testing

Integration Testing begins when some of the unit tested components of the software are integrated together to check compatibility and validate the interaction between them.

#### c. System Testing

System Testing begins when all the components of the system are already integrated. With this, the components of the Pharmalogue are combined and the system is tested for compliance and corrections against the requirement specifications.

## 3.6 Deployment and Maintenance

### A. **Software Requirements for the Full- Stack Developers**

Pharmalogue can be able to function well with the XAMPP server hosting environment and the use of Integrated Development Environment such as Visual Studio Code. The script languages used for the User Interface are HTML, CSS, JS. For the database connection from front-end and back-end, the developers use PHP. The version control system used by the developers is Google Drive for managing source code, collaboration, and tracking changes during development. For Database Management, the database system used is MySQL through myphpadmin in the XAMPP server.

### B. **Hardware Requirements for the Full- Stack Developers**

The developers use an operating system called Windows 10. The Application Server used is Visual Studio Code. The Database Server used is XAMPP server.

### C. **Software Requirements for Users**

Users' operating system must be in Windows and the web browser must be Chrome or Microsoft Edge to ensure optimal user experience and system performance in a suitable resolution and screen size.

### D. **Hardware Requirements for Users**

Users must have a possible desktop computer or laptop for a user-friendly interface.

### E. **Deployment Diagram**

This explains the hardware and software components and their interactions in the Pharmalogue system. The Deployment Diagram is created using Visual Paradigm.

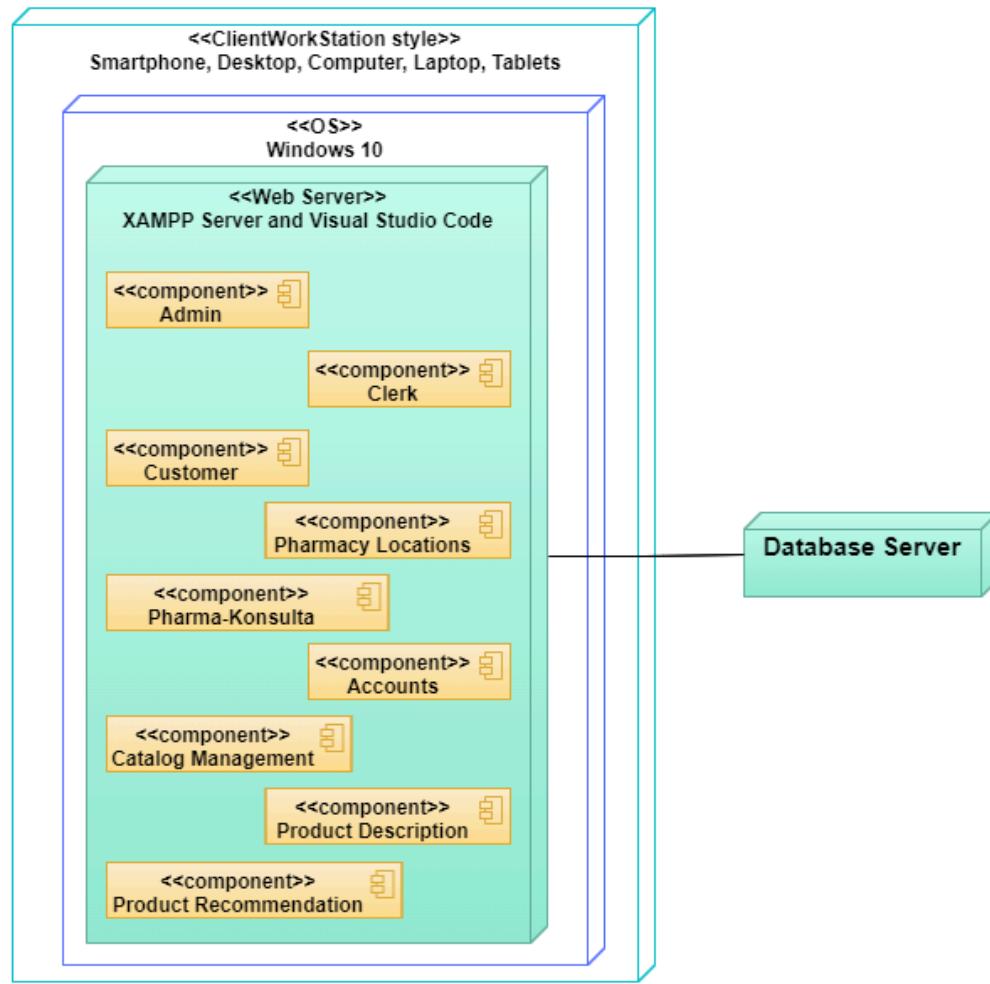


Figure 7. Pharmalogue's Deployment Diagram

## 4. Requirements Definition

### 4.1 Requirements Traceability Matrix

#### Functional Requirements

The system is designed to provide Botika Ycsobel a platform to market the business venture to potential customers through a product catalog that allows the viewing of medicine details and search for medicines based on certain illnesses that the catalog viewer enters as a query, and the catalog viewer can also check into the availability of medicine within the different branches the pharmacy has allowing an easy skim-and-scanning of the nearest branch one could buy from. End-users of the system also include the administrative personnel like the admin and clerks assigned to the respective branches of the pharmacy within Iligan City - where they need to have an account for verification and authentication purposes in order to manipulate the catalog by adding medicines, updating the medicine information, up to deleting specific medicines.

#### Non-Functional Requirements

##### Usability

- The system contains simple modals where users can easily and immediately spot the information they need.
- The system doesn't make use of unnecessary buttons, allowing users to use the user as direct and as simple as possible.

##### Interfacing

- The system is built with a user-friendly interface for all intended users.
- The system has a cool-toned palette that creates a sense of calmness and somehow associates with a sense of credibility creating a space for concentration to the end users.

##### Manageability or Administrative Control

- The system's content can be modified real-time, for the admin has complete access and can perform immediate updates once there is a need for one.
- The system makes use of an appropriate access control mechanism that only authorized users can make content updates - and the updates are role-specific between the pharmacy admin and pharmacy clerks per branch.

## 4.1 Requirements Traceability Matrix

Requirements Traceability Matrix (RTM) is a document that establishes traceability links between project requirements and various project artifacts that serves as a comprehensive tool for tracking the progression of the requirements by first identifying the requirements needed, who's responsible for the requirements listed, then the respective start and end dates of the development per requirements. Also, RTM allows the developers to label statuses to each requirement to establish transparency of progress - often displayed with respective colors (e.g. green for completed requirements, yellow for in-progress, and red for no progress at all).

TABLE I. REQUIREMENTS TRACEABILITY MATRIX OF PHARMALOGUE

RTM ID	Requirements	Notes	Requestor	Request Date	Status
UC1	View Homepage	UC1 serves as the entry point for users to explore the system further and engage with its various features and functionalities	Catalog Viewer, ADMIN, Clerk	05/13/2023	Finished
UC2	View About Us	UC2 allows users to access the relevant page that provides information about the organization, its mission, vision, values, expertise, and any other relevant details.	Catalog Viewer	05/20/2023	Finished
UC3	View Pharma-Konsulta	UC3 allows users to explore pre-existing information and find solutions to common queries as to how the system works.	Catalog Viewer	05/20/2023	Finished
UC4	View Store Locator	UC4 allows users to identify nearby stores based on user-defined criteria such as location or product availability.	Catalog Viewer	05/20/2023	Finished
UC5	View Catalog Interface	UC5 allows users to explore the interface containing the various medicine products, medicine categories, and essential medicine information.	Catalog Viewer	5/24/2023	Finished
UC6	View Categories	UC6 allows the catalog viewer to browse	Catalog Viewer	5/24/2023	Finished

RTM ID	Requirements	Notes	Requestor	Request Date	Status
		medicine categories available for viewing in the system.			
UC7	Select Category	UC7 allows catalog viewers to access medicine through available categories of interest, which narrows down the search and find products that aligns what preference or needs the viewer has.	Catalog Viewer	5/24/2023	Finished
UC8	View Medicines	UC8 allows the catalog viewer to browse different medicines available in the system.	Catalog Viewer	5/24/2023	Finished
UC9	Select Medicine	UC9 allows users to retrieve important details as follows: drug image, drug name, drug brand, drug category, drug description, directions for usage, active ingredients, inactive ingredients, side effects, storage instructions, price, and stock availability per branch.	Catalog Viewer	05/11/2023	Finished
UC10	Search Medicine	UC10 allows actors to retrieve certain queries passed in the search bar.	Catalog Viewer, ADMIN, Clerk	05/11/2023	Finished
UC11	View Accounts	UC11 allows the administrative staff to access and manipulate changes to the information displayed in the catalog interface.	ADMIN, Clerk	12/02/2022	Finished
UC12	Sign Up	UC12 allows pharmacy admin and clerks to register themselves as new members that are authorized to use the system with administrative privileges.	ADMIN, Clerk	05/24/2023	Finished
UC13	Log In	UC13 allows pharmacy admin and clerks to	ADMIN, Clerk	05/24/2023	Finished

RTM ID	Requirements	Notes	Requestor	Request Date	Status
		authenticate themselves and gain access to administrative features for information management.			Green
UC14	View ADMIN Interface	UC15 allows pharmacy admin to perform queries by adding, creating, deleting medicine information and medicine categories.	ADMIN	05/30/2023	Finished
UC15	View Clerk Interface	UC15 allows pharmacy clerks from the respective Yscobel branches to perform editing/updating of the stock availability per medicine.	Clerk	06/02/2023	Finished
UC16	Update Medicine Information	UC16 allows the admin to modify the content of information to be displayed to the catalog's interface that is viewed by customers.	ADMIN	05/30/2023	Finished
UC17	Add Medicine	UC17 allows the admin to add an actual unit of medicines to be displayed in the catalog's interface that can be viewed by customers.	ADMIN	05/30/2023	Finished
UC18	Delete Medicine	UC18 ensures that the removed medicine is no longer available within the medical application or system.	ADMIN	05/30/2023	Finished
UC19	Add Category	UC19 allows the admin to expand the available categories and provide users with more options for organizing and accessing content or products.	ADMIN	05/30/2023	Finished
UC20	Delete Category	UC20 allows the user's intention to remove the medicine category from the system - where its purpose is to ensure that the system is free from unnecessary information.	ADMIN	05/30/2023	Finished
UC21	Update Quantity	UC21 allows the respective clerks from the different branches to update the stocks availability per medicines	Clerk	06/02/2023	Finished

<b>RTM ID</b>	<b>Requirements</b>	<b>Notes</b>	<b>Requestor</b>	<b>Request Date</b>	<b>Status</b>
		displayed in the catalog system.			
<b>UC22</b>	Log out	UC22 allows the user's intention to end the current session and securely log out of the system.	ADMIN, Clerk	05/24/2023	Finished

The RTM covers the 22 Use Cases, per use case is performed by the intended end-users: customer, admin, and clerks. There are use cases that are shared by the different users and there are also use cases that are user-sensitive which means that the other users of the system are restricted with some functionalities.

## 4.2 Activity Diagram

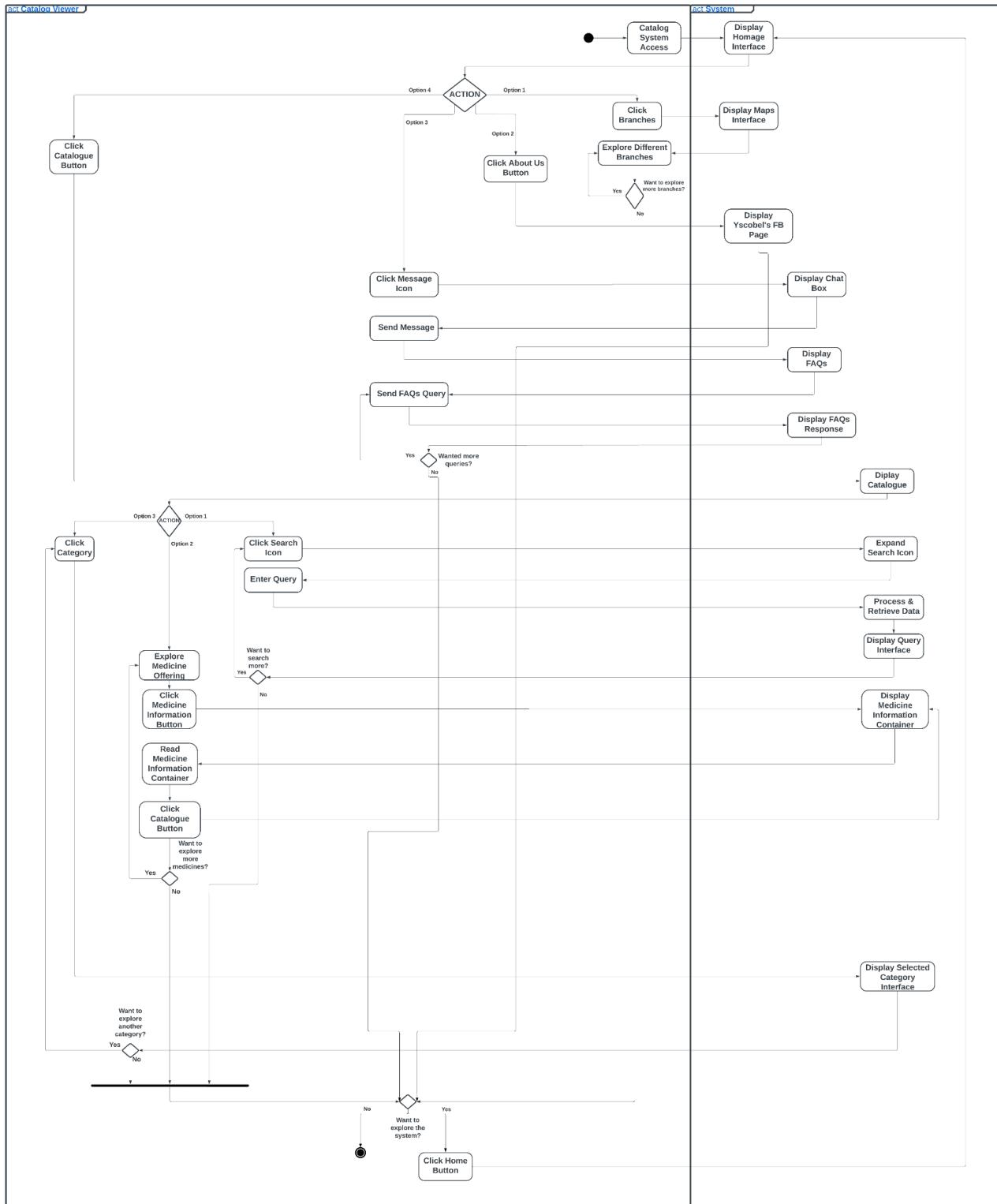


Figure 1. Activity Diagram (Catalog Viewer)

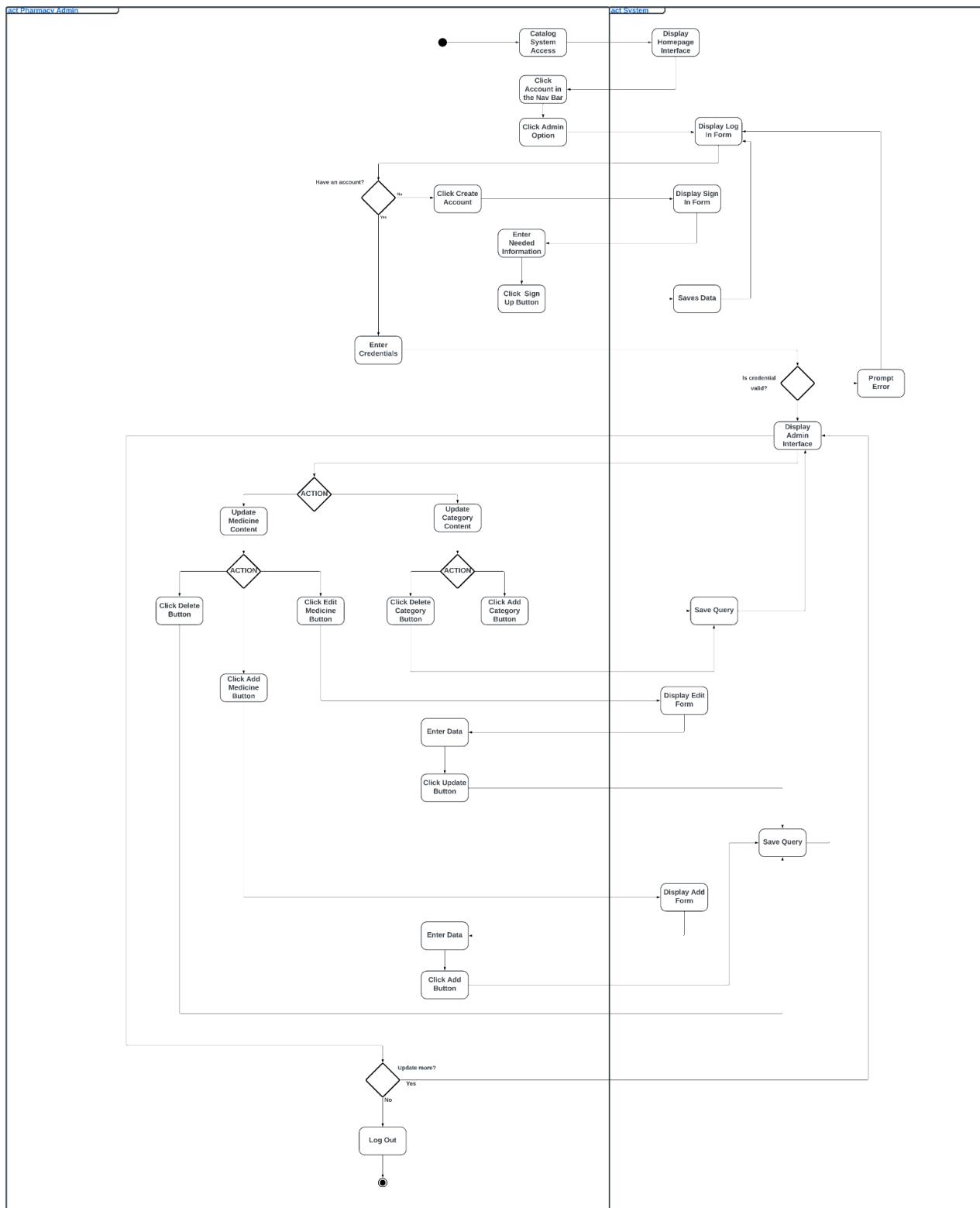


Figure 2. Activity Diagram (Pharmacy ADMIN)

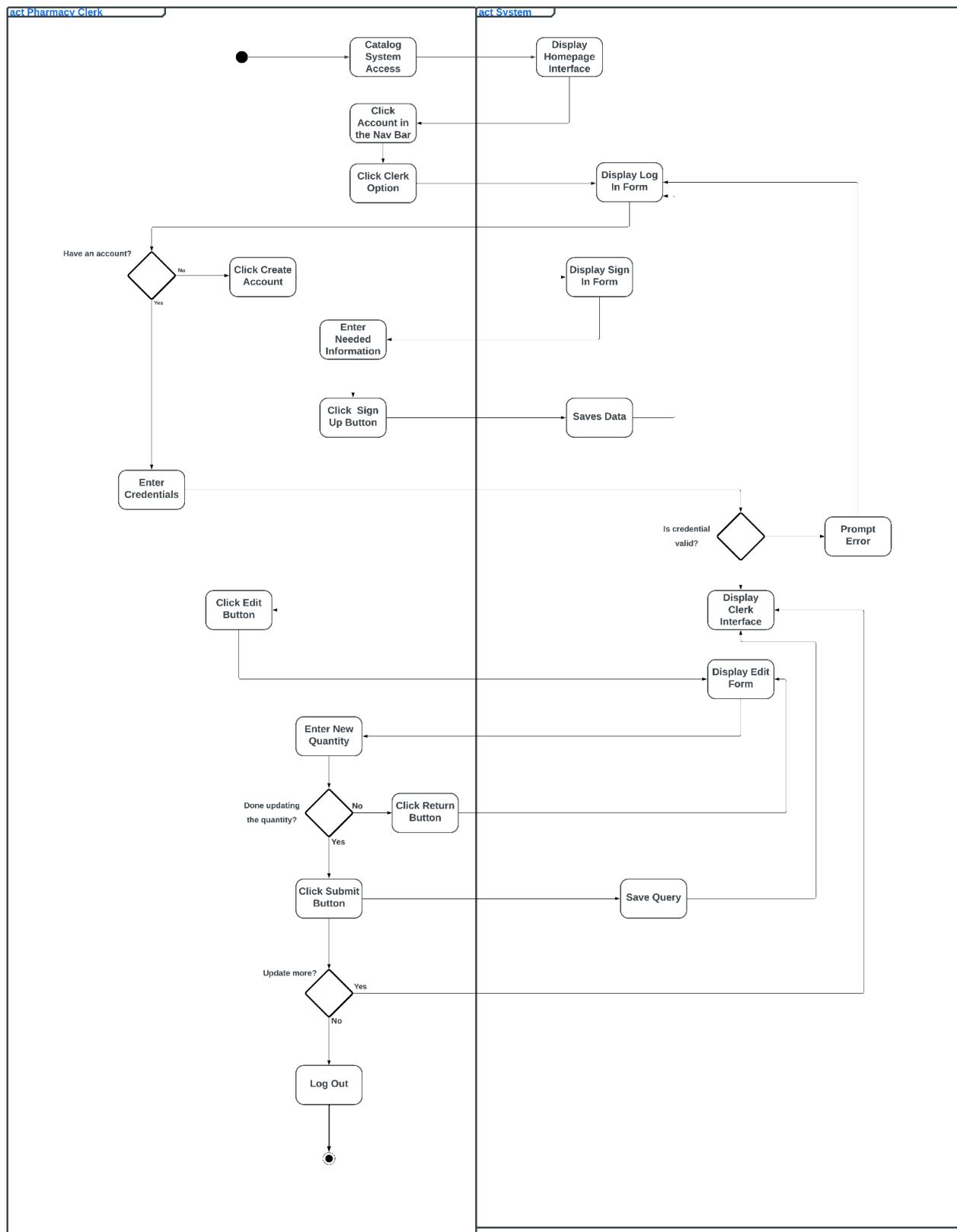


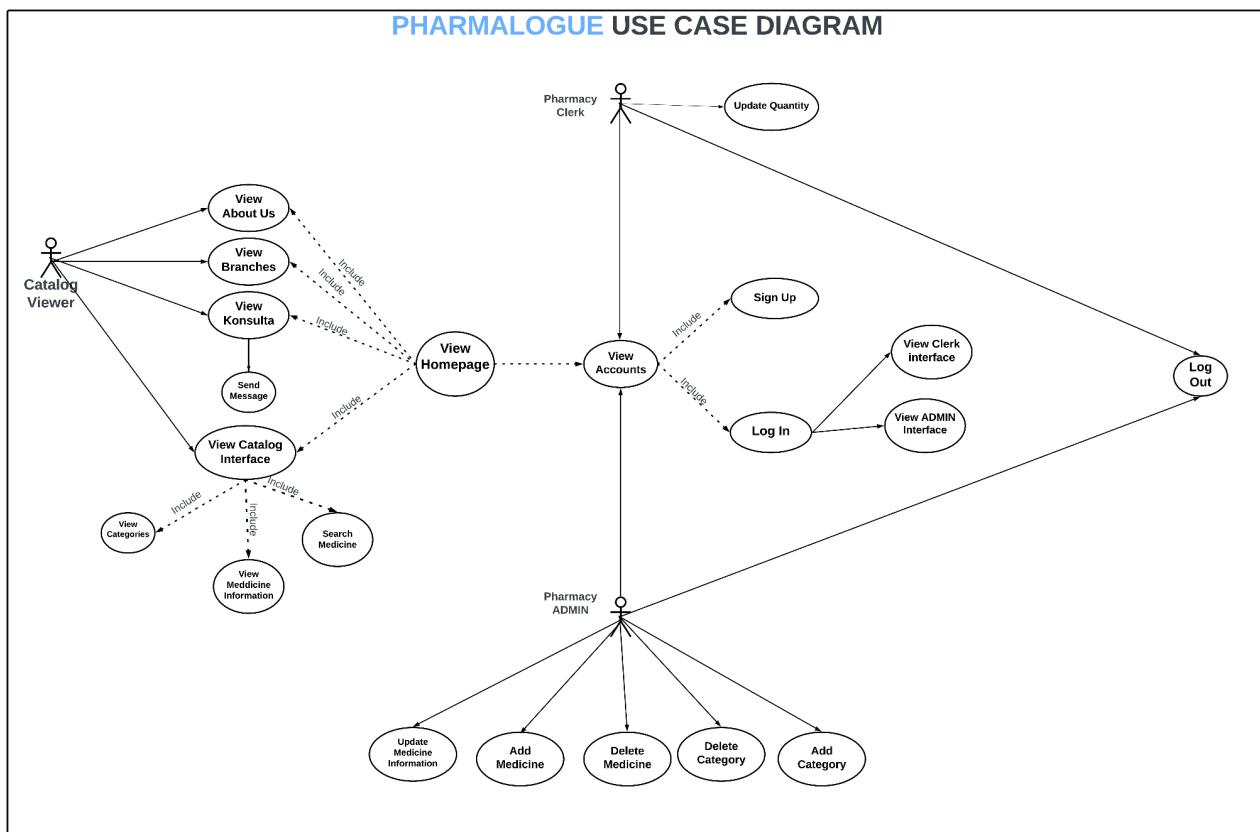
Figure 3. Activity Diagram (Pharmacy Clerks)

The figures shown above this section are the respective activity diagrams of the intended user of the system: PharmaLogue. All three users will have the common entry point which is the Homepage Interface - then from there onwards, the succeeding activities are illustrated in their respective diagrams. Initially the Catalog viewer will be exploring the homepage, then continue to explore the system by visiting the pharmacy catalog. Then, for the administrative staff consisting the pharmacy admin and pharmacy clerks from the different branches needed to log into their respective system accounts in order to perform administrative functions in the system. These tasks are: updating medicine information, adding new medicine products, deleting medicine, adding & deleting the medicine category then, updating the stocks availability of medicines per branch.

## 5. Analysis and Design

This section represents the narrative and detailed flow of the system, specifically the specific interactions between the end users of the system, the system's interface, and the system's database. The figures and illustrations used in these sections are as follows: (i) Use Case Diagram, (ii) Use Case Description, (iii) Sequence Diagram, and (iv) Collaboration Diagram.

### Use Case Diagram



**Figure 1. Use Case Diagram**

A use case diagram is a visual representation of the functional requirements of a system from the perspective of its users or external entities. It illustrates the interactions between the system and its users, as well as the different use cases or functionalities provided by the system. The system contains 3 actors: The Customer or the Catalog Viewer having 11 use cases; The Pharmacy ADMIN having 8 Use Cases; and the Pharmacy Clerk having 8 use cases. The view homepage is a shared use case by the 3 actors, and the use cases "view accounts", "sign up/login", and log out are shared by the pharmacy admin and clerks.

## 5.1 Use Case Description

<b>Use Case ID:</b>	UC1
<b>Use Case Name:</b>	<b>View Homepage</b>
<b>Actors:</b>	Primary: ALL (Catalog Viewer, Admin, Clerk)
<b>Description:</b>	UC1 represents the action of accessing the homepage of the PharmaLogue (Medicine Catalog System). This is the first interaction or page that the users will experience.
<b>Trigger:</b>	When the user opens the directory in their browsers.
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The PharmaLogue System is accessible and functioning properly.</li> </ol>
<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The user opens their chosen web browser.</li> <li>2. The user enters the URL.</li> <li>3. The system will receive the relevant files and data.</li> <li>4. The system generates the HTML, CSS, and other resources required to display the homepage.</li> <li>5. The system sends the rendered homepage to the user's device.</li> <li>6. The user's device receives the response and displays the homepage in the web browser.</li> <li>7. The user scans the homepage, reading the content and examining the available features and navigation options.</li> <li>8. The user may interact with the homepage by clicking on links, buttons, or other interactive elements to access specific sections or perform desired actions.</li> </ol>
<b>Alternative Flows:</b>	<p>8a. In Step 8 of the Normal Flow, the user can navigate the different buttons in the homepage interface according to its desired actions.</p> <ol style="list-style-type: none"> <li>1. When a button is clicked the user will be directed to another use case interface.</li> <li>2. Users will be performing the respective</li> </ol>

	<p>flows in navigating the new interface.</p> <p>3. This use case will be a trigger for most of the use cases in the next section.</p>
<b>Exceptions:</b>	<p>4a. In Step 4 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the resources needed.</p> <ol style="list-style-type: none"> <li>1. The user will experience a delay in loading the homepage.</li> <li>2. Users may need to retry accessing the homepage by opening it in a new tab or refreshing the current tab.</li> <li>3. Use Case resumes on Step 5.</li> </ol>
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has successfully viewed the homepage and is now familiar with the context and available functionality.</li> <li>2. The user may proceed to navigate to other pages or perform additional actions based on their requirements or interest.</li> </ol>

<b>Use Case ID:</b>	UC2
<b>Use Case Name:</b>	View About Us
<b>Actors:</b>	Primary: Catalog Viewer
<b>Description:</b>	UC2 allows users to access the relevant page that provides information about the organization, its mission, vision, values, expertise, and any other relevant details.
<b>Trigger:</b>	When the "About Us" button is clicked.
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The PharmaLogue System is accessible and functioning properly.</li> </ol>
<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The user opens their chosen web browser.</li> <li>2. The user enters the URL.</li> <li>3. User navigates the homepage interface.</li> <li>4. The user locates the "About Us" link or button and clicks on it.</li> <li>5. The system loads the "About Us" page or</li> </ol>

	section. 6. The user explores the redirected page.
<b>Alternative Flows:</b>	<b>none</b>
<b>Exceptions:</b>	5a. In Step 5 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't redirect the user to another page containing the information relating to Botika Ycsobel.
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. The user have now accessed the linked facebook page of the pharmacy.</li> <li>2. The user may proceed to navigate to other pages or perform additional actions based on their requirements or interest.</li> </ol>

<b>Use Case ID:</b>	3
<b>Use Case Name:</b>	<b>View Pharma-Konsulta</b>
<b>Actors:</b>	Catalog Viewer
<b>Description:</b>	UC5 represents the action of a user clicking the message icon to initiate a consultation message but instead of composing a new message, the user chooses to browse the Frequently Asked Questions (FAQs) for possible answers to their query. This use case allows users to explore pre-existing information and find solutions to common queries as to how the system works.
<b>Trigger:</b>	The "Message Icon" is clicked.
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The PharmaLogue System is accessible and functioning properly.</li> </ol>
<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The user navigates the catalog system.</li> <li>2. The user identifies the message icon.</li> <li>3. The user clicks the message icon to initiate a consultation message.</li> <li>4. The system presents the message interface, providing options for selecting</li> </ol>

	<p>FAQs.</p> <ol style="list-style-type: none"> <li>5. The user selects the option to browse the FAQs.</li> <li>6. The system retrieves the relevant FAQs from the database.</li> <li>7. The system presents the FAQs to the user, displaying a categorized list.</li> <li>8. The user explores the FAQs, reading the questions and corresponding answers provided.</li> <li>9. The user finds a relevant answer to a query in the FAQs.</li> <li>10. The user selects the corresponding question.</li> <li>11. The system displays the answer associated with the selected question.</li> <li>12. The user reviews the answer and determines if it adequately addresses their query or concern.</li> <li>13. The user is satisfied with the response and proceeds to close the message icon, and continues to explore the catalog interface.</li> </ol>
<b>Alternative Flows:</b>	<p>13a. In Step 13, of the Normal Flow. If further clarification is needed, the user may proceed with exploring other FAQs.</p> <ol style="list-style-type: none"> <li>1. The user performs again starting from Step 10 onwards.</li> </ol>
<b>Exceptions:</b>	<p>1a. In Step 1 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the interface.</p> <ol style="list-style-type: none"> <li>1. The user will experience a delay in loading the catalog interface.</li> <li>2. Users may need to retry accessing the catalog homepage by opening it in a new tab or refreshing the current tab.</li> <li>3. Use Case resumes on Step 2.</li> </ol> <p>13a. In Step 13 of the Normal Flow, when the user wasn't able to find the relevant answers in the FAQs, the user may choose to explore the catalog or close the application immediately.</p>
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has successfully explored the FAQs for possible answers to their query.</li> <li>2. The user has found a satisfactory answer and proceeded to explore the catalog</li> </ol>

	<p>system.</p> <ol style="list-style-type: none"> <li>3. The user has not acquire satisfactory answer but still proceeded to explore the catalog system.</li> <li>4. The user closes the program and performs alternative ways to acquire information needed.</li> </ol>
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<b>Use Case ID:</b>	<b>4</b>
<b>Use Case Name:</b>	<b>View Store Locator</b>
<b>Actors:</b>	<b>Catalog Viewer, Admin, Clerks</b>
<b>Description:</b>	UC6 represents the action of the user clicking the store locator in the navigation bar to initiate the viewing of the different branches of Botika Yscobel in Iligan to make comparisons on which among the branches has the nearest route from the location of the viewer who's planning to make a purchase.
<b>Trigger:</b>	The “Store Locator” Button in the navigation bar is clicked.
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The PharmaLogue System is accessible and functioning properly.</li> </ol>
<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The user navigates the catalog system.</li> <li>2. The user identifies the store locator button.</li> <li>3. The user clicks the store locator button.</li> <li>4. The system directs the user to the maps interface.</li> <li>5. The user can explore the different branches through the embedded google map interface.</li> </ol>
<b>Alternative Flows:</b>	<b>none</b>
<b>Exceptions:</b>	<p>1a. In Step 1 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the catalog interface.</p> <ol style="list-style-type: none"> <li>1. The user will experience a delay in</li> </ol>

	<p>loading the catalog interface.</p> <ol style="list-style-type: none"> <li>2. Users may need to retry accessing the catalog homepage by opening it in a new tab or refreshing the current tab.</li> <li>3. Use Case resumes on Step 2.</li> </ol>
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has successfully viewed the location of the different branches.</li> </ol>

<b>Use Case ID:</b>	UC5
<b>Use Case Name:</b>	View Catalog Interface
<b>Actors:</b>	Primary: Catalog Viewer
<b>Description:</b>	UC5 represents the action of accessing the catalog page or catalog interface of the PharmaLogue (Medicine Catalog System). This allows the user to be directed to the page where the medicines and medicine information are being listed and displayed.
<b>Trigger:</b>	When the "Catalogue" Button in the homepage is clicked.
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The PharmaLogue System is accessible and functioning properly.</li> </ol>
<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The user opens the application or website's homepage.</li> <li>2. The user locates and clicks on the "Catalog" button displayed on the homepage.</li> <li>3. The system redirects the user to the catalog interface or loads the catalog section.</li> <li>4. The catalog interface is displayed, presenting a grid of medicines available for browsing on the right side, categories on the left, and a search bar near the navigation panel.</li> <li>5. The user can scroll through the catalog or use filters, categories, or search functionality to refine their search.</li> </ol>

	<p>6. The user can repeat step 5 to explore more products/services within the catalog.</p>
<b>Alternative Flows:</b>	<b>none.</b>
<b>Exceptions:</b>	<p>3a. In Step 3 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the resources needed.</p> <ol style="list-style-type: none"> <li>1. The user will experience a delay in loading the homepage.</li> <li>2. Users may need to retry accessing the homepage by opening it in a new tab or refreshing the current tab.</li> <li>3. Use Case resumes on Step 4.</li> </ol>
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has successfully explored the available products or services and gathered essential information for comparing the medicine to other products available in the market.</li> <li>2. The user may proceed to navigate to other pages or perform additional actions based on their requirements or interest.</li> </ol>

<b>Use Case ID:</b>	UC5
<b>Use Case Name:</b>	<b>View Catalog Interface</b>
<b>Actors:</b>	Primary: Catalog Viewer
<b>Description:</b>	UC5 represents the action of accessing the catalog page or catalog interface of the PharmaLogue (Medicine Catalog System). This allows the user to be directed to the page where the medicines and medicine information are being listed and displayed.
<b>Trigger:</b>	When the "Catalogue" Button in the homepage is clicked.
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>3. The user has a device with strong internet connectivity.</li> <li>4. The PharmaLogue System is accessible and functioning properly.</li> </ol>

<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The user opens the application or website's homepage.</li> <li>2. The user locates and clicks on the "Catalog" button displayed on the homepage.</li> <li>3. The system redirects the user to the catalog interface or loads the catalog section.</li> <li>4. The catalog interface is displayed, presenting a grid of medicines available for browsing on the right side, categories on the left, and a search bar near the navigation panel.</li> <li>5. The user can scroll through the catalog or use filters, categories, or search functionality to refine their search.</li> <li>6. The user can repeat step 5 to explore more products/services within the catalog.</li> </ol>
<b>Alternative Flows:</b>	<p><b>5a. In Step 5 of the Normal Flow, if the user is interested in knowing the detailed information of a specific medicine.</b></p> <ol style="list-style-type: none"> <li>1. The user clicks the "View Medicine Information"</li> <li>2. The system will display the detailed information of the medicine.</li> <li>3. The use case resumes back in Step 5.</li> </ol> <p><b>5b. In Step 5 of the Normal Flow, if the user spots and becomes interested in knowing the medicines based on the listed categories.</b></p> <ol style="list-style-type: none"> <li>1. The user clicks one category in the listed category.</li> <li>2. The system will display related medicines to that category</li> <li>3. The use case resumes back in Step 5.</li> </ol>
<b>Exceptions:</b>	<p><b>3a. In Step 3 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the resources needed.</b></p> <ol style="list-style-type: none"> <li>1. The user will experience a delay in loading the homepage.</li> <li>2. Users may need to retry accessing the homepage by opening it in a new tab or refreshing the current tab.</li> <li>3. Use Case resumes on Step 4.</li> </ol>

<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has successfully explored the available products or services and gathered essential information for comparing the medicine to other products available in the market.</li> <li>2. The user may proceed to navigate to other pages or perform additional actions based on their requirements or interest.</li> </ol>
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<b>Use Case ID:</b>	<b>6</b>
<b>Use Case Name:</b>	<b>View Categories</b>
<b>Actors:</b>	Catalog Viewer
<b>Description:</b>	UC2 represents the action of a catalog viewer accessing and viewing the available medicine categories in PharmaLogue. This use case allows the catalog viewer to browse different medicine categories for specific health conditions or complaints.
<b>Trigger:</b>	When the user clicks the "Catalogue" Button in the Homepage Interface.
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The PharmaLogue System is accessible and functioning properly.</li> <li>3. The Catalogue Interface is accessed as is functioning properly.</li> </ol>
<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The user opens the application or website's homepage.</li> <li>2. The user locates and clicks on the "Catalog" button displayed on the homepage.</li> <li>3. The system redirects the user to the catalog interface or loads the catalog section.</li> <li>4. The catalog interface is displayed, presenting a grid of medicines available for browsing on the right side, categories on the left, and a search bar near the navigation panel.</li> <li>5. The Catalog Viewer scans the catalog</li> </ol>

	<p>homepage, reading the content and examining the listed-categories of medicines.</p> <p>6. The user can repeat step 7 to explore more products/services within the catalog.</p>
<b>Alternative Flows:</b>	<p>5a. In Step 5 of the Normal Flow, the user can navigate the different listed categories.</p> <ol style="list-style-type: none"> <li>1. When a category is selected once clicked.</li> <li>2. The system retrieves the attributes needed in the database.</li> <li>3. The system generates and presents the medicines for that category.</li> <li>4. The user then scans the information available.</li> <li>5. The user may then click the “Return - Button”, and the Use Case 6 is resumed.</li> </ol>
<b>Exceptions:</b>	<p>3a. In Step 3 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the categories available.</p> <ol style="list-style-type: none"> <li>1. The user will experience a delay in loading the catalog interface.</li> <li>2. Users may need to retry accessing the catalog homepage by opening it in a new tab or refreshing the current tab.</li> <li>3. Use Case resumes on Step 4.</li> </ol>
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has successfully viewed the available categories.</li> <li>2. The user may proceed to explore the selected category or explore more categories in the selection.</li> </ol>

<b>Use Case ID:</b>	7
<b>Use Case Name:</b>	Select Categories
<b>Actors:</b>	Catalog Viewer
<b>Description:</b>	UC2 represents the action of a catalog viewer accessing and viewing the available medicine categories in PharmaLogue. This use case allows the catalog viewer to browse different medicines available in the system.

<b>Trigger:</b>	When the user clicks a specific medicine category in the listed-categories.
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The PharmaLogue System is accessible and functioning properly.</li> <li>3. The Catalogue Interface is accessed as is functioning properly.</li> </ol>
<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The user opens the application or website's homepage.</li> <li>2. The user locates and clicks on the "Catalog" button displayed on the homepage.</li> <li>3. The system redirects the user to the catalog interface or loads the catalog section.</li> <li>4. The catalog interface is displayed, presenting a grid of medicines available for browsing on the right side, categories on the left, and a search bar near the navigation panel.</li> <li>5. The user locates the category menu displayed in listed text.</li> <li>6. The user explores through the list by viewing.</li> <li>7. The user then selects a category of interest by clicking on its name.</li> <li>8. The system registers the user's selection and updates the display to show offerings within the selected category.</li> <li>9. The user can view a list or grid of products/services within the selected category, along with their detailed information associated with that medicine.</li> <li>10. The system presents the Catalog Interface.</li> <li>11. The Catalog Viewer scans the catalog homepage, reading the content and examining the listed-categories of medicines.</li> <li>12. The user may choose to click on a specific product/service to view more details about it.</li> <li>13. The user can repeat step 8 to explore more products/services using the listed-categories.</li> </ol>

<b>Alternative Flows:</b>	None.
<b>Exceptions:</b>	<p>3a. In Step 3 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the categories available.</p> <ul style="list-style-type: none"> <li>4. The user will experience a delay in loading the catalog interface.</li> <li>5. Users may need to retry accessing the catalog homepage by opening it in a new tab or refreshing the current tab.</li> <li>6. Use Case resumes on Step 4.</li> </ul>
<b>Postconditions:</b>	<ul style="list-style-type: none"> <li>3. The user has successfully viewed the medicines available within the chosen categories.</li> <li>4. The user may navigate back to the categories page to select a different category for exploration.</li> </ul>

<b>Use Case ID:</b>	<b>8</b>
<b>Use Case Name:</b>	<b>View Medicine</b>
<b>Actors:</b>	Catalog Viewer
<b>Description:</b>	UC8 represents the action of a catalog viewer accessing and viewing the available medicine in PharmaLogue. This use case allows the catalog viewer to browse different medicines the system offers.
<b>Trigger:</b>	When the user clicks the "Catalogue" Button in the Homepage Interface.
<b>Preconditions:</b>	<ul style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The PharmaLogue System is accessible and functioning properly.</li> <li>3. The Catalogue Interface is accessed as is functioning properly.</li> </ul>
<b>Normal Flows:</b>	<ul style="list-style-type: none"> <li>1. The user opens the application or website's homepage.</li> <li>2. The user locates and clicks on the "Catalog" button displayed on the homepage.</li> <li>3. The system redirects the user to the</li> </ul>

	<p>catalog interface or loads the catalog section.</p> <ol style="list-style-type: none"> <li>4. The catalog interface is displayed, presenting a grid of medicines available for browsing on the right side, categories on the left, and a search bar near the navigation panel.</li> <li>7. The system presents the Catalog Interface.</li> <li>8. The Catalog Viewer scans the medicines in the medicine container whose intended purpose is for product comparison.</li> <li>9. The user can repeat step 8 to explore more products/services within the catalog.</li> </ol>
<b>Alternative Flows:</b>	<p>8a. In Step 8 of the Normal Flow, the user can further expand the medicine information of a product:</p> <ol style="list-style-type: none"> <li>1. When a user identifies a medicine of choice.</li> <li>6. The user can click the "View Medicine Information"</li> <li>7. The system generates and presents detailed medicine information.</li> <li>8. The user then scans the information available.</li> <li>9. The user may then click the "Return - Button", and the Use Case 9 is resumed.</li> </ol>
<b>Exceptions:</b>	<p>3a. In Step 3 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the categories available.</p> <ol style="list-style-type: none"> <li>1. The user will experience a delay in loading the catalog interface.</li> <li>2. Users may need to retry accessing the catalog homepage by opening it in a new tab or refreshing the current tab.</li> <li>3. Use Case resumes on Step 4.</li> </ol>
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has successfully viewed the further medicine details.</li> <li>2. The user may proceed to explore the selected category or explore more categories in the selection.</li> </ol>

<b>Use Case ID:</b>	9
<b>Use Case Name:</b>	Select Medicine
<b>Actors:</b>	Catalog Viewer
<b>Description:</b>	UC9 represents the action of a user clicking the "View Medicine Info" button to access and view detailed information about a specific medicine. This use case allows users to retrieve important details as follows: drug image, drug name, drug brand, drug category, drug description, directions for usage, active ingredients, inactive ingredients, side effects, storage instructions, price, and stock availability per branch.
<b>Trigger:</b>	When the user clicks the <<View More Med Info>> Button in the Catalog Interface.
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The PharmaLogue System is accessible and functioning properly.</li> <li>3. The Catalogue Interface is accessed as is functioning properly.</li> </ol>
<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The user opens the application or website's homepage.</li> <li>2. The user locates and clicks on the "Catalog" button displayed on the homepage.</li> <li>3. The system redirects the user to the catalog interface or loads the catalog section.</li> <li>4. The catalog interface is displayed, presenting a grid of medicines available for browsing on the right side, categories on the left, and a search bar near the navigation panel.</li> <li>5. The system presents the Catalog Interface.</li> <li>6. The user identifies the desired medicine.</li> <li>7. The user locates in the "Medicine Information" Button associated with the selected medicine of choice.</li> <li>8. The user clicks the "Medicine Information" button to know more information about the medicine.</li> <li>9. The system retrieves the detailed information for the selected medicine</li> </ol>

	<p>from the database.</p> <ol style="list-style-type: none"> <li>10. The system generates the medicine information page, populating it with the retrieved data.</li> <li>11. The system then sends and displays the medicine information page to the user's device.</li> <li>12. The user reviews the detailed information displayed.</li> <li>13. The user can repeat step 5 to explore more products/services within the catalog.</li> </ol>
<b>Alternative Flows:</b>	<p>5a. In Step 5 of the Normal Flow, if the user wants to browse using the search bar and the medicine the user is trying to access isn't on the database.</p> <ol style="list-style-type: none"> <li>1. The user clicks the search bar icon.</li> <li>2. The user enters the medicine of choice.</li> <li>3. The system retrieves the information from the database.</li> <li>4. The system will prompt an error message if the medicine isn't found in the database.</li> <li>5. User clicks the "Return Button".</li> <li>6. The Use Case resumes back to Step 1.</li> </ol> <p>5b. In Step 5 of the Normal Flow, if the user wants to browse using the search bar and the medicine the user is trying to access is on the database.</p> <ol style="list-style-type: none"> <li>1. The user clicks the search bar icon .</li> <li>2. The user enters the medicine of choice.</li> <li>3. The system retrieves the information from the database.</li> <li>4. The system sends and displays the medicine in the catalog interface.</li> <li>5. The Use Case resumes on Step 3.</li> </ol> <p>5c. In Step 5 of the Normal Flow, if the user wanted to browse using the listed-menu of health condition categories.</p> <ol style="list-style-type: none"> <li>1. The Catalog Viewer interacts with the listed-menu by selecting a specific category of interest.</li> <li>2. The system retrieves the information from the database.</li> <li>3. The system sends and displays the medicine in the catalog interface.</li> </ol>

	4. The Use Case resumes on Step 3.
<b>Exceptions:</b>	<p>1a. In Step 1 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the medicines available.</p> <ol style="list-style-type: none"> <li>1. The user will experience a delay in loading the catalog interface.</li> <li>2. Users may need to retry accessing the catalog homepage by opening it in a new tab or refreshing the current tab.</li> <li>3. Use Case resumes on Step 2.</li> </ol>
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has successfully viewed the detailed information for the selected medicine.</li> <li>2. The user can now make informed decisions regarding the medicine's critical information.</li> </ol>

<b>Use Case ID:</b>	10
<b>Use Case Name:</b>	Search Medicine
<b>Actors:</b>	Primary Actor: Catalog Viewer, Admin, Clerks
<b>Description:</b>	UC 4 represents the action of the primary actor clicking the search bar icon to initiate a search for a specific medicine. This allows primary actors to find and retrieve information about medicines based on the search queries.
<b>Trigger:</b>	The "Search Bar" Icon is clicked.
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The PharmaLogue System is accessible and functioning properly.</li> <li>3. The Catalogue Interface is accessed as is functioning properly.</li> </ol>
<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The user opens the application or website's homepage.</li> <li>2. The user locates and clicks on the "Catalog" button displayed on the homepage.</li> </ol>

	<ol style="list-style-type: none"> <li>3. The system redirects the user to the catalog interface or loads the catalog section.</li> <li>4. The catalog interface is displayed, presenting a grid of medicines available for browsing on the right side, categories on the left, and a search bar near the navigation panel.</li> <li>5. The system presents the Catalog Interface.</li> <li>6. The user navigates the Catalog Interface specifically in the Medicine Comparison Container.</li> <li>7. The user locates the search bar icon in the Catalog Interface.</li> <li>8. The user clicks on the search bar, activating it for text input.</li> <li>9. The user enters a search query related to the medicine they are interested in.</li> <li>10. The user submits the search query by pressing the enter key.</li> <li>11. The system receives the search query from the user.</li> <li>12. The system processes the search query and performs a search operation based on the provided query.</li> <li>13. The system retrieves relevant search results from the database or external sources.</li> <li>14. The system generates a search results page, listing the medicines that match or closely match the search query.</li> <li>15. The system sends and displays the result page to the Catalog Interface.</li> <li>16. The user reviews the results.</li> <li>17. The user may click on a specific search result, or perform another search by doing the previous step from Step 6 onwards.</li> </ol>
<b>Alternative Flows:</b>	<p>5a. In Step 5 of the Normal Flow, if the user submits the search query and the medicine the user is trying to access isn't on the database.</p> <ol style="list-style-type: none"> <li>1. The system retrieves the information from the database.</li> <li>1. The system will prompt an error message if the medicine isn't found in the database.</li> <li>2. User clicks the "Return Button".</li> </ol>

	<p>3. The Use Case resumes back to Step 1 or closes the application.</p>
<b>Exceptions:</b>	<p>1a. In Step 1 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the catalog interface.</p> <ol style="list-style-type: none"> <li>1. The user will experience a delay in loading the catalog interface.</li> <li>2. Users may need to retry accessing the catalog homepage by opening it in a new tab or refreshing the current tab.</li> <li>3. Use Case resumes on Step 4.</li> </ol>
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has successfully obtained search results related to the entered search query.</li> <li>2. The user can proceed to view detailed information about specific medicines or perform further actions based on the search results.</li> </ol>

<b>Use Case ID:</b>	<b>11</b>
<b>Use Case Name:</b>	<b>View Accounts</b>
<b>Actors:</b>	<b>ADMIN, Clerk</b>
<b>Description:</b>	UC11 represents the action of accessing the specific interfaces of the administrative personnel. This allows the pharmacy admin and clerk to log into their respective accounts in order to conduct changes to the information displayed in the catalog interface.
<b>Trigger:</b>	The "Accounts" Button in the Navigation Bar is Clicked
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The PharmaLogue System is accessible and functioning properly.</li> <li>3. The Catalogue Interface is accessed as is functioning properly.</li> <li>4. The user must be an authenticated staff of the pharmacy.</li> </ol>

<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The user opens the application or website's homepage.</li> <li>2. The user locates the navigation bar.</li> <li>3. The user clicks the Accounts.</li> <li>4. The system will display the dropdown for "User-Type" validation.</li> </ol>
<b>Alternative Flows:</b>	<b>None.</b>
<b>Exceptions:</b>	<p>1a. In Step 1 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the resources needed.</p> <ol style="list-style-type: none"> <li>1. The user will experience a delay in loading the homepage.</li> <li>2. Users may need to retry accessing the homepage by opening it in a new tab or refreshing the current tab.</li> <li>3. Use Case resumes on Step 2.</li> </ol>
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has successfully discovered the entry point for administrative staff.</li> <li>2. The user chooses his user-type.</li> <li>3. The user will be redirected to a page for log in or registration.</li> </ol>

<b>Use Case ID:</b>	12
<b>Use Case Name:</b>	Sign Up
<b>Actors:</b>	Admin, Clerks
<b>Description:</b>	UC7 represents the action of a user creating a new account on a platform or application. This use case allows pharmacy admin and clerks to register themselves as new members that are authorized to use the system.
<b>Trigger:</b>	The "create an account" link is clicked within the Login Form.
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The PharmaLogue Login System - Registration Interface is accessed and functioning properly.</li> </ol>

	<p>3. The admin or clerk is guaranteed to be first time users of the system.</p>
<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The user explores the webpage and identifies the accounts option in the navigation bar.</li> <li>2. The user clicks the "Accounts" Category.</li> <li>3. Once clicked, the system will display the dropdown containing the classification category.</li> <li>4. The user will click the Admin/Clerk Option depending on their designated roles.</li> <li>5. The system will direct the user to the Log-In Interface.</li> <li>6. The system will present the user with a Log-In Form containing personal information.</li> <li>7. The user clicks the "Create an Account" option.</li> <li>8. The system will direct the user to the Sign-up/Registration Interface.</li> <li>9. The system will present the user with a registration form to enter their personal information.</li> <li>10. The user enters the required information into the respective fields.</li> <li>11. The user submits the registration form by clicking the Sign-Up Button.</li> <li>12. The system creates a new user account associated with the provided credentials, once passed the validation.</li> <li>13. The system confirms the successful creation of the account.</li> <li>14. The system redirects the user to the Log-In interface, indicating that the sign-up process is complete.</li> </ol>
<b>Alternative Flows:</b>	<b>none.</b>
<b>Exceptions:</b>	<p>1a. In Step 1 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the interface.</p> <ol style="list-style-type: none"> <li>1. The user will experience a delay in loading the catalog interface.</li> <li>2. Users may need to retry accessing the catalog homepage by opening it in a new tab or refreshing the current tab.</li> <li>3. Use Case resumes on Step 2.</li> </ol>

<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has successfully created an admin or clerk account on the platform or application.</li> <li>2. The user's account is active and ready to be used to access the administrative features and functionalities of the system.</li> </ol>
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<b>Use Case ID:</b>	<b>13</b>
<b>Use Case Name:</b>	<b>Log In</b>
<b>Actors:</b>	<b>Admin</b>
<b>Description:</b>	<b>UC8 represents the action of a pharmacy admin user accessing the administrative interface of the system. This enables the admin to authenticate themselves and gain access to administrative features for information management.</b>
<b>Trigger:</b>	<b>The “Admin” option within the Account Drop Down in the navigation panel is clicked.</b>
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The PharmaLogue Login System - Registration Interface is accessed and functioning properly.</li> <li>3. The admin has a valid admin account registered on the platform.</li> </ol>
<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The user explores the webpage and identifies the accounts option in the navigation bar.</li> <li>2. The user clicks the “Accounts” Category.</li> <li>3. Once clicked, the system will display the dropdown containing the user classification category.</li> <li>4. The user will select the admin option by clicking the admin category.</li> <li>5. The system will direct the user to the Log-In Interface.</li> <li>6. The system will present the user with a Log-In Form containing the login fields (Email Address associated with the</li> </ol>

	<p>admin account &amp; Password for the admin account)</p> <ol style="list-style-type: none"> <li>7. The admin user enters the email address and password into the respective login fields.</li> <li>8. The system validates the login credentials stored in the system's database.</li> <li>9. The system redirects the admin to the admin interface.</li> <li>10. The admin user gains access to the administrative features.</li> <li>11. The admin user can perform administrative tasks: Updating, Adding, and Deleting of Medicine Information &amp; Adding and Deleting of Medicine Category.</li> <li>12. The admin user can log out from the admin interface whenever they want to terminate their access.</li> </ol>
<b>Alternative Flows:</b>	<p>8a. In Step 8 of the normal flow. If the admin user enters invalid login credentials.</p> <ol style="list-style-type: none"> <li>1. The system will display an error message.</li> <li>2. The system will prompt the admin user to re-enter correct credentials.</li> <li>3. The Use Case will go back to Step 6 and will resume from there.</li> </ol>
<b>Exceptions:</b>	<p>1a. In Step 1 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the interface.</p> <ol style="list-style-type: none"> <li>1. The user will experience a delay in loading the catalog interface.</li> <li>2. Users may need to retry accessing the catalog homepage by opening it in a new tab or refreshing the current tab.</li> <li>3. Use Case resumes on Step 2.</li> </ol>
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. The admin user has successfully logged into the admin interface.</li> <li>2. The admin now has access to administrative features:</li> </ol>

<b>Use Case ID:</b>	13
<b>Use Case Name:</b>	Log In
<b>Actors:</b>	Clerks
<b>Description:</b>	UC9 represents the action of a pharmacy clerk user accessing the administrative interface of the system. This enables the admin to authenticate themselves and gain access to administrative features for information management.
<b>Trigger:</b>	The “Clerk” option within the Account Drop Down in the navigation panel is clicked.
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The PharmaLogue Login System - Registration Interface is accessed and functioning properly.</li> <li>3. The pharmacy clerks have a valid clerk account registered on the platform.</li> </ol>
<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The user explores the webpage and identifies the accounts option in the navigation bar.</li> <li>2. The user clicks the “Accounts” Category.</li> <li>3. Once clicked, the system will display the dropdown containing the user classification category.</li> <li>4. The user will select the clerk option by clicking the admin category.</li> <li>5. The system will direct the user to the Log-In Interface.</li> <li>6. The system will present the user with a Log-In Form containing the login fields (Email Address associated with the admin account &amp; Password for the admin account)</li> <li>7. The clerk user enters the email address and password into the respective login fields.</li> <li>8. The system validates the login credentials stored in the system’s database.</li> <li>9. The system redirects the clerk to the clerk interface.</li> <li>10. The clerk user gains access to the administrative features.</li> </ol>

	<ul style="list-style-type: none"> <li>11. The clerk user can perform administrative tasks: Editing the quantity of medicines that are available in their respective branches.</li> <li>12. The clerk user can log out from the clerk interface whenever they want to terminate their access.</li> </ul>
<b>Alternative Flows:</b>	<p>8a. In Step 8 of the normal flow. If the admin user enters invalid login credentials.</p> <ul style="list-style-type: none"> <li>1. The system will display an error message.</li> <li>2. The system will prompt the admin user to re-enter correct credentials.</li> <li>3. The Use Case will go back to Step 6 and will resume from there.</li> </ul>
<b>Exceptions:</b>	<p>1a. In Step 1 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the interface.</p> <ul style="list-style-type: none"> <li>1. The user will experience a delay in loading the catalog interface.</li> <li>2. Users may need to retry accessing the catalog homepage by opening it in a new tab or refreshing the current tab.</li> <li>3. Use Case resumes on Step 2.</li> </ul>
<b>Postconditions:</b>	<ul style="list-style-type: none"> <li>1. The admin user has successfully logged into the admin interface.</li> <li>2. The admin now has access to administrative features:</li> </ul>

<b>Use Case ID:</b>	<b>14</b>
<b>Use Case Name:</b>	<b>View Admin Interface</b>
<b>Actors:</b>	<b>Admin</b>
<b>Description:</b>	14C involves logging into the system with administrative credentials and accessing a dedicated admin interface that provides administrative functionalities and controls. This allows pharmacy admin to perform CRUD by adding, creating, deleting medicine information and medicine category.

<b>Trigger:</b>	The “Log-in” Button is clicked.
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The PharmaLogue Login System - Registration Interface is accessed and functioning properly.</li> <li>3. The admin has a valid admin account registered on the platform.</li> <li>4. The credentials are verified and validated.</li> </ol>
<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The admin enters credentials in the login interface.</li> <li>2. Credentials got validated by the system.</li> <li>3. The admin interface is displayed, providing access to administrative functionalities, controls, and relevant information.</li> <li>4. The user can navigate through the admin interface to perform various administrative tasks: Creating new medicine/Adding new category, Updating current medicine, Deleting medicine/medicine category.</li> </ol>
<b>Alternative Flows:</b>	<b>None.</b>
<b>Exceptions:</b>	<p>1a. In Step 1 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the interface.</p> <ol style="list-style-type: none"> <li>4. The user will experience a delay in loading the catalog interface.</li> <li>5. Users may need to retry accessing the catalog homepage by opening it in a new tab or refreshing the current tab.</li> <li>6. Use Case resumes on Step 2.</li> </ol>
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. The user can navigate through the admin interface, access relevant information, and utilize the available tools and features based on their administrative role and privileges.</li> <li>2. The user can now perform updates.</li> </ol>

<b>Use Case ID:</b>	<b>15</b>
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<b>Use Case Name:</b>	<b>View Clerk Interface</b>
<b>Actors:</b>	Clerk
<b>Description:</b>	15C involves logging into the system with administrative credentials and accessing a dedicated clerk interface that provides administrative functionalities and controls. This allows pharmacy clerks to perform the updating of medicine stocks availability per branch.
<b>Trigger:</b>	The “Log-in” Button is clicked.
<b>Preconditions:</b>	<ul style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The PharmaLogue Login System - Registration Interface is accessed and functioning properly.</li> <li>3. The admin has a valid admin account registered on the platform.</li> <li>4. The credentials are verified and validated.</li> </ul>
<b>Normal Flows:</b>	<ul style="list-style-type: none"> <li>1. The clerk enters credentials in the login interface.</li> <li>2. Credentials got validated by the system.</li> <li>3. The clerk interface is displayed, providing access to administrative functionalities, controls, and relevant information.</li> <li>4. The user can navigate through the clerk interface to perform the updating of stock availability per medicine of that respective branch.</li> </ul>
<b>Alternative Flows:</b>	<b>None.</b>
<b>Exceptions:</b>	<p>1a. In Step 1 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the interface.</p> <ul style="list-style-type: none"> <li>1. The user will experience a delay in loading the catalog interface.</li> <li>2. Users may need to retry accessing the catalog homepage by opening it in a new tab or refreshing the current tab.</li> <li>3. Use Case resumes on Step 2.</li> </ul>
<b>Postconditions:</b>	<ul style="list-style-type: none"> <li>3. The user can navigate through the admin interface, access relevant information, and utilize the available tools and</li> </ul>

	<p>features based on their administrative role and privileges.</p> <p>4. The user can now perform updates.</p>
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<b>Use Case ID:</b>	<b>16</b>
<b>Use Case Name:</b>	<b>Update Medicine Information</b>
<b>Actors:</b>	Admin
<b>Description:</b>	UC16 allows the admin to modify the content of information to be displayed to the catalog's interface that is viewed by customers.
<b>Trigger:</b>	The "Edit" Button is clicked.
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The admin was granted access to the admin interface.</li> <li>3. The admin identifies medicine to modify.</li> </ol>
<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The authorized user opens the medical application or system and logs in with administrative credentials.</li> <li>2. The system will display the Admin interface,</li> <li>3. The user navigates to the section or page that lists medicines or manages medicine information.</li> <li>4. The user identifies the medicine for which they need to update the information.</li> <li>5. The user clicks on the "Update Medicine" button or selects an option to edit the medicine's details.</li> <li>6. The system displays a form or interface pre-populated with the current information of the medicine.</li> <li>7. The user modifies the relevant fields or sections of the form to update the medicine's information</li> <li>8. The user submits the updated information by clicking on the "Save" or "Update" button.</li> <li>9. The admin presses "Exit Button" to close</li> </ol>

	<p>the form.</p> <p>10. The system displays the changes to the admin table.</p> <p>11. The admin may repeat Step 2 onwards if there are more medicines left to be modified.</p>
<b>Alternative Flows:</b>	<b>None.</b>
<b>Exceptions:</b>	<p>1a. In Step 1 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the interface.</p> <p>4. The user will experience a delay in loading the catalog interface.</p> <p>5. Users may need to retry accessing the catalog homepage by opening it in a new tab or refreshing the current tab.</p> <p>6. Use Case resumes on Step 3.</p>
<b>Postconditions:</b>	<p>1. Admin users ensure that the medical application or system reflects the accurate and updated details of the medicine.</p>

<b>Use Case ID:</b>	17
<b>Use Case Name:</b>	Add Medicine
<b>Actors:</b>	Admin
<b>Description:</b>	UC17 allows the admin to add an actual unit of medicines to be displayed in the catalog's interface that can be viewed by customers.
<b>Trigger:</b>	The "Add" Button is clicked.
<b>Preconditions:</b>	<p>1. The user has a device with strong internet connectivity.</p> <p>2. The admin was granted access to the admin interface.</p> <p>3. The admin identifies medicine to add.</p>
<b>Normal Flows:</b>	<p>1. The authorized user opens the medical application or system and logs in with administrative credentials.</p> <p>2. The system will display the Admin</p>

	<p>interface,</p> <ol style="list-style-type: none"> <li>3. The user navigates to the section or page that lists medicines or manages medicine information.</li> <li>4. The user identifies the medicine for which they need to update the information.</li> <li>5. The user clicks on the "Add Medicine" button or selects an option to add a medicine.</li> <li>6. The system displays a form that needs to be filled in with information within the respective text labels.</li> <li>7. The user fills in the relevant fields or sections of the form to update the medicine's information.</li> <li>8. The user submits the updated information by clicking on the "Save" or "Add" button.</li> <li>9. The admin presses "Exit Button" to close the form.</li> <li>10. The system displays the changes to the admin table.</li> <li>11. The admin may repeat Step 2 onwards if there are more medicines left to be modified.</li> </ol>
<b>Alternative Flows:</b>	<b>None.</b>
<b>Exceptions:</b>	<p>1a. In Step 1 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the interface.</p> <ol style="list-style-type: none"> <li>1. The user will experience a delay in loading the catalog interface.</li> <li>2. Users may need to retry accessing the catalog homepage by opening it in a new tab or refreshing the current tab.</li> <li>3. Use Case resumes on Step 3.</li> </ol>
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. Admin users ensure that the medicines information is reliable.</li> <li>2. Admin may add more OTC medicines when needed or required by the management.</li> </ol>

Use Case ID:	18
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<b>Use Case Name:</b>	Delete Medicine
<b>Actors:</b>	Admin
<b>Description:</b>	UC18 allows the user's intention to remove the medicine from the system - where its purpose is to ensure that the system is free from unnecessary information.
<b>Trigger:</b>	The "Delete" Button is clicked.
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The admin was granted access to the admin interface.</li> <li>3. The admin identifies medicine to delete.</li> </ol>
<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The authorized user opens the medical application or system and logs in with administrative credentials.</li> <li>2. The system will display the Admin interface,</li> <li>3. The user navigates to the section or page that lists medicines or manages medicine information.</li> <li>4. The user identifies the medicine for which they need to remove.</li> <li>5. The user clicks on the "Delete Medicine" button.</li> <li>6. The system displays the changes to the admin table.</li> <li>7. The admin may repeat Step 2 onwards if there are more medicines left to be modified.</li> </ol>
<b>Alternative Flows:</b>	<b>None.</b>
<b>Exceptions:</b>	<p>1a. In Step 1 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the interface.</p> <ol style="list-style-type: none"> <li>1. The user will experience a delay in loading the catalog interface.</li> <li>2. Users may need to retry accessing the catalog homepage by opening it in a new tab or refreshing the current tab.</li> <li>3. Use Case resumes on Step 3.</li> </ol>
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. User ensures that the removed medicine is no longer available within the medical application or system.</li> </ol>

	<p>2. Users can verify the successful deletion of the medicine by visiting the catalog homepage or by checking the admin table.</p>
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<b>Use Case ID:</b>	19
<b>Use Case Name:</b>	Add Category
<b>Actors:</b>	Admin
<b>Description:</b>	UC19 allows the admin to expand the available categories and provide users with more options for organizing and accessing content or products.
<b>Trigger:</b>	The "Add" Button is clicked.
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The admin was granted access to the admin interface.</li> <li>3. The admin identifies the medicine category to add.</li> </ol>
<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The authorized user opens the medical application or system and logs in with administrative credentials.</li> <li>2. The system will display the Admin interface,</li> <li>3. The user navigates to the section or page that lists medicines or manages medicine information.</li> <li>4. The user identifies the medicine for which they need to update the information.</li> <li>5. The user clicks on the "Add Medicine Category" button or selects an option to add a medicine.</li> <li>6. The system displays a form that needs to be filled in with information within the respective text labels.</li> <li>7. The user fills in the relevant fields or sections of the form to update the medicine's information.</li> <li>8. The user submits the updated information by clicking on the "Save" or</li> </ol>

	<p>"Add" button.</p> <ol style="list-style-type: none"> <li>9. The admin presses "Exit Button" to close the form.</li> <li>10. The system displays the changes to the admin table.</li> <li>11. The admin may repeat Step 2 onwards if there are more medicines left to be modified.</li> </ol>
<b>Alternative Flows:</b>	<b>None.</b>
<b>Exceptions:</b>	<p>1a. In Step 1 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the interface.</p> <ol style="list-style-type: none"> <li>1. The user will experience a delay in loading the catalog interface.</li> <li>2. Users may need to retry accessing the catalog homepage by opening it in a new tab or refreshing the current tab.</li> <li>3. Use Case resumes on Step 3.</li> </ol>
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. Admin users ensure that the medicines information is reliable.</li> <li>2. Admin may add another category when more OTC medicines are needed or required by the management.</li> </ol>

<b>Use Case ID:</b>	<b>20</b>
<b>Use Case Name:</b>	<b>Delete Category</b>
<b>Actors:</b>	Admin
<b>Description:</b>	UC18 allows the user's intention to remove the medicine category from the system - where its purpose is to ensure that the system is free from unnecessary information.
<b>Trigger:</b>	The "Delete" Button is clicked.
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The admin was granted access to the admin interface.</li> <li>3. The admin identifies the medicine category to delete.</li> </ol>

<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The authorized user opens the medical application or system and logs in with administrative credentials.</li> <li>2. The system will display the Admin interface,</li> <li>3. The user navigates to the section or page that lists medicines or manages medicine information.</li> <li>4. The user identifies the medicine for which they need to remove.</li> <li>5. The user clicks on the "Delete Medicine Category" button.</li> <li>6. The system displays the changes to the admin table.</li> <li>7. The admin may repeat Step 3 onwards if there are more medicines left to be modified.</li> </ol>
<b>Alternative Flows:</b>	<b>None.</b>
<b>Exceptions:</b>	<p>1a. In Step 1 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the interface.</p> <ol style="list-style-type: none"> <li>1. The user will experience a delay in loading the catalog interface.</li> <li>2. Users may need to retry accessing the catalog homepage by opening it in a new tab or refreshing the current tab.</li> <li>3. Use Case resumes on Step 2.</li> </ol>
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>3. User ensures that the removed medicine is no longer available within the medical application or system.</li> <li>4. Users can verify the successful deletion of the medicine by visiting the catalog homepage or by checking the admin table.</li> </ol>

<b>Use Case ID:</b>	<b>21</b>
<b>Use Case Name:</b>	<b>Update Quantity</b>
<b>Actors:</b>	Clerk
<b>Description:</b>	UC21 allows the respective clerks from the different branches to update the stocks

	availability per medicines displayed in the catalog system.
<b>Trigger:</b>	The "Edit" Button is clicked.
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The admin was granted access to the admin interface.</li> <li>3. The admin identifies medicine to modify.</li> </ol>
<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The authorized user opens the medical application or system and logs in with administrative credentials.</li> <li>2. The system will display the Admin interface,</li> <li>3. The user navigates to the section or page that lists medicines or manages medicine information.</li> <li>4. The user identifies the medicine for which they need to update the information.</li> <li>5. The user clicks on the "Update Medicine Quantity" button or selects an option to edit the medicine's details.</li> <li>6. The system displays a form.</li> <li>7. The user modifies the quantity of stocks.</li> <li>8. The user submits the updated information by clicking on the "Save" or "Update" button.</li> <li>9. The admin presses "Exit Button" to close the form.</li> <li>10. The system displays the changes to the admin table.</li> <li>11. The admin may repeat Step 2 onwards if there are more medicines left to be modified.</li> </ol>
<b>Alternative Flows:</b>	<b>None.</b>
<b>Exceptions:</b>	<p>1a. In Step 1 of the Normal Flow, if there's an issue with the system or network connectivity and couldn't generate the interface.</p> <ol style="list-style-type: none"> <li>1. The user will experience a delay in loading the catalog interface.</li> <li>2. Users may need to retry accessing the catalog homepage by opening it in a new tab or refreshing the current tab.</li> <li>3. Use Case resumes on Step 3.</li> </ol>

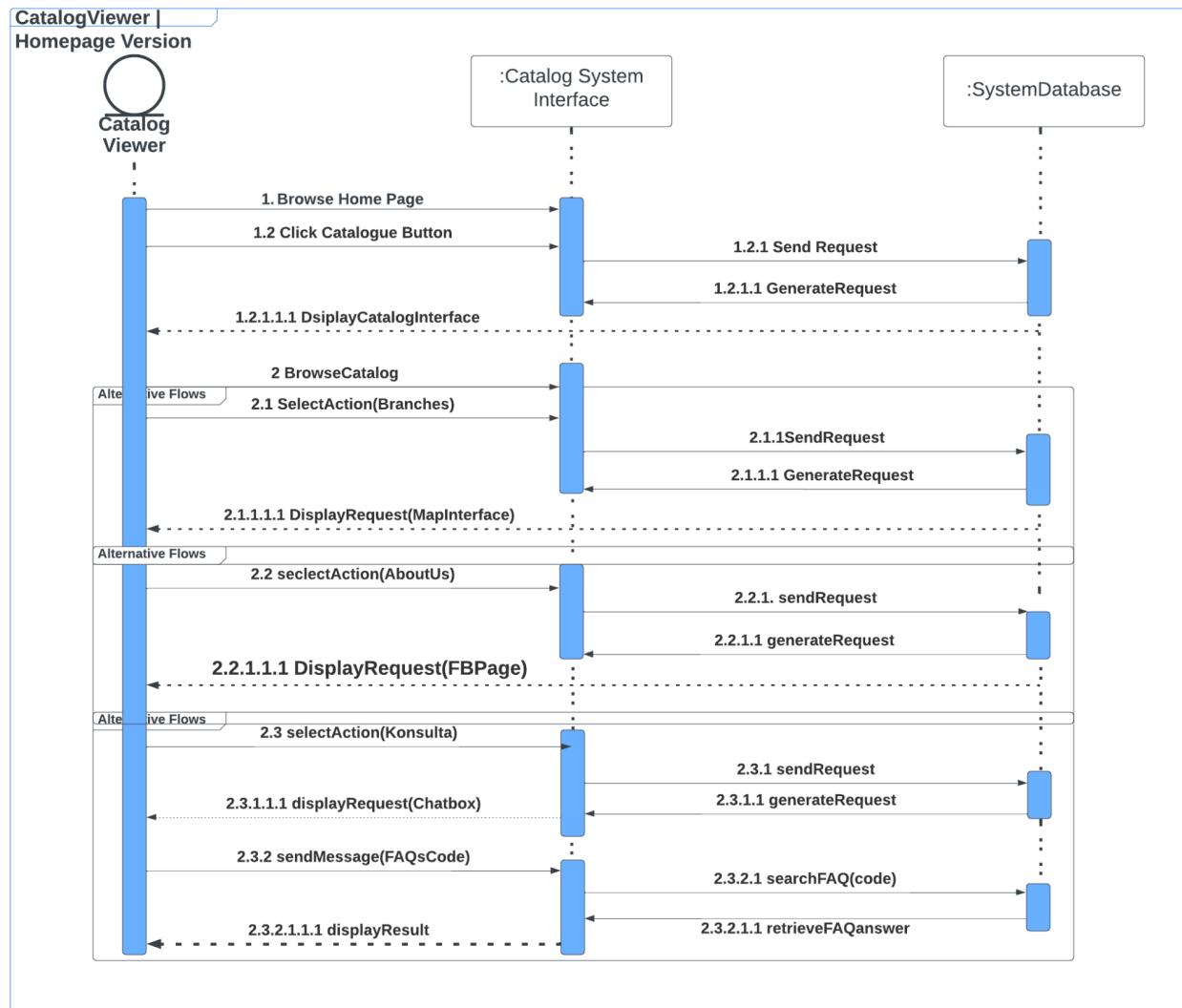
<b>Postconditions:</b>	<ol style="list-style-type: none"> <li>1. Admin users ensure that the medical application or system reflects the accurate and updated details of the medicine.</li> </ol>
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<b>Use Case ID:</b>	<b>22</b>
<b>Use Case Name:</b>	<b>Log Out</b>
<b>Actors:</b>	<b>ADMIN, Clerk</b>
<b>Description:</b>	UC22 allows the user's intention to end the current session and securely log out of the system.
<b>Trigger:</b>	<b>When the "LogOut" Button is clicked.</b>
<b>Preconditions:</b>	<ol style="list-style-type: none"> <li>1. The user has a device with strong internet connectivity.</li> <li>2. The user is granted access to the system.</li> <li>3. The user is done using the system for administrative use.</li> </ol>
<b>Normal Flows:</b>	<ol style="list-style-type: none"> <li>1. The user is currently logged into the application or website.</li> <li>2. The user navigates to the account or profile settings section of the application.</li> <li>3. The user identifies the "Log Out" button or a similar option within the account settings.</li> <li>4. The user clicks on the "Log Out" button to initiate the log out process.</li> <li>5. The system terminates the user's session and clears any user-specific data or information stored locally.</li> <li>6. The system redirects the user to the application's homepage.</li> </ol>
<b>Alternative Flows:</b>	<p><b>6a. In Step 6 of the normal flow, the user might want to log in:</b></p> <ol style="list-style-type: none"> <li>1. Repeat the steps under UC1.</li> <li>2. Repeat the steps under UC11.</li> <li>3. Repeat the steps under UC13</li> </ol>
<b>Exceptions:</b>	<p><b>1a. In Step 1 of the Normal Flow, if there's an issue with the system or network connectivity</b></p>

	<p>and couldn't generate the interface.</p> <ul style="list-style-type: none"><li>1. The user might experience session timeout due to inactivity or the system might abruptly log them out without requiring explicit user action.</li><li>2. Network/Server Failure.</li></ul>
<b>Postconditions:</b>	<ul style="list-style-type: none"><li>1. The user can no longer access their account or perform any actions requiring authentication.</li></ul>

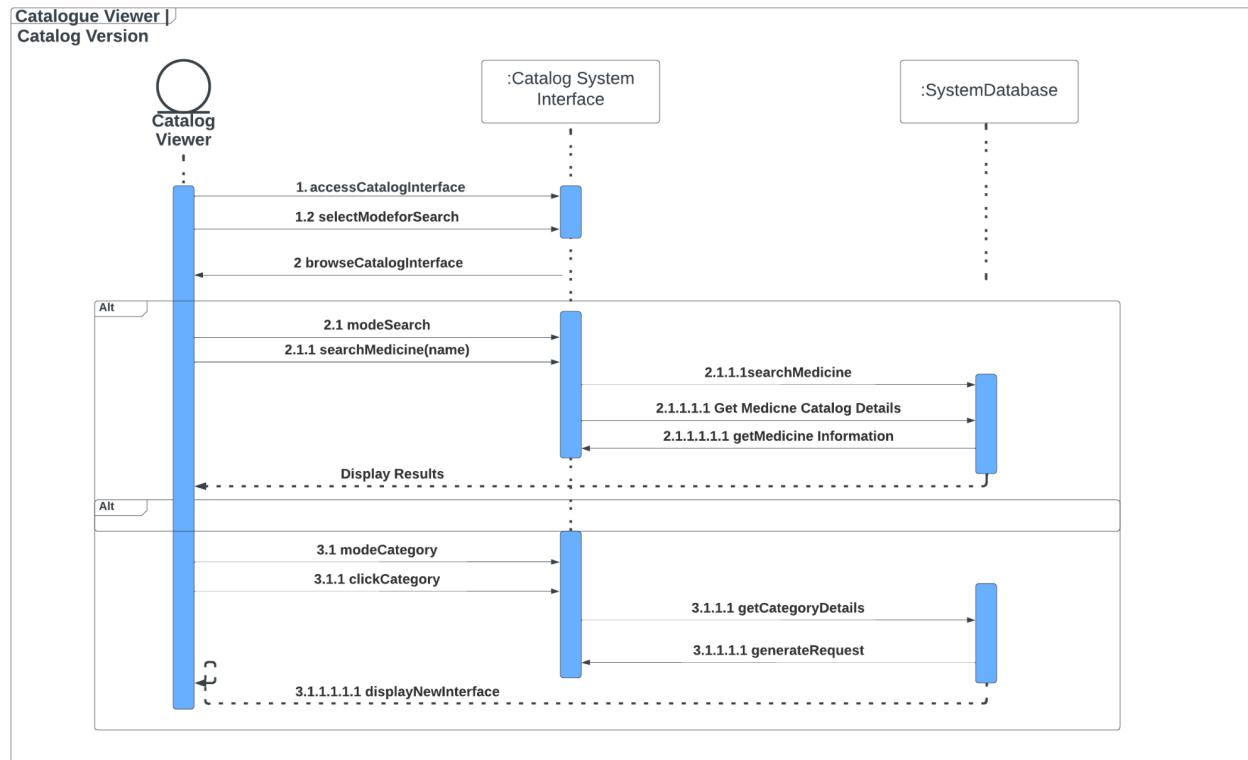
## 5.2 Sequence Diagram

A sequence diagram is a type of UML (Unified Modeling Language) diagram that depicts the interactions between objects or components within a system over a specific period of time. It provides a visual representation of the flow of messages or method calls between different entities involved in a particular scenario or use case.



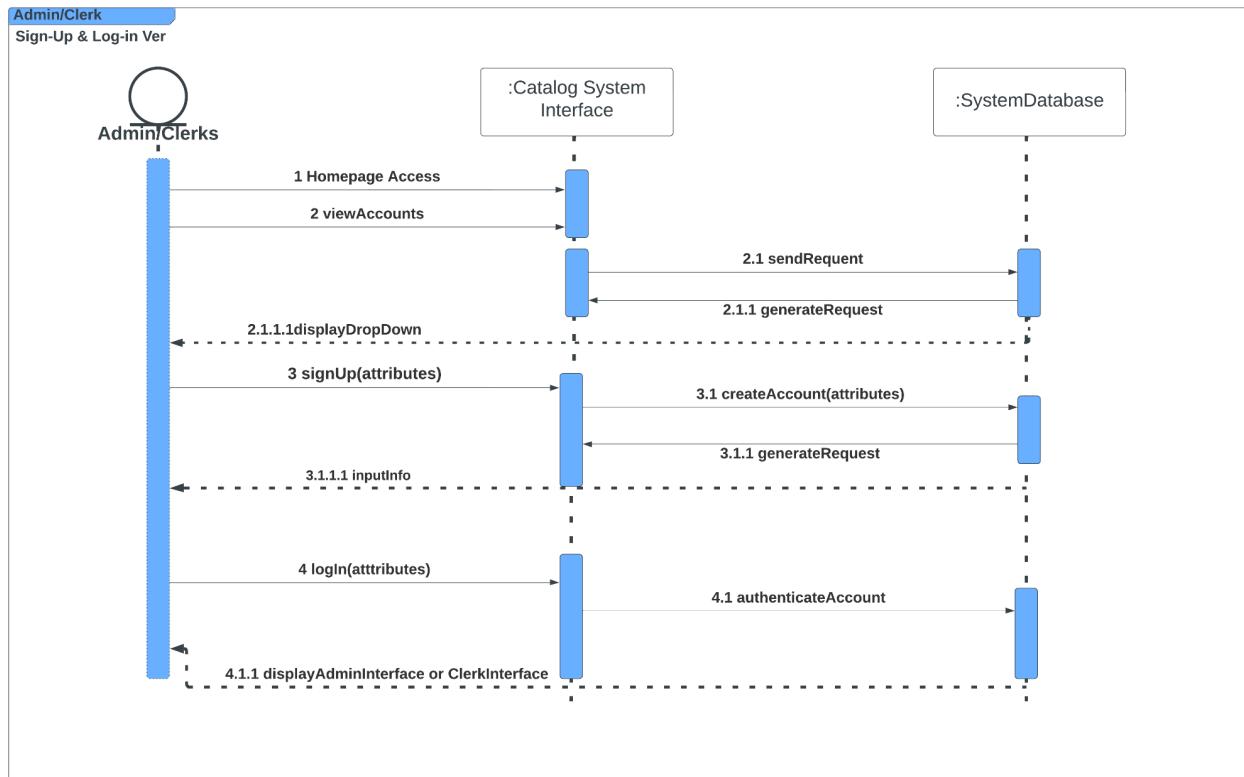
**Figure 1.** Sequence Diagram (Homepage)

For this figure, the entities involved are the actor, the system interface, and the system's database. Use cases utilized for this diagram involve viewing the homepage, viewing of the catalog interface, viewing about us, viewing the Konsulta features, and viewing of the maps. This scenario only limits the use cases performed in the Homepage Interface.



**Figure 2. Sequence Diagram (Catalog View)**

For this figure, the entities involved are the actor, the system interface, and the system's database. Use cases utilized for this diagram involve viewing the medicine containers - containing the different medicines having essential comparative information, then the viewing of categories. Also in this scenario, the use cases of searching a medicine, selecting category, selecting a medicine, and selecting medicine information are performed.



**Figure 3. Sequence Diagram (Sign In and Log In of Staff)**

For this figure, the entities involved are the actor, the system interface, and the system's database. Use cases utilized for this diagram are the use cases for signing and logging in an account. This includes accessing the homepage, selecting accounts, then selecting the user preference, then logging in for authorized users and signing up for first time administrative staff users.

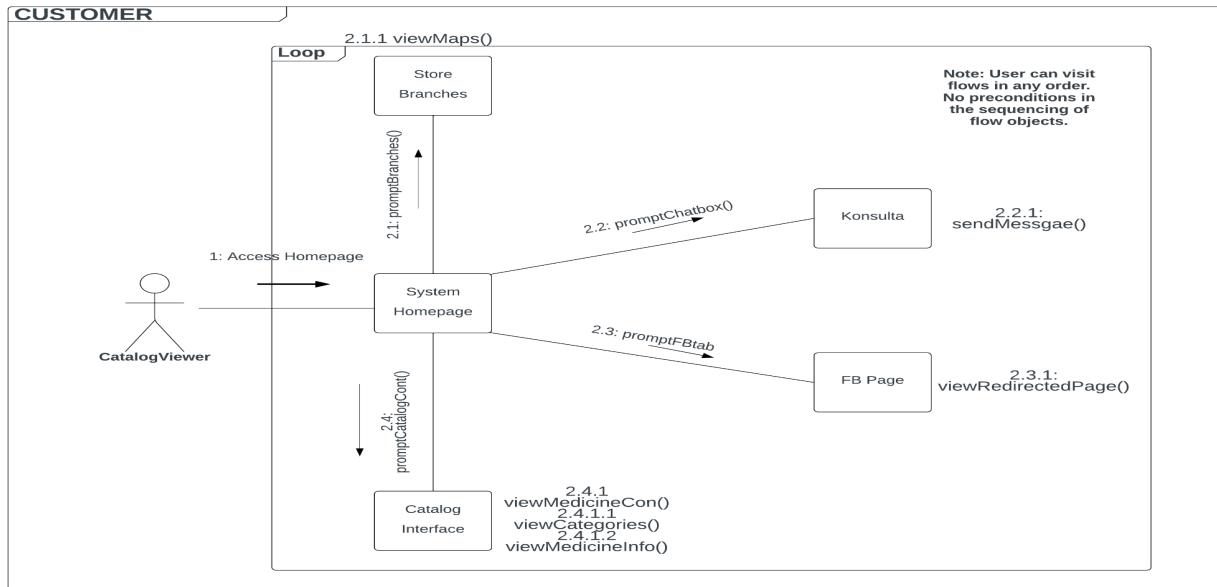
**Figure 4. Sequence Diagram (CRUD)**

For this figure, the entities involved are the actor, the system interface, and the system's database. Use cases utilized for this diagram are the use cases for performing administrative tasks like: add and delete medicine and medicine category, update medicine information and stock availability per branch.

### 5.3 Collaboration Diagram

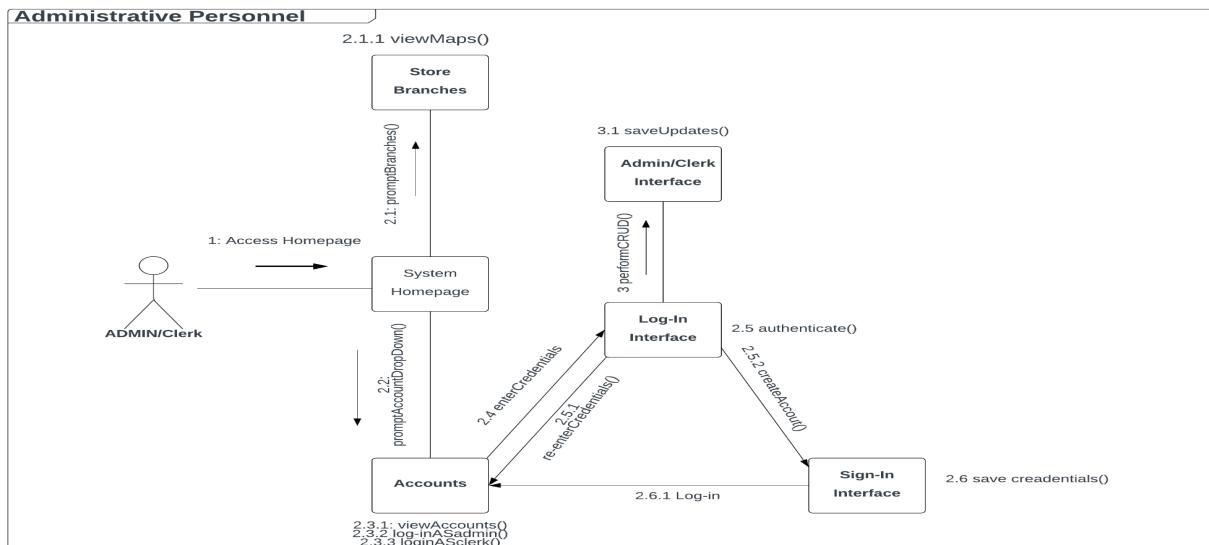
A collaboration diagram, also known as a communication diagram, is a visual representation that illustrates the interactions and relationships among objects or components in a system. It emphasizes the messages exchanged between objects to accomplish a particular task or achieve a specific goal.

Figures 1 and 2 illustrated under in this section contains two different diagrams, Figure 1 is intended for the Catalog Viewer perspective and Figure 2 is intended for the administrative personnel who have the administrative features of doing administrative tasks in order to manage the information to be displayed in the catalog/customer's view.



**Figure 1. Collaboration Diagram (Catalog Viewer)**

In this figure, the perspective is composed of one actor and 5 objects are interrelated responsible for the interactions and exchange of information. The actor visits first the System Homepage and from there onward there are different possible starting flows - and every flow the actor chooses entails specific actions and specific messages returned back to the customer/catalog viewer's screens.



**Figure 2: Collaboration Diagram (ADMIN/Clerk)**

In this figure, the perspective is composed of one actor and 5 objects are interrelated responsible for the interactions and exchange of information. The actor visits first the System Homepage and from there onward there are two different unique starting flows - the user might want to check the branches, then the other flow includes the logging in of account and performing CRUD queries from that point onwards in order to perform the administrative tasks.

## 6. Data Models

This part of the paper consists of the diagrams of the system which visualizes the system's entities and how they relate with each other as well as other components of the system. The following diagrams identified is/are an Entity-Relationship Diagram (ERD), class diagram, context diagram, component diagram, and a package diagram.

### 6.1 Entity-Relationship Diagram

An entity relationship diagram (ERD) is a visual representation used in database architecture to show the logical links between entities. It gives a clear and succinct overview of the relationships between various entities, illuminating the relationships, dependencies, and interactions present in a database system. It is a useful tool for creating and visualizing intricate databases, guaranteeing data accuracy, and laying the groundwork for effective data management.

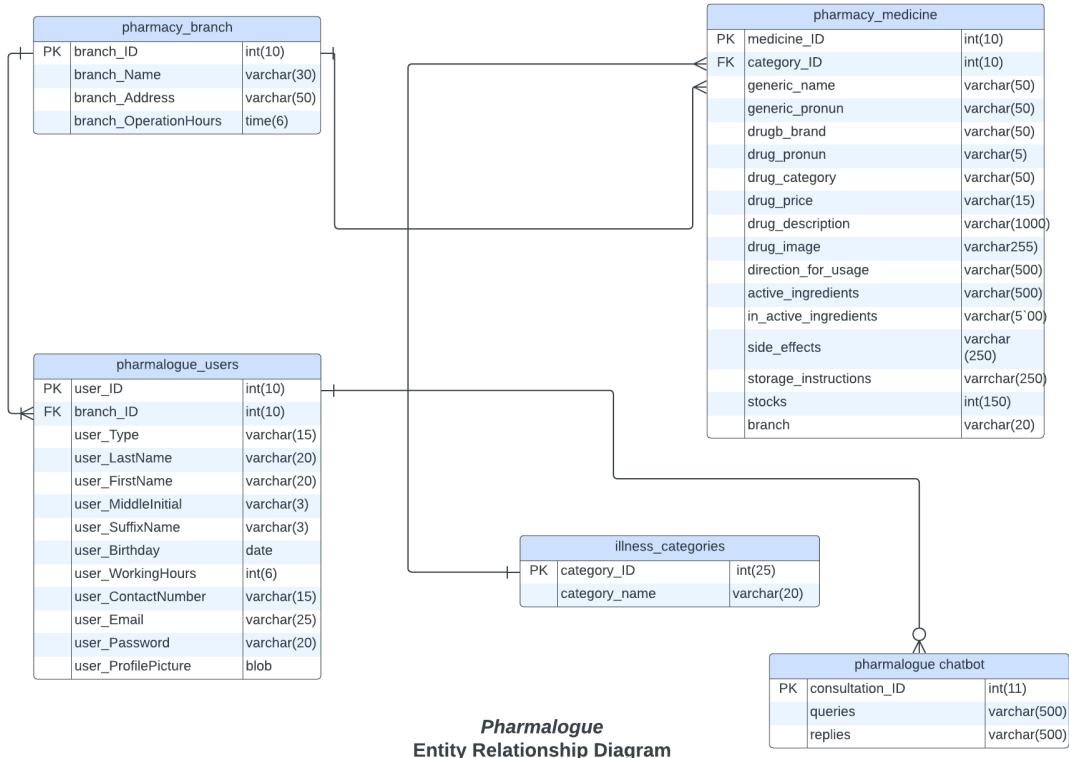


Figure. 1. Entity Relationship Diagram (ERD)

This diagram shows the entities of the system, its attributes, and it shows how the entities relate to each other. Pharmalogue, we have entities labeled as **pharmacy\_branch**, **pharmacy\_users**, **pharmacy\_medicine**, **illness\_categories**, and **Pharmalogue chatbot**. The entity **pharmacy\_branch** has a one-to-many relationship with **pharmacy\_users** since one branch may have multiple users which includes the assigned clerks in that branch. It also has a one-to-many relationship with the entity **pharmacy\_medicine** since one multiple medicines are stored in a single pharmacy. **Pharmacy\_users**

has one-to-many cardinality with Pharmalogue chatbot since a single user can access the automated chatbot with FAQs. The entity illness\_category has a one-to-many relationship with pharmacy\_medicine because multiple medicines could be stored in a single category.

## 6.2 Class Diagram

A class diagram is a visual representation that shows the structure and connections between classes. It displays the various classes, along with their features, functionalities, and connections. It serves as a blueprint for developing software systems, enabling developers to comprehend the general structure and behavior of a system by utilizing boxes to represent classes and lines to denote relationships. A Class Diagram facilitates effective software development, maintenance, and documentation by assisting in the identification of the primary classes, their properties, and the relationships between objects.

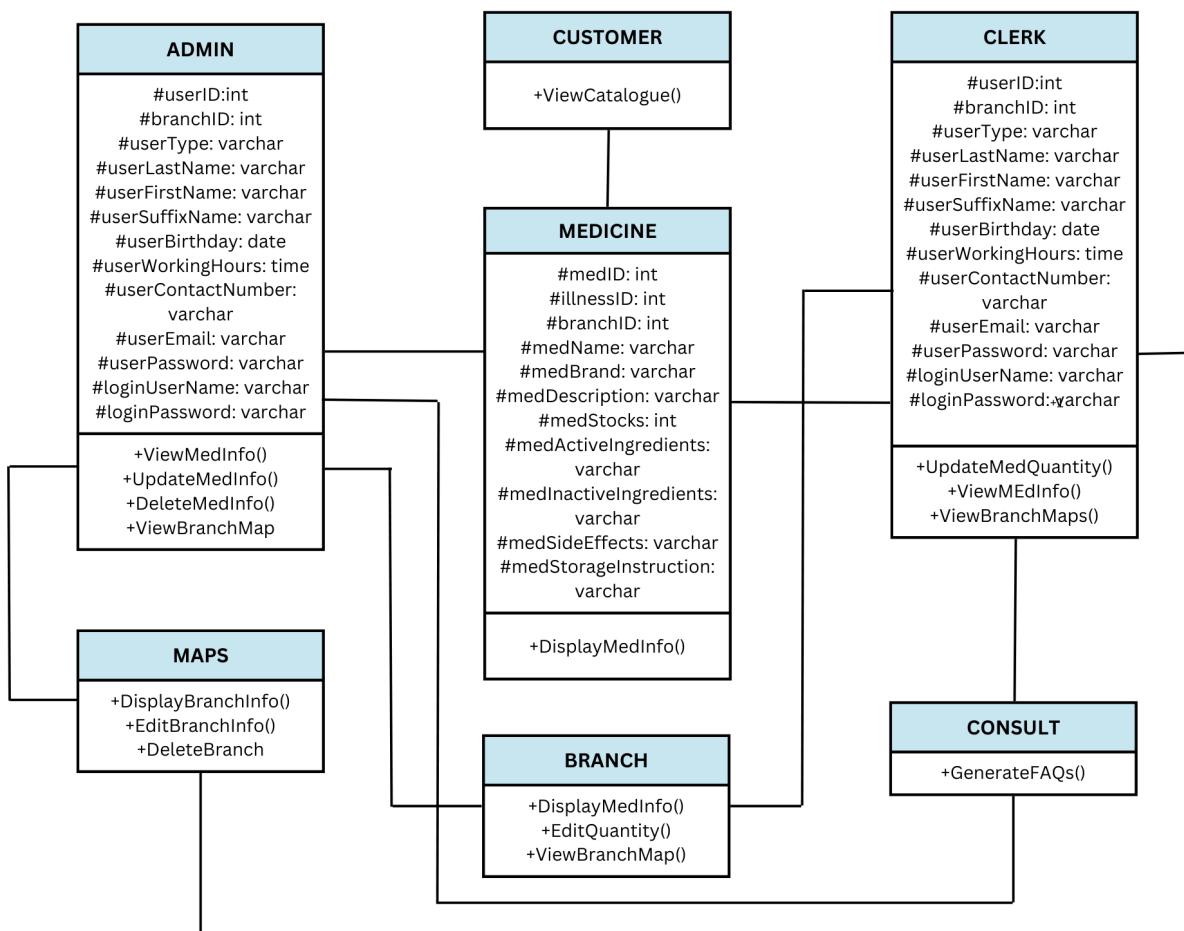


Figure. 2. Class Diagram

The above diagram shows Pharmalogue's Class Diagram. It contains the classes Admin, Maps, Customer, Medicine, Branch, Clerk, and Consult. Each of the classes has their own unique attributes which are protected, public, or private. The Admin class has the operations +ViewMedInfo(), +UpdateMedInfo(), +DeleteMedInfo(), and +ViewBranchMap() which are the main activities the user Admin could do in the web application. The Medicine class has its operation that displays

information regarding medicine data input. The Clerk class has the same attributes as the Admin user only that the Clerk Class is limited to the operation that is to update the quantity of medicines. The diagram also consists of the classes Maps, which mainly operates to manage branch map features, the Branch class, which pertains to the Clerk's class user interface access, and the Consult class which generates automated FAQs.

### 6.3 Context Diagram

A context diagram is a visual representation that shows external elements and their interactions with a system. The system boundaries and the connections between the system and its external entities, such as users, other systems, or external data sources, are high-level overviews provided. The Context Diagram aids in comprehending the overall system architecture, establishing the system's boundaries, and specifying the interfaces with other entities by concentrating on interactions at a high level.

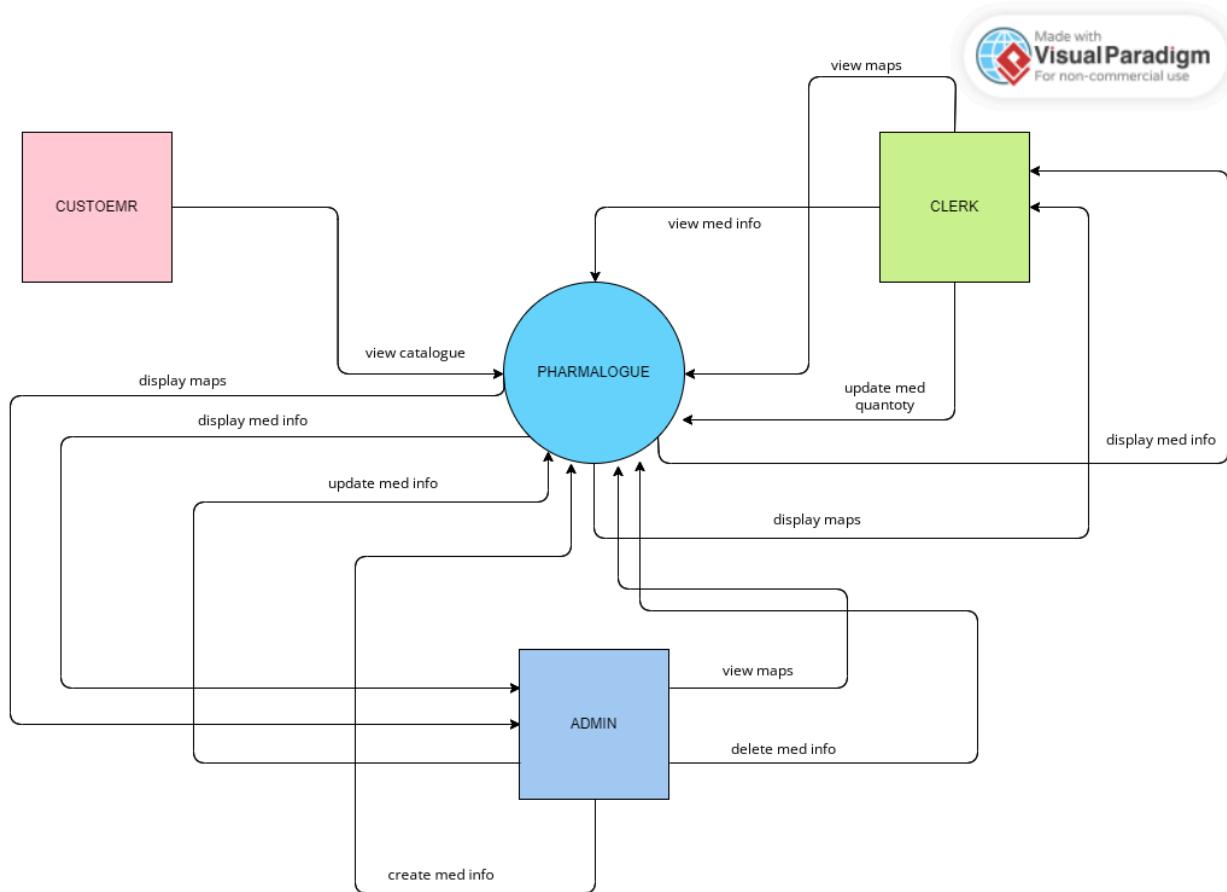


Figure. 3. Context Diagram

The above diagram shows how external entities interact with the system. In our end, these external environments refers to the system's different users - the Customer, Clerk, and Admin. The Admin entity interacts with the system through updating, deleting, and creating med information. In return, the system itself displays the following changes and data inputs. The Clerk entity interacts with the system the same thing as how the Admin interacts except that the Clerk can only update the quantity's side of the medicine information. Likewise, the system displays the changes

from this interaction. Meanwhile, the Customer entity has lesser interaction with the system which is just mainly to view the catalogue end of the system.

## 6.4 Component Diagram

A component diagram is a type of visual representation used in software engineering to show the linkages and high-level structure of a system's or software application's component parts. It emphasizes on the system's modular building elements, like classes, libraries, modules, or executable files, and demonstrates how they interact and work together to fulfill the functionality of the system. The Component Diagram facilitates system analysis, design, and documentation by graphically displaying the components and their relationships. This facilitates effective communication between stakeholders and developers.

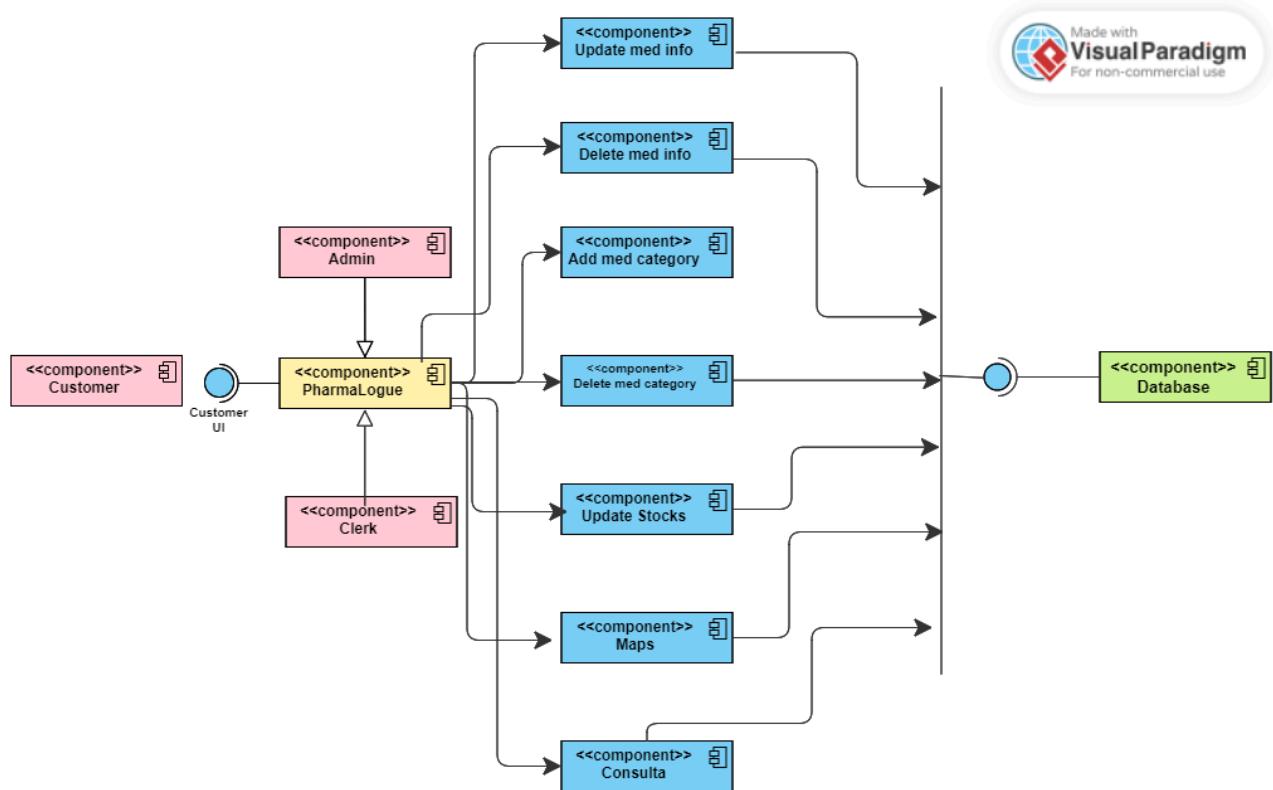


Figure 4. Component Diagram

The components present in the web-based application Pharmalogue are as follows: the Pharmalogue system, Customer, Admin, Clerk; the Update, Delete, and Edit components, and the Map and Consulta. All of these components are stored in the database. The customer feeds with the information provided by these components. The Admin and Clerk are the ones who interacts and input data into the system. And the Pharmalogue component which consists of the other components stores and retrieves these data from the database.

## 6.5 Package Diagram

A package diagram is a visual representation used in software modeling to organize and show the structure of a system or software program. It depicts the various packages or modules that make up the system, highlighting the connections, dependencies, and interactions between them. Packages are used to organize and provide a higher degree of abstraction for related classes, components, or subsystems. The Package Diagram assists in the modularization, encapsulation, and management of the complexity of large-scale software systems by giving a clear picture of the system's structure. For system design, communication, and documentation, it is a useful tool.

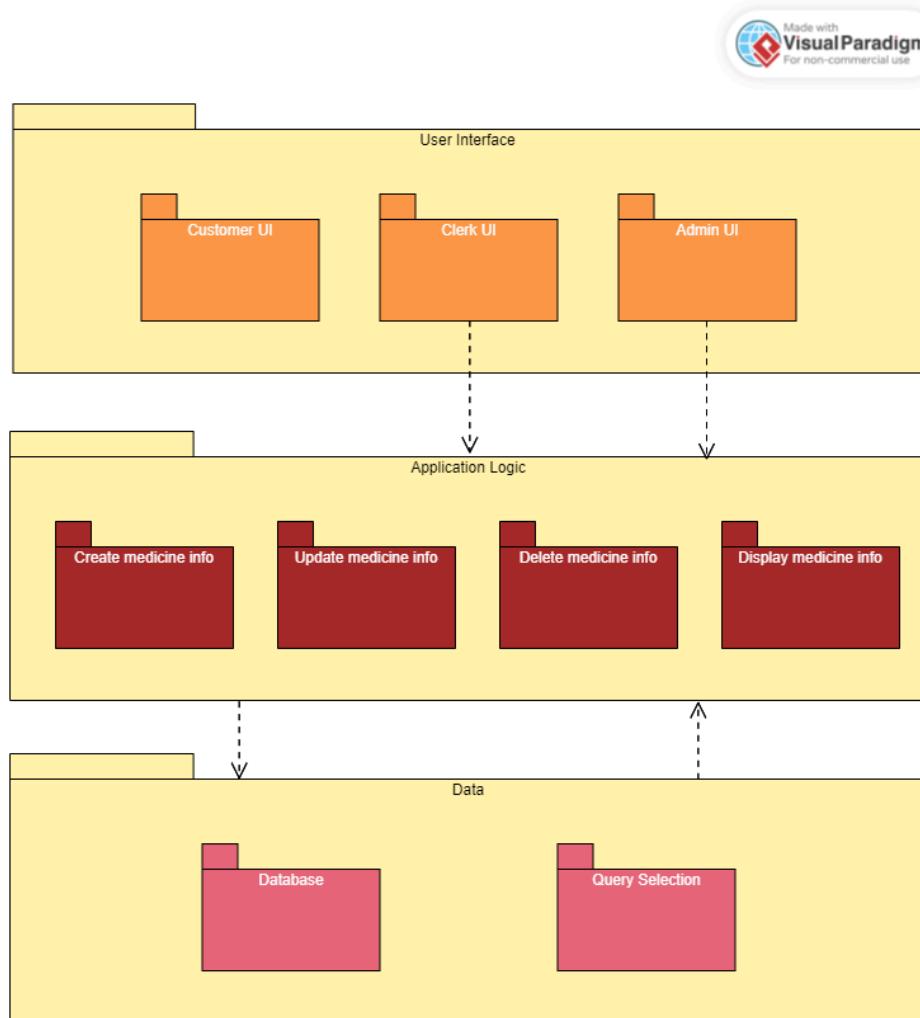


Figure. 5. Package Diagram

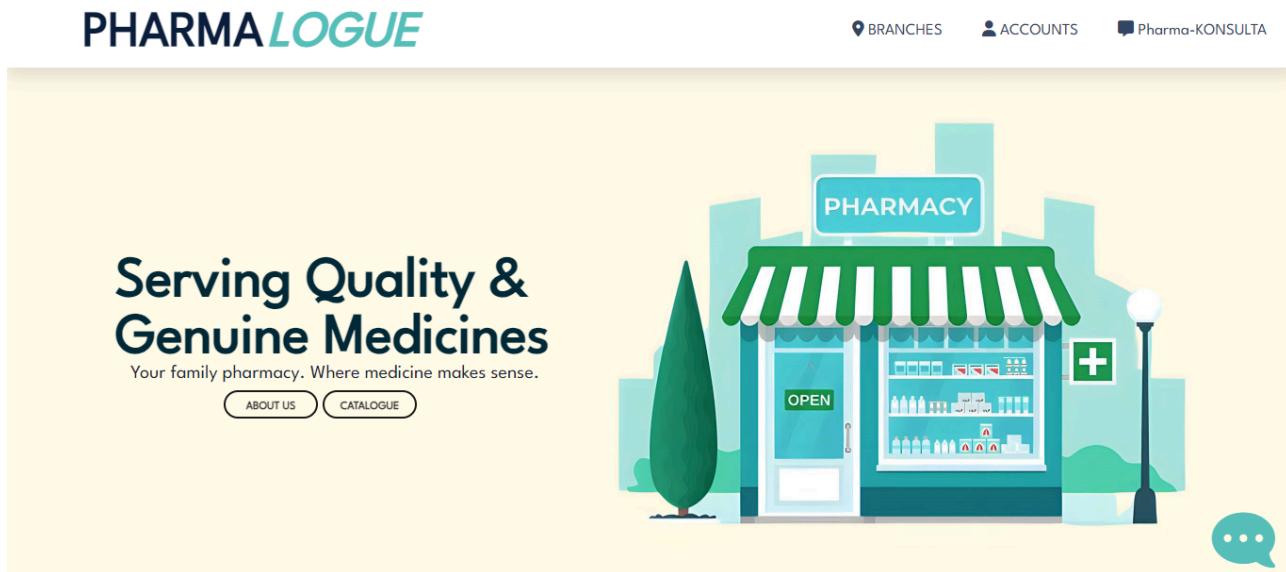
This diagram illustrates the packages containing the Pharmalogue system. The diagram consists of the packages User Interface, Application Logic, and Data. The User Interface package is where the main users of the system connects with the system and interacts. The application logic consists of the main function of the system that is to create, delete, update, and display medicine information which is accessible only in the Admin user and Clerk user's end. Lastly is the Data package which consists of the database and the query selection for data inputs and retrieval.

## 7. The System

Pharmalogue is a system which allows individuals and potential customers to browse through a pharmaceutical catalogue which is populated with Botica Ycsobel's medicine inventory & stocks. We have three (3) main UI involved: customer UI, admin UI, and clerk UI.

### 7.1 System Overview

Connecting all of the three (3) is the Homepage UI. It consists of a PharmaKonsulta chatbot, the Pharmaceutical catalogue with a comparison feature, the Map of Botica Ycsobel's branches, the About Us page, the Log in gateway (Accounts) for Botica Ycsobel clerks/pharmacists and admins.



On the other hand, the customer UI showcases Botica Ycsobel's medicines, a search bar, and the category of medicine types that specific medicines are able to treat. A PharmaKonsulta feature has also been integrated into the system so that the public is able to contact an attending clerk/physician should they have any questions regarding certain medicines. Furthermore, should they be interested in purchasing a specific medication within the catalogue, then they simply have to click on Botica Ycsobel's Branches at the navigation bar. Each medicine is equipped with a button that reveals further information about the said medication.

# PHARMA LOGUE

BRANCHES

Pharma-KONSULTA



## Category

- Analgesics (Non-Opi)
- Nonsteroidal Anti-In
- Vitamins &/or Minera
- Vitamins & Minerals
- Vitamin C
- Supplements & Adjuva
- Vitamins & Minerals
- Cough & Cold Prepara
- Antiasthmatic & COPD
- Antihistamines & Ant
- Antihistamines & Ant

 <p><b>Biogesic</b> Acetaminophen   Paracetamol 4.50 PHP/Tablet</p> <p><b>Side Effects:</b></p> <ul style="list-style-type: none"> <li>▪ Dizziness</li> <li>▪ Drowsiness</li> <li>▪ Constipation</li> <li>▪ Upset Stomach</li> <li>▪ Blurred vision</li> <li>▪ Drying of mouth, nose, and throat may occur</li> </ul>	 <p><b>Tempra Forte - 30mL</b> Acetaminophen   Paracetamol 65.00 PHP</p> <p><b>Side Effects:</b></p> <ul style="list-style-type: none"> <li>▪ Hematological: Skin Rashes</li> </ul>	 <p><b>Tempra Forte - 60mL</b> Acetaminophen   Paracetamol 131.25 PHP</p> <p><b>Side Effects:</b></p> <ul style="list-style-type: none"> <li>▪ Hematological: Skin Rashes</li> </ul>
--	--	---

Meanwhile, the admin UI consists of a product display table where they're able to view the list of medicines they've added onto the system, an add, delete, and an update feature for medicines and categories, a search bar, and a feature that allows them to view Botica Ycsobel's branches across Iligan City.

# PHARMA LOGUE



BRANCHES

Log-out

## Category

Add Medicine

Add Category

Action	Product Image	Generic Name	Generic Pronunciation	Drug Brand	Brand Pronunciation	Drug Category	Drug Description	Directions
<a href="#"></a> <a href="#"></a>		Acetaminophen   Paracetamol	Biogesic	bayo-jeh-sic	Analgesics (Non-Opioid) & Antipyretics	4.50 PHP/Tablet	For the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, minor arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.	>1 - 2 tc for Adult year adviabl year recomr than Paracet hours be
<a href="#"></a> <a href="#"></a>		Acetaminophen   Paracetamol	Tempr-for-te	tem-prah-for-te	Analgesics (Non-Opioid) & Antipyretics	65.00 PHP	useful for reducing fever and for the temporary relief of minor aches, pains, and discomfort associated with the common colds or flu, inoculations or vaccinations. It is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids).	>2 - 5, ages 3 10 mL / year to 4 tsp years taken : paracet

Lastly, the clerk UI has the same design and product display as the admin UI, but without the add and delete features. As the clerks/pharmacists, they have no authoritarian role to edit any medicine information and are only permitted to edit the respective medicine's quantity/stocks. They are, however, entitled to view all of what Botica Ycsobel has to offer in terms of over-the-counter (OTC) medicines and its corresponding information. A search bar is integrated into their UI in order to filter out specific medicines, a view of Botica Ycsobel branches, and a PharmaKonsulta feature which allows them to communicate with their customers and other individuals who'll make use of this feature. A logout feature is then present should they clock out at the end of the day.

# PHARMA LOGUE



BRANCHES

Pharma-KONSULTA

Log-out

Action	Stocks	Generic Name	Generic Pronunciation	Drug Brand	Brand Pronunciation	Drug Medicine	Drug Description	Direction for Usage	Action
<button>Edit</button>	930	Acetaminophen   Paracetamol	a-set-a-mee'-noe-fen   par-a-ce-ta-mol	Biogesic	bayo-jeh-sic	Analgesics (Non-Opioid) & Antipyretics	4.50 PHP/Tablet	For the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, minor arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.	>1 - 2 to for Adul year adviabl year recom tha Parac hours be
<button>Edit</button>	249	Acetaminophen   Paracetamol	a-set-a-mee'-noe-fen   par-a-ce-ta-mol	Tempra Forte - 30mL	tem-prah for-te	Analgesics (Non-Opioid) & Antipyretics	65.00 PHP	useful for reducing fever and for the temporary relief of minor aches, pains, and discomfort associated with the common colds or flu, inoculations or vaccinations. It is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids). Available in different flavors: Grape, Orange, Strawberry	>2 - 5 ages 3 n mL (1 to to 5 yec tsp) fr years taken presc

## 7.1.1 System Features

Phamologue consists of a number of features which allow for the proper showcasing of Botica Ycsobel's medicine selection. Due to the intimidation factor displayed by the sheer vastness of medicinal information contained in one system, the project team ventured to simplify the process of educating the masses about over-the-counter (OTC) medicines through user-friendly interfaces. To further make the learning process more accessible and comfortable, several features and functions were integrated into the system as a means of communication between the public and Botica Ycsobel's clerks and pharmacists. All of these features and functions serve a greater purpose in increasing medicinal knowledge within Iligan City and its people.

### 7.1.1.1 View Botica Ycsobel's pharmaceutical catalogue

This feature displays all of Botica Ycsobel's over-the-counter (OTC) medicines ranging from vitamins to antihistamines. End users are able to compare and contrast medicines due to a columnar view of the medicines displaying their generic name, brand name, price, and side effects.

### 7.1.1.2 View Detailed Medicinal Information

Aside from the fact that end users are able to view all of Botica Ycsobel's medicines, they are also given the ability to view a detailed list of information regarding each of the said medicines.

### 7.1.1.3 View Medicine Category

Each medicine is categorized according to their medicine types/class, where customers are able to view what medicines treat specific illnesses. For example, antihistamine medications are primarily known to treat hay fever and various allergic reactions. This feature was

implemented in order for the end-users to quickly determine a group of medications they might require in treating certain illnesses.

#### **7.1.1.4 Search Medicine**

In the instance where end-users are looking for a specific medication, they're able to swiftly locate the said product using the search bar feature. Furthermore, end-users are also able to search for a medicine's generic name which further simplifies & quickens the process of looking for a specific medication.

On the admin & clerks / pharmacists' side, this search medicine helps them locate specific medication in their own respective UIs so they'll be able to edit & update the medicine information.

#### **7.1.1.5 View Botica Ycsobel's Branches**

Botica Ycsobel has a total of six (6) branches situated across the entirety of Iligan City. If customers become curious about the locations of these branches, whether to determine the nearest branch from their location or for other purposes, then they are able to view Botica Ycsobel branches' address through an integrated Google Maps where each branch is marked with a button.

#### **7.1.1.6 Communicate with Clerks / Pharmacists using PharmaKonsulta**

PharmaKonsulta is a communication feature which allows users and Botica Ycsobel clerks & pharmacists to interact with each other. It is a chatbot which sends automated responses when the attending clerk / pharmacist isn't available or off-duty. However, once they're currently on the job, they're able to actually connect into the system and send real-time responses. Customers are provided with a list of FAQs regarding the system should they have any questions regarding Pharmalogue. Concerns regarding medicines will be entertained by the clerks / pharmacists themselves during duty hours.

#### **7.1.1.7 View About Us**

This feature redirects the users to Botica Ycsobel's Facebook page where they're able to learn more about the pharmacy and its goals and objectives.

#### **7.1.1.8 Sign up**

The sign up feature is particularly useful for Botica Ycsobel's admin and clerks / pharmacists. They'll be able to create their own respective accounts within the system to access Pharmalogue's database and product information display table, where they'll be able to add, delete, and update Botica Ycsobel's medicine information. The following information are needed during sign up:

- First Name
- Middle Initial
- Surname
- Name Suffix

- Contact Number
- Birth Date
- Email
- Branch Location (where they're assigned to)
- Working Hours
- User Type (Admin / Clerk)
- Password

#### **7.1.1.9 Log in**

Depending on the user type, the login feature will redirect the clerk user type to the clerk UI and the admin to the adminUI. This login feature allows Botica Ycsobel employees to connect to Pharmalogue's database containing all of the pharmacy's medicines.

#### **7.1.1.10 Log out**

Once Botica Ycsobel's employees are done for the day / have finished their tasks in Pharmalogue, then a simple log out feature will redirect them back to the Log in UI.

#### **7.1.1.11 View Product Information Display Table**

Both the admin and clerks / pharmacists are connected to the same database which contains all of Botica Ycsobel's medicines. The display table contains the information needed for the admin and clerks / pharmacists to educate the public about over-the-counter (OTC) medicines.

#### **7.1.1.12 Add Medicine**

An admin-specific feature which allows Botica Ycsobel's admin to add in medicine information into the system. Due to Pharmalogue's CRUD operations regarding this section onwards, Pharmalogue can also double as a semi-inventory system since admins and clerks are able to keep track of their stocks and medicine inventory. The medicine added and its corresponding information will then be reflected back to the clerk UI and customer UI. The following information are for a medicine to be successfully added into the system:

- Product Image
- Generic Name
- Generic Name Pronunciation
- Drug Brand
- Brand Pronunciation
- Drug Category
- Drug Description
- Direction for Usage
- Active Ingredients
- In-active Ingredients
- Side Effects
- Storage Instructions
- Drug Price
- Stocks / Quantity

- Branch Availability

#### **7.1.1.13 Delete Medicine**

An admin-specific feature which allows Botica Ycsobel's admin to delete an entire medicine from the system. The deleted medicines and its corresponding information will also be removed from the clerk UI and customer UI. The admin is able to delete all medicines.

#### **7.1.1.14 Update Medicine**

An admin-specific feature which allows Botica Ycsobel's admin to edit / update the medications within the system. Here, they'll be able to make changes into all of the medicine information & the changes will also be reflected in the clerk UI and customer UI. The admin is able to update all medicines.

#### **7.1.1.15 Add Category**

An admin-specific feature which allows Botica Ycsobel's admin to add in medicine categories into the system. The category names are usually according to a medicine's class / type. However, since a category has been newly added, this doesn't contain any medicines yet unless the admin adds / updates a medicine with this specific category.

#### **7.1.1.16 Delete Category**

An admin-specific feature which allows Botica Ycsobel's admin to delete an entire category from the system. The deleted category and its corresponding medicines will also be removed from the clerk UI and customer UI. The admin is able to delete all categories.

#### **7.1.1.17 Update Category**

An admin-specific feature which allows Botica Ycsobel's admin to edit / update the categories within the system. Here, they'll be able to make changes to the category names & this change will also be reflected back to the clerk UI and customer UI. The admin is able to update all categories.

#### **7.1.1.18 Update Medicine Quantity**

A clerk-specific feature which allows Botica Ycsobel's clerks to edit / update the quantities or stocks of each medicine within the system. Changes made will also be reflected back to the clerk UI and customer UI. The clerk is able to update all categories.

## 7.1.2 System Functions

Pharmalogue has a total of 25 system functionalities, all of which serve as a means to educate the public on over-the-counter (OTC) medicines and for Botica Ycsobel to use the system as a semi-inventory system.

### 7.1.2.1 About Us Button

The About Us button redirects the user to Botica Ycsobel's Facebook Page. Wi-fi or internet is required for the user to successfully be redirected to the site.

**STIMULUS**

# PHARMALOGUE

Serving Quality & Genuine Medicines  
Your family pharmacy. Where medicine makes sense.

[ABOUT US](#) [CATALOGUE](#)

**RESPONSE**

**Botica Ycsobel**  
89 likes • 123 followers

[Posts](#) [About](#) [Photos](#) [Videos](#) ...

Botica Ycsobel  
March 30 ·

### 7.1.2.2 Catalogue Button

The Catalogue button allows its end users to view the system catalogue which contains all of Botica Ycsobel's medicine inventory.

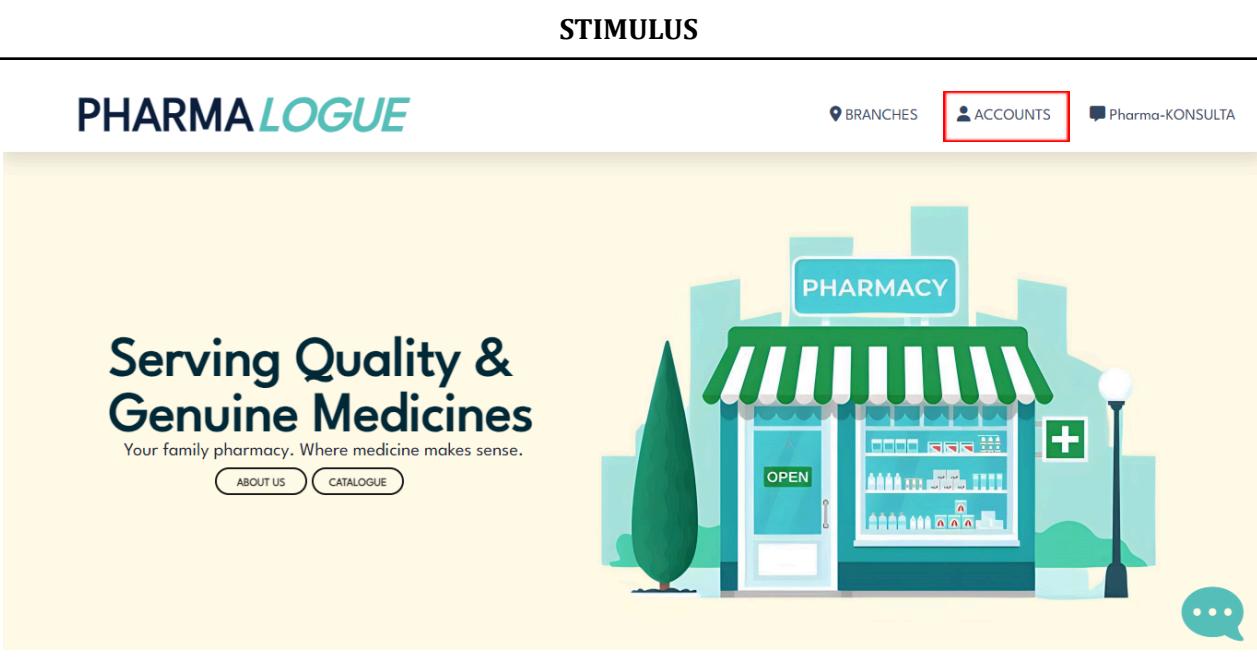
STIMULUS
RESPONSE

### 7.1.2.3 Branches Text Link

The 'Branches' text link redirects the user to an integrated Google Maps system where the users are able to view all of Botica Ycsobel's branches across Iligan City.

**STIMULUS**

**RESPONSE**

 <p>The screenshot shows the PHARMA LOGUE website homepage. At the top, there is a navigation bar with links for 'BRANCHES', 'ACCOUNTS' (which is highlighted with a red box), and 'Pharma-KONSULTA'. Below the navigation bar, there is a main content area featuring a stylized illustration of a pharmacy storefront with a green awning and shelves filled with medicine bottles. To the left of the illustration, the text 'Serving Quality &amp; Genuine Medicines' and 'Your family pharmacy. Where medicine makes sense.' is displayed. There are also 'ABOUT US' and 'CATALOGUE' buttons. A speech bubble icon is located in the bottom right corner of the content area.</p> |  <p>The screenshot shows the same PHARMA LOGUE website as above, but with a modal window overlaid on the 'ACCOUNTS' link. The modal contains two buttons: 'Admin' and 'Clerk'. The URL 'localhost/PHARMALOGUE/PHARMALOGUE/HomePage/#' is visible at the bottom of the page.</p> |

### 7.1.2.5 Admin & Clerk Text Link

Both the 'Admin' & 'Clerk' text link directs the user to Pharmalogue's Log in page.

**STIMULUS**

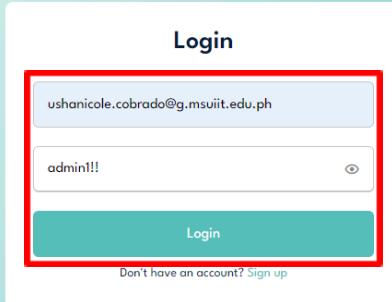
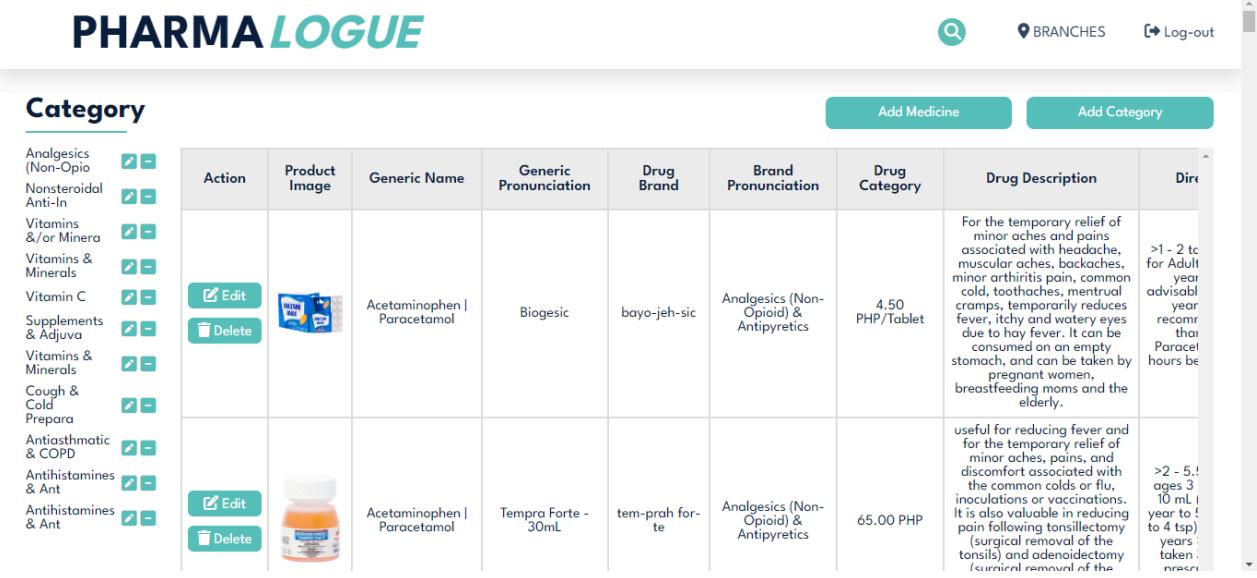
The screenshot shows the Pharmalogue homepage. At the top right, there are navigation links: 'BRANCHES', 'ACCOUNTS' (which is currently selected and highlighted in blue), and 'Pharma-KONSULTA'. Below these are two buttons: 'Admin' and 'Clerk', with 'Admin' having a red border around it. The main content features the text 'Serving Quality & Genuine Medicines' and 'Your family pharmacy. Where medicine makes sense.' with links to 'ABOUT US' and 'CATALOGUE'. A stylized illustration of a green and white striped awning over a storefront window labeled 'OPEN' is shown. The URL 'localhost/PHARMALOGUE/PHARMALOGUE/HomePage/#' is visible at the bottom left of the page.

**RESPONSE**

The screenshot shows the Pharmalogue login page. It has a light gray header with the word 'Login' in bold. Below it are two input fields: one for 'Enter your email' and another for 'Enter your password' with a small eye icon to the right. A large teal button labeled 'Login' is centered below the password field. At the bottom, a smaller text link says 'Don't have an account? Sign up'.

### 7.1.2.6 Login Form

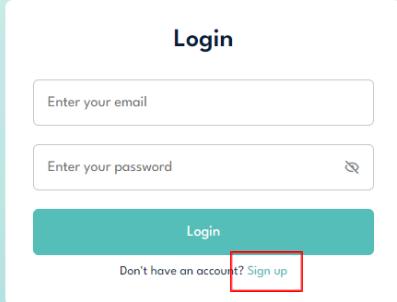
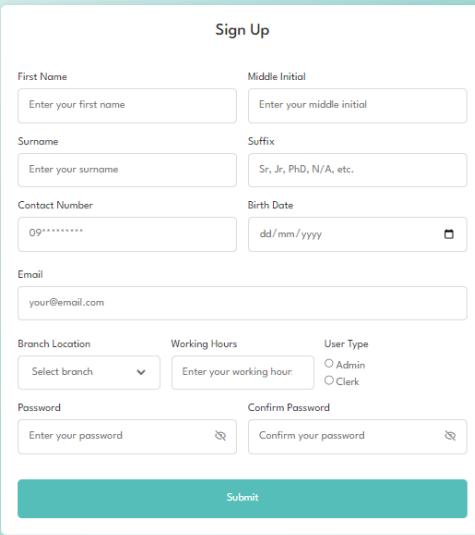
The log in function allows the admin & the clerk to input their email & password so that they can log into the system. Depending on the user type (admin / clerk) upon account registration / sign up, the user will be directed to their specified UI.

STIMULUS - ADMIN USER								
								
RESPONSE - ADMIN USER								
								

STIMULUS - CLERK USER																																							
RESPONSE - CLERK USER																																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Action</th> <th>Stocks</th> <th>Generic Name</th> <th>Generic Pronunciation</th> <th>Drug Brand</th> <th>Brand Pronunciation</th> <th>Drug Medicine</th> <th>Drug Description</th> <th>Direction for Usage</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td><button>Edit</button></td> <td>930</td> <td>Acetaminophen   Paracetamol</td> <td>a-set-a-mee'-noe-fen   par-a-ce-ta-mol</td> <td>Biogesic</td> <td>bayo-jeh-sic</td> <td>Analgesics (Non-Opioid) &amp; Antipyretics</td> <td>4.50 PHP/Tablet</td> <td>For the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, minor arthritis pain, common cold, toothaches, menstrual cramps; temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.</td> <td>&gt;1 - 2 tablets for Adults, 1 tablet for children aged 3 years and above. Recommended dosage: 1 tablet every 4 hours as required.</td> </tr> <tr> <td><button>Edit</button></td> <td>249</td> <td>Acetaminophen   Paracetamol</td> <td>a-set-a-mee'-noe-fen   par-a-ce-ta-mol</td> <td>Tempra Forte - 30mL</td> <td>tem-prah for-te</td> <td>Analgesics (Non-Opioid) &amp; Antipyretics</td> <td>65.00 PHP</td> <td>useful for reducing fever and for the temporary relief of minor aches, pains, and discomfort associated with the common colds or flu, inoculations or vaccinations. It is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids). Available in different flavors: Grape, Orange, Strawberry</td> <td>&gt;2 - 5, ages 3 months to 5 years. Recommended dosage: 1 to 2 teaspoons taken every 4 hours as required.</td> </tr> </tbody> </table>										Action	Stocks	Generic Name	Generic Pronunciation	Drug Brand	Brand Pronunciation	Drug Medicine	Drug Description	Direction for Usage	Action	<button>Edit</button>	930	Acetaminophen   Paracetamol	a-set-a-mee'-noe-fen   par-a-ce-ta-mol	Biogesic	bayo-jeh-sic	Analgesics (Non-Opioid) & Antipyretics	4.50 PHP/Tablet	For the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, minor arthritis pain, common cold, toothaches, menstrual cramps; temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.	>1 - 2 tablets for Adults, 1 tablet for children aged 3 years and above. Recommended dosage: 1 tablet every 4 hours as required.	<button>Edit</button>	249	Acetaminophen   Paracetamol	a-set-a-mee'-noe-fen   par-a-ce-ta-mol	Tempra Forte - 30mL	tem-prah for-te	Analgesics (Non-Opioid) & Antipyretics	65.00 PHP	useful for reducing fever and for the temporary relief of minor aches, pains, and discomfort associated with the common colds or flu, inoculations or vaccinations. It is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids). Available in different flavors: Grape, Orange, Strawberry	>2 - 5, ages 3 months to 5 years. Recommended dosage: 1 to 2 teaspoons taken every 4 hours as required.
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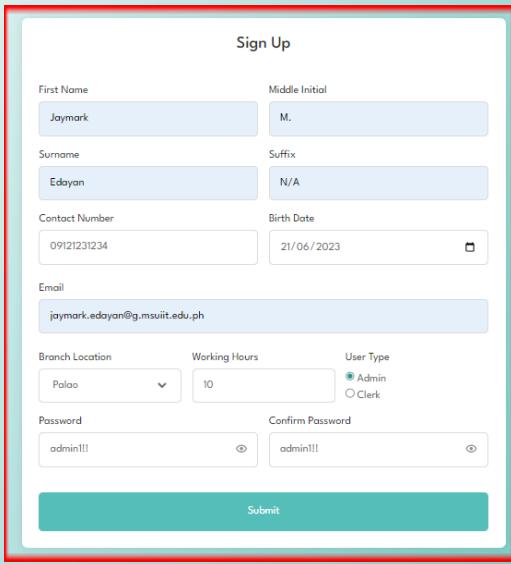
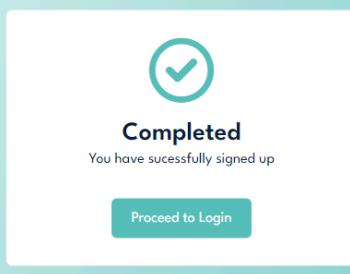
### 7.1.2.7 Sign up Hyperlink

The sign up hyperlink redirects the user to the Sign Up form where they'll be able to input their respective data in order to create an account in Pharmalogue

STIMULUS

RESPONSE


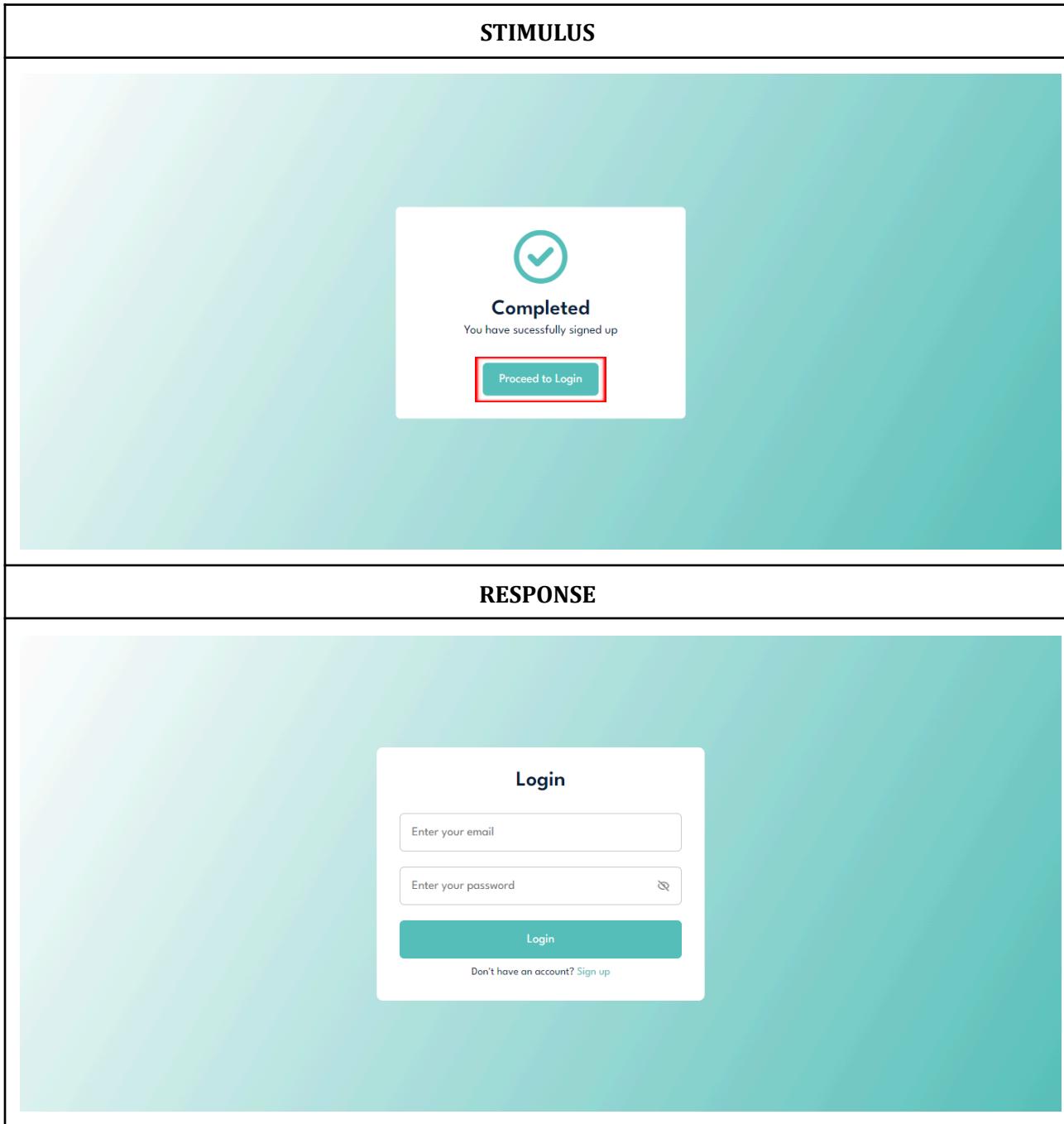
### 7.1.2.8 Sign Up Form

The sign up form allows Botica Ycsobel's admins & clerks / pharmacists to create an account which will be used to sign in into Pharmalogue.

STIMULUS	
 A screenshot of a 'Sign Up' form. The form fields are: First Name (Jaymark), Middle Initial (M.), Surname (Edayan), Suffix (N/A), Contact Number (09121231234), Birth Date (21/06/2023), Email (jaymark.edayan@g.msuit.edu.ph), Branch Location (Palao), Working Hours (10), User Type (radio buttons for Admin and Clerk, with Admin selected), Password (admin!!!), and Confirm Password (admin!!!). A red box highlights the entire form area.	
RESPONSE	
 A confirmation message: 'Completed' with a checkmark icon, followed by the text 'You have successfully signed up' and a 'Proceed to Login' button.	

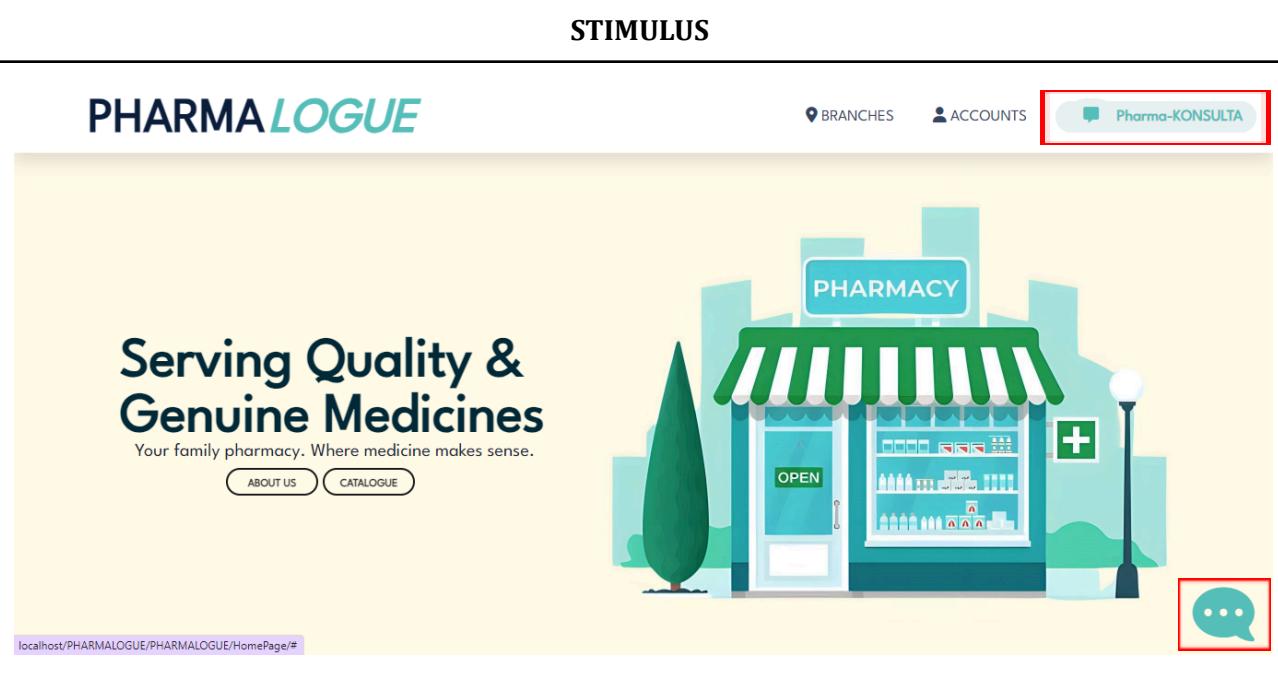
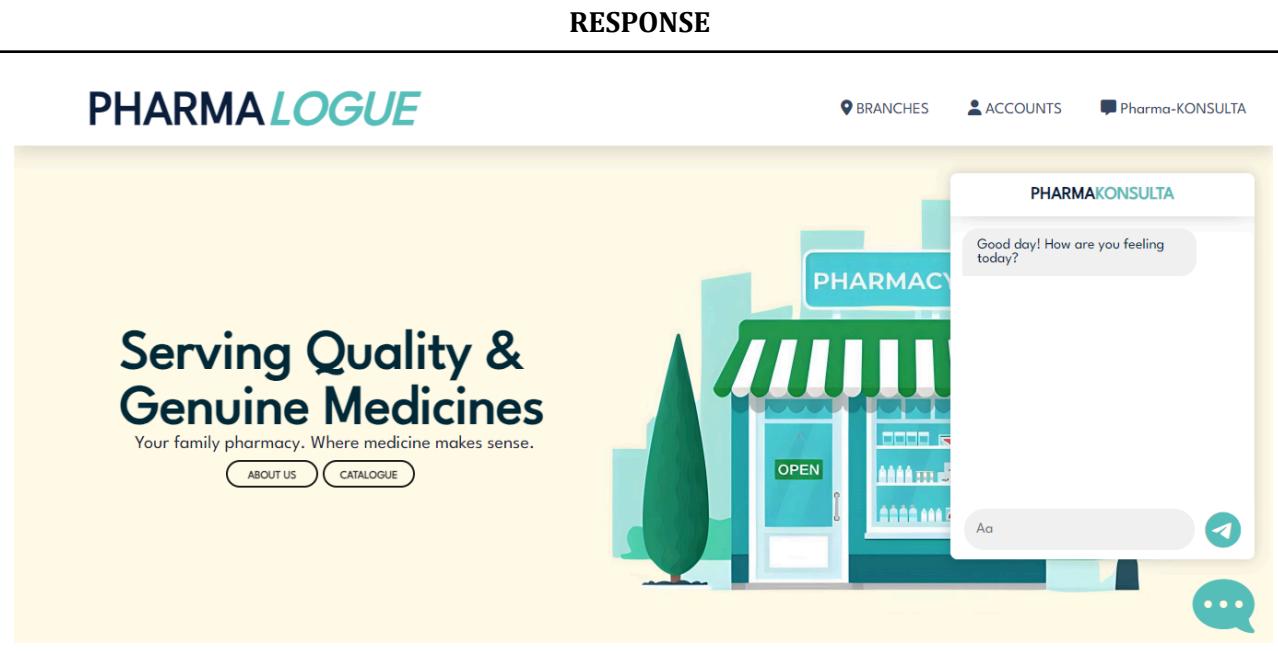
### 7.1.2.9 Proceed to Login Button

The 'Proceed to Login' Button takes the user back to the Login Form.



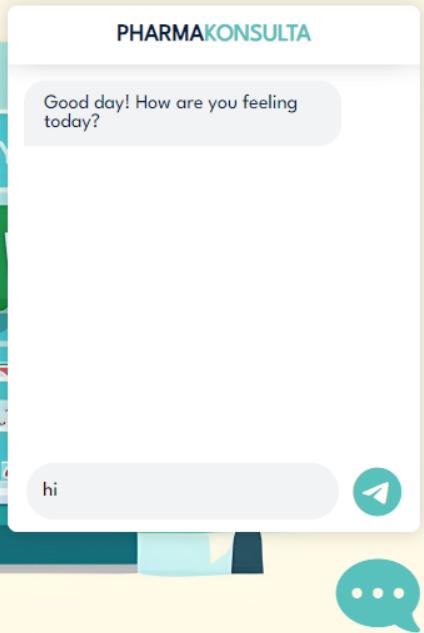
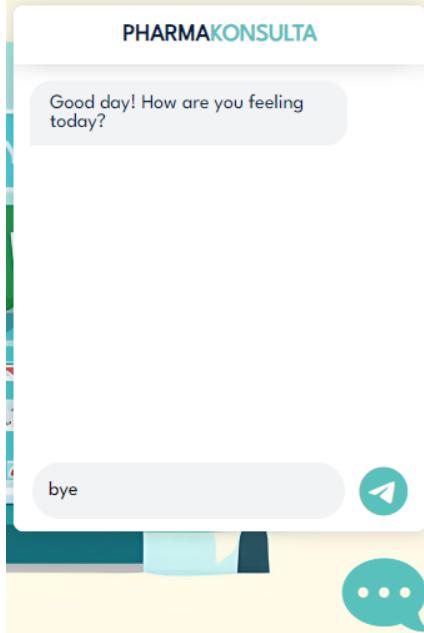
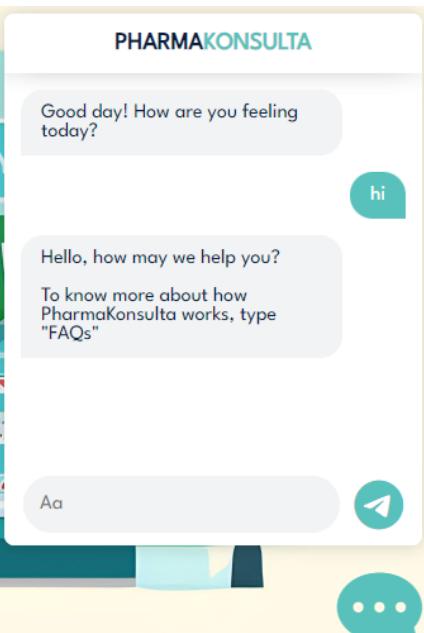
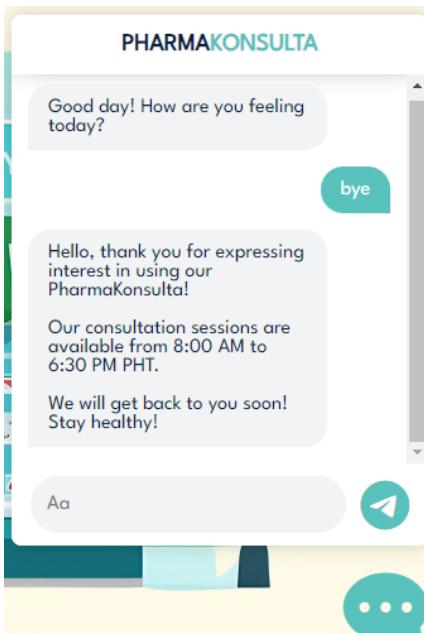
### 7.1.2.10 PharmaKonsulta Text Link & Open Chat box Button

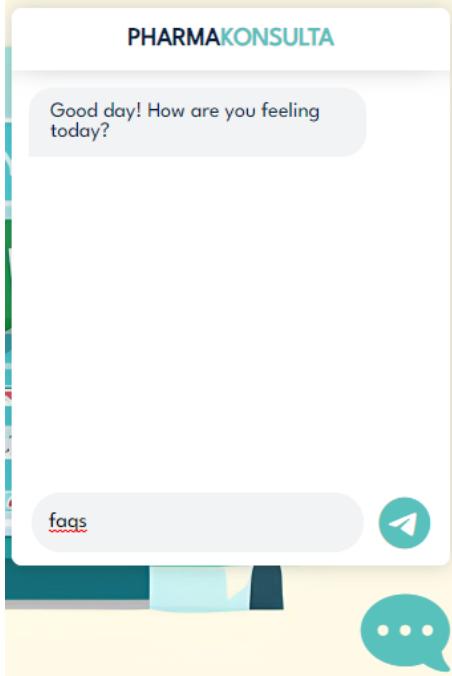
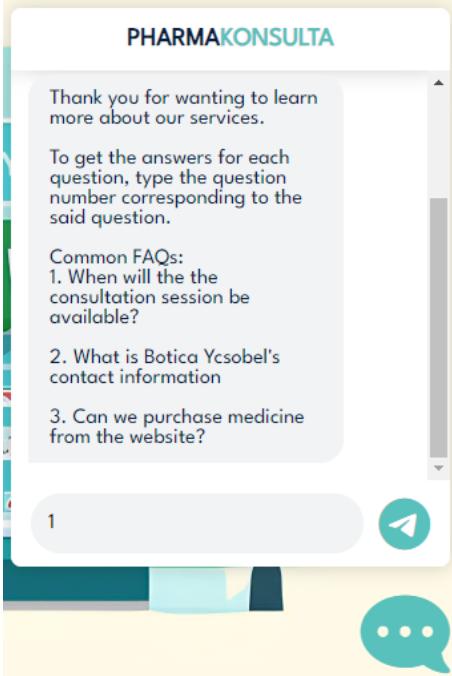
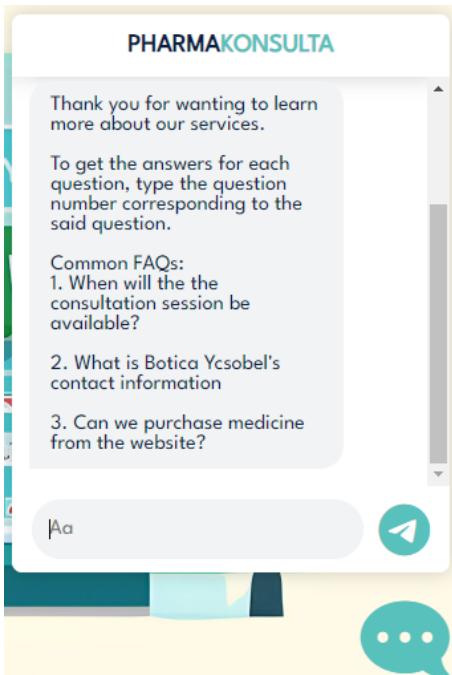
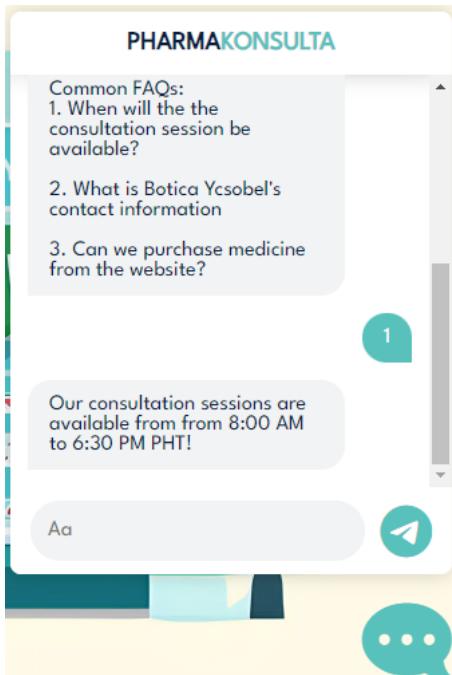
Both the 'PharmaKonsulta' text link at the navigation bar & the Chat button below both have the same functionalities. Clicking either of the two will yield the same results, which is to open the chat box.

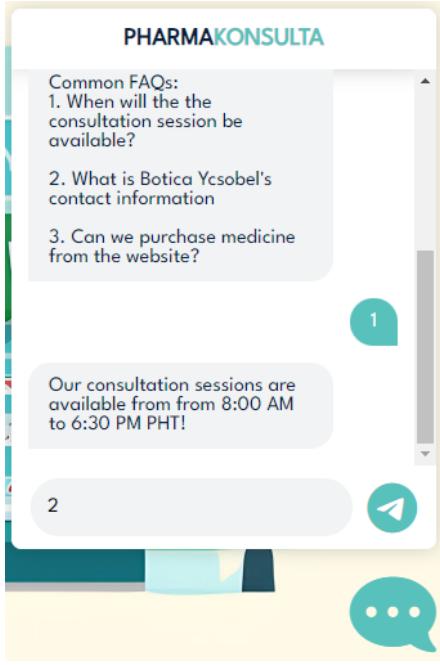
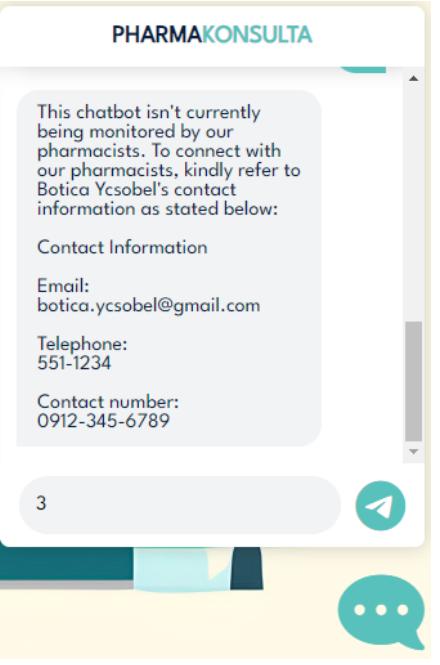
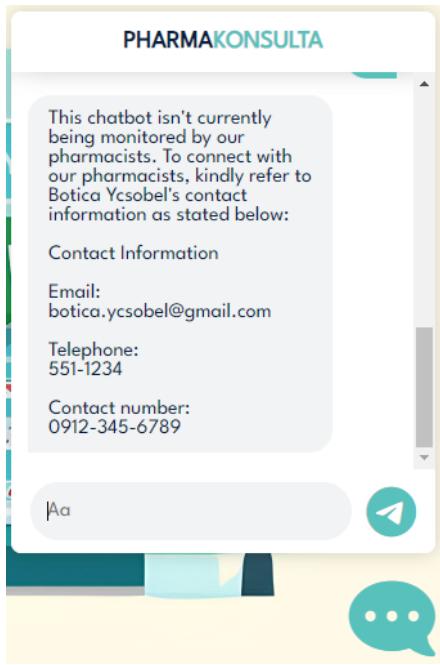
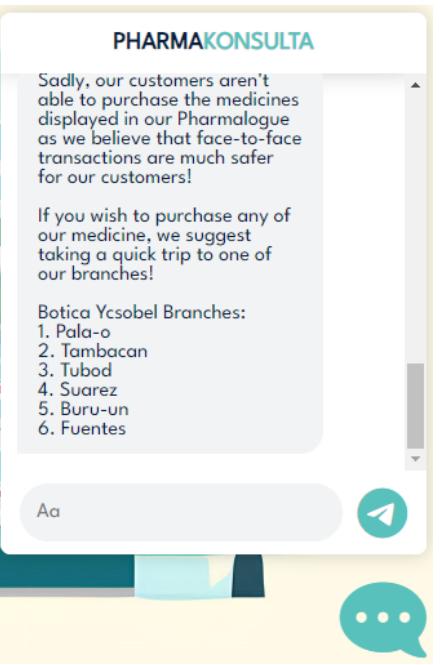
STIMULUS	RESPONSE
 <p><a href="localhost/PHARMALOGUE/PHARMALOGUE/HomePage/#">localhost/PHARMALOGUE/PHARMALOGUE/HomePage/#</a></p>	

### 7.1.2.11 Text box, Chatbot Responses, & Send Button

The chat box returns an automated response to the users. Depending on what the user has to say, there is a corresponding response for that. The user could also choose to press the 'Enter' key on the keyboard or use the Send button next to the text box to send their messages.

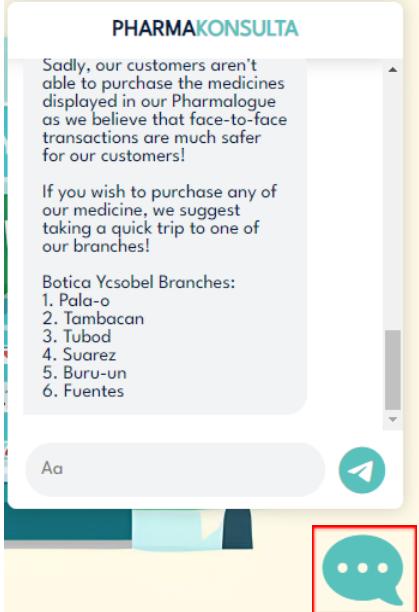
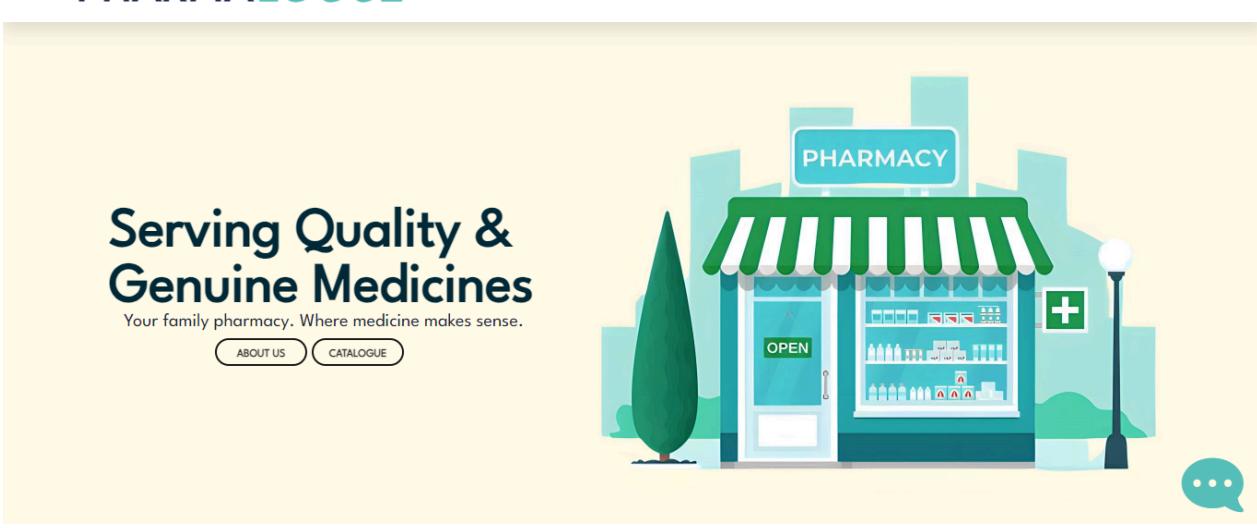
STIMULUS - "HI" MESSAGE	STIMULUS - ANY OTHER MESSAGE
	
RESPONSE	RESPONSE
	

STIMULUS - "FAQS" MESSAGE	STIMULUS - "1" MESSAGE
 <p>PHARMAKONSULTA</p> <p>Good day! How are you feeling today?</p> <p>faqs</p>	 <p>PHARMAKONSULTA</p> <p>Thank you for wanting to learn more about our services.</p> <p>To get the answers for each question, type the question number corresponding to the said question.</p> <p>Common FAQs:</p> <ol style="list-style-type: none"> <li>1. When will the the consultation session be available?</li> <li>2. What is Botica Ycsobel's contact information</li> <li>3. Can we purchase medicine from the website?</li> </ol> <p>1</p>
RESPONSE	RESPONSE
 <p>PHARMAKONSULTA</p> <p>Thank you for wanting to learn more about our services.</p> <p>To get the answers for each question, type the question number corresponding to the said question.</p> <p>Common FAQs:</p> <ol style="list-style-type: none"> <li>1. When will the the consultation session be available?</li> <li>2. What is Botica Ycsobel's contact information</li> <li>3. Can we purchase medicine from the website?</li> </ol> <p>Aa</p>	 <p>PHARMAKONSULTA</p> <p>Common FAQs:</p> <ol style="list-style-type: none"> <li>1. When will the the consultation session be available?</li> <li>2. What is Botica Ycsobel's contact information</li> <li>3. Can we purchase medicine from the website?</li> </ol> <p>Our consultation sessions are available from from 8:00 AM to 6:30 PM PHT!</p> <p>1</p> <p>Aa</p>
STIMULUS - "2" MESSAGE	STIMULUS - "3" MESSAGE

 <p><b>PHARMAKONSULTA</b></p> <p>Common FAQs:</p> <ol style="list-style-type: none"> <li>1. When will the consultation session be available?</li> <li>2. What is Botica Ycsobel's contact information</li> <li>3. Can we purchase medicine from the website?</li> </ol> <p>Our consultation sessions are available from 8:00 AM to 6:30 PM PHT!</p> <p>1</p> <p>2</p>	 <p><b>PHARMAKONSULTA</b></p> <p>This chatbot isn't currently being monitored by our pharmacists. To connect with our pharmacists, kindly refer to Botica Ycsobel's contact information as stated below:</p> <p>Contact Information</p> <p>Email: botica.ycsobel@gmail.com</p> <p>Telephone: 551-1234</p> <p>Contact number: 0912-345-6789</p> <p>3</p>
<p><b>RESPONSE</b></p>  <p><b>PHARMAKONSULTA</b></p> <p>This chatbot isn't currently being monitored by our pharmacists. To connect with our pharmacists, kindly refer to Botica Ycsobel's contact information as stated below:</p> <p>Contact Information</p> <p>Email: botica.ycsobel@gmail.com</p> <p>Telephone: 551-1234</p> <p>Contact number: 0912-345-6789</p> <p>Ja</p>	<p><b>RESPONSE</b></p>  <p><b>PHARMAKONSULTA</b></p> <p>Sadly, our customers aren't able to purchase the medicines displayed in our Pharmalogue as we believe that face-to-face transactions are much safer for our customers!</p> <p>If you wish to purchase any of our medicine, we suggest taking a quick trip to one of our branches!</p> <p>Botica Ycsobel Branches:</p> <ol style="list-style-type: none"> <li>1. Pala-o</li> <li>2. Tambacan</li> <li>3. Tubod</li> <li>4. Suarez</li> <li>5. Buru-un</li> <li>6. Fuentes</li> </ol> <p>Aa</p>

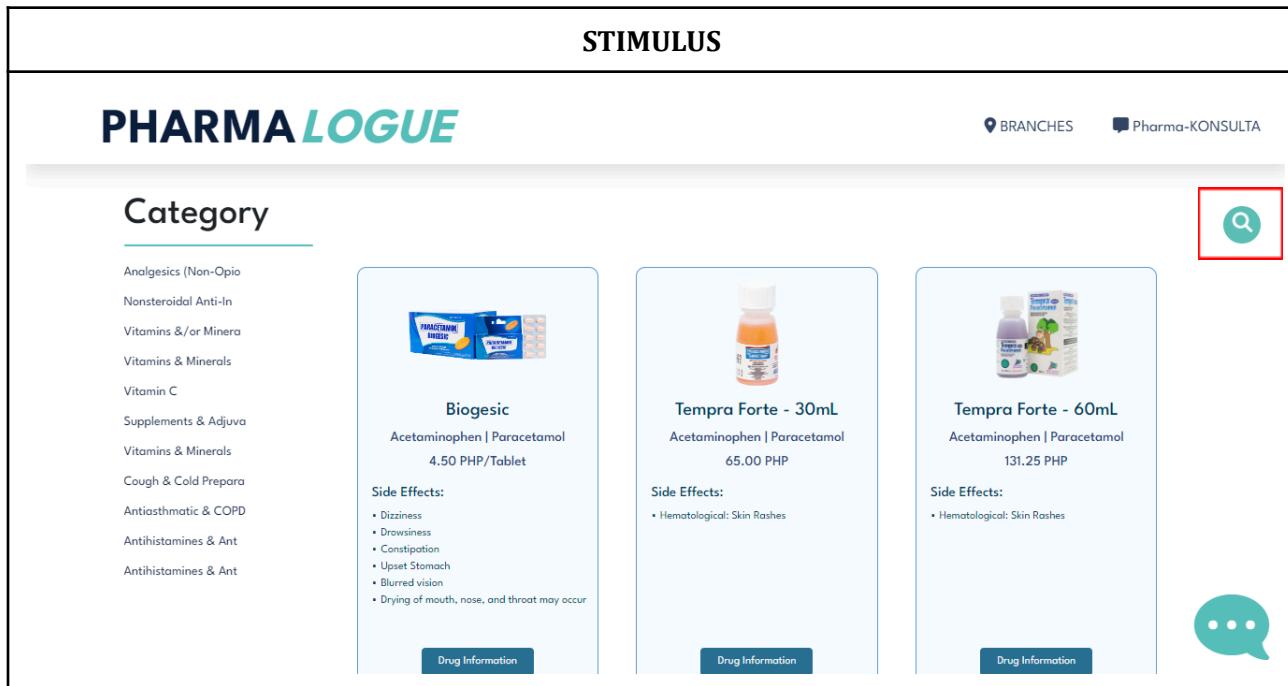
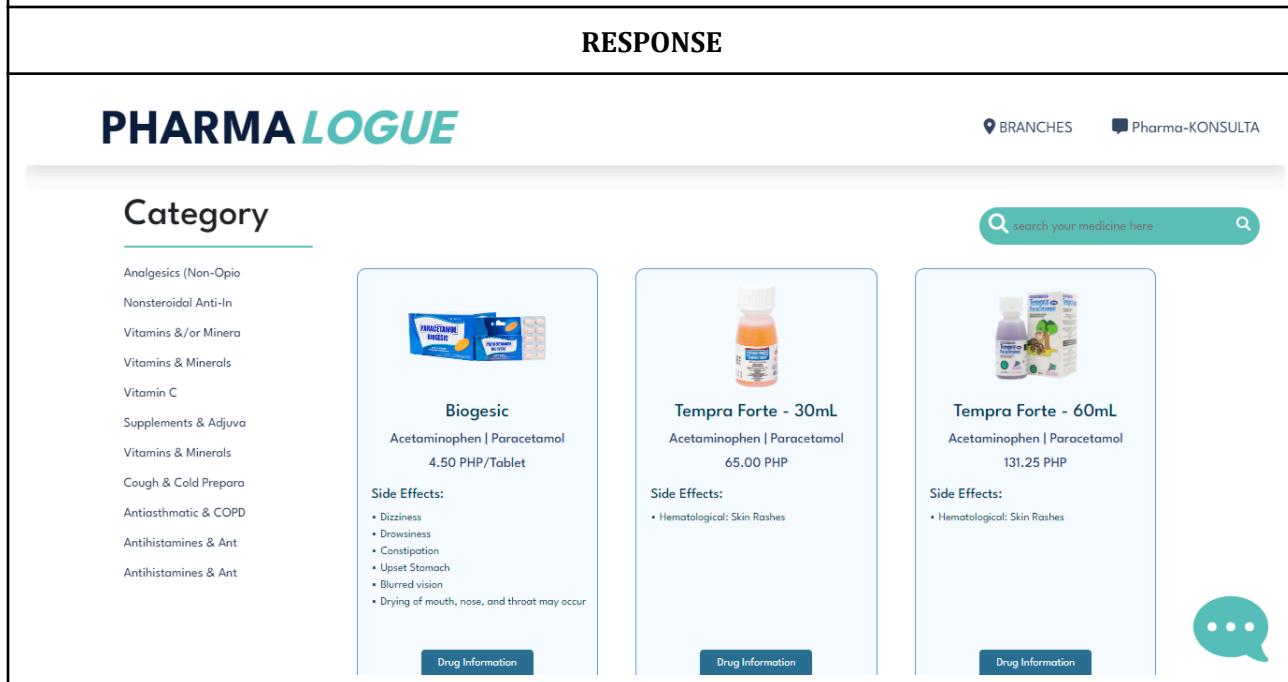
### 7.1.2.12 Close Chat box Button

The close chat box button has the same design as the Open Chat box Button. Simply click on the same button at the same position to close the chat box. The user doesn't have to worry about losing his/her chat history since the chat box won't delete the messages upon closing the said chat box. Only when the page is refreshed will the messages be erased.

STIMULUS

RESPONSE


### 7.1.2.13 Open Search Bar Button

The Open Search Bar Button opens the search bar so that the users can now start searching for a specific medicine.

STIMULUS	
	
RESPONSE	
	

### 7.1.2.14 Search for Medicine

For the customer UI, the search bar returns a response of either one (1) medicine or a set of medicines, depending on what the end-user has typed into the search bar. For the admin UI & the clerk UI, they respond differently. The search process only returns one (1) specific medicine & it is reflected at the 1st row of their product display table. Furthermore, if the user searches for a medicine from the Drug Information UI, then the system will show the Drug Information of that specific medicine

STIMULUS - CUSTOMER UI	
<p><b>PHARMALOGUE</b></p> <p><b>Category</b></p> <ul style="list-style-type: none"> <li>Analgesics (Non-Opi)</li> <li>Nonsteroidal Anti-In</li> <li>Vitamins &amp;/or Minera</li> <li>Vitamins &amp; Minerals</li> <li>Vitamin C</li> <li>Supplements &amp; Adjuva</li> <li>Vitamins &amp; Minerals</li> <li>Cough &amp; Cold Prepara</li> <li>Antiasthmatic &amp; COPD</li> <li>Antihistamines &amp; Ant</li> <li>Antihistamines &amp; Ant</li> </ul> <p><b>STIMULUS - CUSTOMER UI</b></p> <p><b>RESPONSE</b></p> <p><b>PHARMALOGUE</b></p> <p><b>Category</b></p> <ul style="list-style-type: none"> <li>Analgesics (Non-Opi)</li> <li>Nonsteroidal Anti-In</li> <li>Vitamins &amp;/or Minera</li> <li>Vitamins &amp; Minerals</li> <li>Vitamin C</li> <li>Supplements &amp; Adjuva</li> <li>Vitamins &amp; Minerals</li> <li>Cough &amp; Cold Prepara</li> <li>Antiasthmatic &amp; COPD</li> <li>Antihistamines &amp; Ant</li> <li>Antihistamines &amp; Ant</li> </ul> <p><b>RESPONSE</b></p>	<p>BRANCHES</p> <p>Pharma-KONSULTA</p> <p>tylenol</p> <p>Biogesic Acetaminophen   Paracetamol 4.50 PHP/Tablet</p> <p>Side Effects: • Dizziness • Drowsiness • Constipation • Upset Stomach • Blurred vision • Drying of mouth, nose, and throat may occur</p> <p>Drug Information</p> <p>Tempra Forte - 30mL Acetaminophen   Paracetamol 65.00 PHP</p> <p>Side Effects: • Hematological: Skin Rashes</p> <p>Drug Information</p> <p>Tempra Forte - 60mL Acetaminophen   Paracetamol 131.25 PHP</p> <p>Side Effects: • Hematological: Skin Rashes</p> <p>Drug Information</p> <p>Tylenol Acetaminophen   Paracetamol 9.25 PHP/Tablet</p> <p>Side Effects: • Allergic Reaction: Hives, difficulty in breathing, swelling of your face, lips, tongue, or throat.</p> <p>Drug Information</p>

STIMULUS									
ADMIN UI					CLERK UI				
<b>PHARMA LOGUE</b> 					<b>PHARMA LOGUE</b> 				

## RESPONSES

RESPONSES									
<b>PHARMA LOGUE</b> 					<b>PHARMA LOGUE</b> 				

STIMULUS - CUSTOMER UI									
<b>PHARMA LOGUE</b> 									
RESPONSE									

The screenshot shows the Pharmalogue website interface. On the left, there's a sidebar with a "Category" section containing links like Analgesics (Non-Opioid), Nonsteroidal Anti-Inflammatories, Vitamins & Minerals, etc. Below this is a product image of Tylenol Extended Release Caplets. On the right, the main content area features a large image of a Tylenol product box and blister pack. To the right of the image, the text "Acetaminophen | Paracetamol" is displayed, along with its pronunciation ("a-set-a-mee'-noe-fen | par-a-ce-ta-mol") and classification ("Analgesics (Non-Opioid) & Antipyretics"). A "MEDICINE DESCRIPTION" section follows, containing a brief text about its temporary relief of pain and discomfort. At the bottom right of the main content area is a teal speech bubble icon.

### 7.1.2.15 Drug Information Button

Clicking on the Drug Information Button will lead the end-user to a UI which reveals comprehensive information about a specific medicine.

STIMULUS			
<p><b>PHARMALOGUE</b></p> <ul style="list-style-type: none"> <li>Analgesics (Non-Opioid)</li> <li>Nonsteroidal Anti-Inflammatories</li> <li>Vitamins &amp;/or Minerals</li> <li>Vitamins &amp; Minerals</li> <li>Vitamin C</li> <li>Supplements &amp; Adjuvants</li> <li>Vitamins &amp; Minerals</li> <li>Cough &amp; Cold Preparations</li> <li>Antioasthmatic &amp; COPD</li> <li>Antihistamines &amp; Antacids</li> <li>Antihistamines &amp; Antacids</li> </ul>	<p><b>Biogesic</b> Acetaminophen   Paracetamol 4.50 PHP/Tablet</p> <p><b>Side Effects:</b></p> <ul style="list-style-type: none"> <li>Dizziness</li> <li>Drowsiness</li> <li>Constipation</li> <li>Upset Stomach</li> <li>Blurred vision</li> <li>Drying of mouth, nose, and throat may occur</li> </ul> <p><b>Drug Information</b></p>	<p><b>Tempra Forte - 30mL</b> Acetaminophen   Paracetamol 65.00 PHP</p> <p><b>Side Effects:</b></p> <ul style="list-style-type: none"> <li>Hematological: Skin Rashes</li> </ul> <p><b>Drug Information</b></p>	<p><b>Tempra Forte - 60mL</b> Acetaminophen   Paracetamol 131.25 PHP</p> <p><b>Side Effects:</b></p> <ul style="list-style-type: none"> <li>Hematological: Skin Rashes</li> </ul> <p><b>Drug Information</b></p>
	<p><b>RESPONSE</b></p>		

**PHARMALOGUE**

[BRANCHES](#) [Pharma-KONSULTA](#)

[HOME | CATALOGUE](#) 

**Category**

- Analgesics (Non-Opioid)
- Nonsteroidal Anti-Inflammatories
- Vitamins &/or Minerals
- Vitamins & Minerals
- Vitamin C
- Supplements & Adjuvants
- Vitamins & Minerals
- Cough & Cold Preparations
- Antihistaminic & COPD
- Antihistamines & Antacids
- Antihistamines & Antacids



**Acetaminophen | Paracetamol**  
*a-set-a-mee'-noe-fen | par-a-ce-ta-mol*  
 Analgesics (Non-Opioid) & Antipyretics

**MEDICINE DESCRIPTION**

For the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, minor arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.

**Biogesic**  
*bayo-jeh-sic*

**PRICE:** 4.50 PHP/Tablet

**SIDE EFFECTS**

- Dizziness
- Drowsiness
- Constipation
- Upset Stomach
- Blurred vision
- Drying of mouth, nose, and throat may occur

**DIRECTION FOR USAGE**

- 1 - 2 tablets every 4-6 hours for Adults and children ages 12 years and older.
- Not advisable for children under 12 years of age.
- It is not recommended to take more than 4g (8 tablets) of Paracetamol in a span of 24 hours because this can lead to an overdose.

**STORAGE INSTRUCTION**  
 Store at temperatures not exceeding 30°C Celsius

**ACTIVE INGREDIENTS:**  
 Acetaminophen 500 mg (Pain Reliever/Fever Reducer),  
 Dexbrompheniramine maleate 1 mg (Antihistamine)

**INACTIVE INGREDIENTS:**  
 dicalcium phosphate, microcrystalline cellulose, povidone,

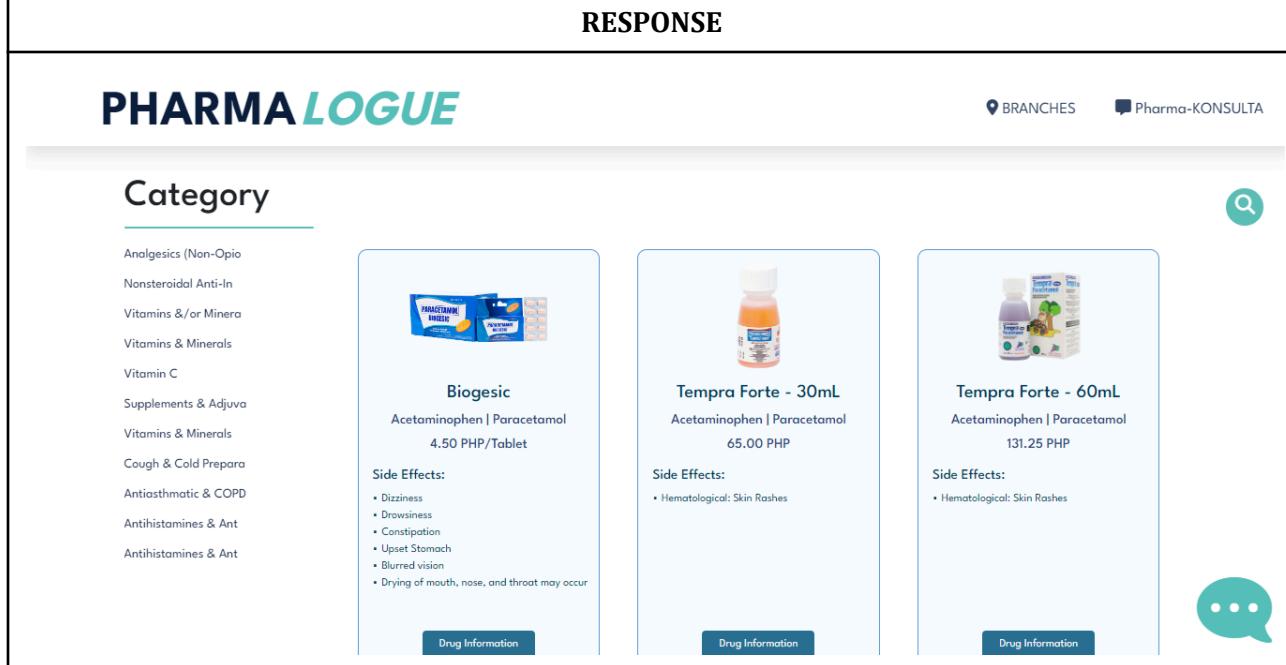
### 7.1.2.16 Home Text Link

Pressing the Home Text Link will return the user to the Home page.

STIMULUS	RESPONSE
<p><b>PHARMALOGUE</b></p> <p><b>Category</b></p> <ul style="list-style-type: none"> <li>Analgesics (Non-Opioid)</li> <li>Nonsteroidal Anti-Inflammatory Drugs</li> <li>Vitamins &amp;/or Minerals</li> <li>Vitamins &amp; Minerals</li> <li>Vitamin C</li> <li>Supplements &amp; Adjuvants</li> <li>Vitamins &amp; Minerals</li> <li>Cough &amp; Cold Preparations</li> <li>Antihistaminic &amp; COPD</li> <li>Antihistamines &amp; Antihistamines &amp; Antihistamines</li> </ul> <p><b>Acetaminophen   Paracetamol</b> a-set-a-mee'-noe-fen   par-a-ce-ta-mol Analgesics (Non-Opioid) &amp; Antipyretics</p> <p><b>MEDICINE DESCRIPTION</b></p> <p>For the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, minor arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.</p>	<p><b>PHARMALOGUE</b></p> <p><b>Serving Quality &amp; Genuine Medicines</b> Your family pharmacy. Where medicine makes sense.</p> <p><b>OPEN</b></p>

### 7.1.2.17 Catalogue Text Link

The Catalogue text link returns the user to the pharmaceutical catalogue.

STIMULUS	RESPONSE
 <p><b>PHARMA LOGUE</b></p> <p><b>Category</b></p> <ul style="list-style-type: none"> <li>Analgesics (Non-Opi)</li> <li>Nonsteroidal Anti-In</li> <li>Vitamins &amp;/or Minera</li> <li>Vitamins &amp; Minerals</li> <li>Vitamin C</li> <li>Supplements &amp; Adjuva</li> <li>Vitamins &amp; Minerals</li> <li>Cough &amp; Cold Prepara</li> <li>Antiasthmatic &amp; COPD</li> <li>Antihistamines &amp; Ant</li> <li>Antihistamines &amp; Ant</li> </ul> <p><b>Acetaminophen   Paracetamol</b></p> <p>a-set-a-mee'-noe-fen   par-a-ce-ta-mol Analgesics (Non-Opioid) &amp; Antipyretics</p> <p><b>MEDICINE DESCRIPTION</b></p> <p>For the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, minor arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.</p>	 <p><b>PHARMA LOGUE</b></p> <p><b>Category</b></p> <ul style="list-style-type: none"> <li>Analgesics (Non-Opi)</li> <li>Nonsteroidal Anti-In</li> <li>Vitamins &amp;/or Minera</li> <li>Vitamins &amp; Minerals</li> <li>Vitamin C</li> <li>Supplements &amp; Adjuva</li> <li>Vitamins &amp; Minerals</li> <li>Cough &amp; Cold Prepara</li> <li>Antiasthmatic &amp; COPD</li> <li>Antihistamines &amp; Ant</li> <li>Antihistamines &amp; Ant</li> </ul> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p><b>Biogesic</b></p> <p>Acetaminophen   Paracetamol 4.50 PHP/Tablet</p> <p><b>Side Effects:</b></p> <ul style="list-style-type: none"> <li>• Dizziness</li> <li>• Drowsiness</li> <li>• Constipation</li> <li>• Upset Stomach</li> <li>• Blurred vision</li> <li>• Drying of mouth, nose, and throat may occur</li> </ul> <p><b>Drug Information</b></p> </div> <div style="text-align: center;">  <p><b>Tempra Forte - 30mL</b></p> <p>Acetaminophen   Paracetamol 65.00 PHP</p> <p><b>Side Effects:</b></p> <ul style="list-style-type: none"> <li>• Hematological: Skin Rashes</li> </ul> <p><b>Drug Information</b></p> </div> <div style="text-align: center;">  <p><b>Tempra Forte - 60mL</b></p> <p>Acetaminophen   Paracetamol 131.25 PHP</p> <p><b>Side Effects:</b></p> <ul style="list-style-type: none"> <li>• Hematological: Skin Rashes</li> </ul> <p><b>Drug Information</b></p> </div> </div>

### 7.1.2.18 Add Medicine Buttons

The Add Medicine Buttons first reveals an Add Medicine Form. After filling out the form & pressing the Add Medicine Button within the said form, it will automatically insert the inputted information into the database, which will also be reflected in the admin UI, clerk UI, and customer UI.

STIMULUS	
RESPONSES	

### 7.1.2.19 Delete Medicine Button

The Delete Medicine Button permanently deletes a medicine and all its corresponding information from the database & the system.

STIMULUS								
								
RESPONSE								
		Antihistamine	muhl-tay-vhai-tamins	Lorapaed	see-kon	Antihistamines & Antiallergics / Cough & Cold Prep	285.00 PHP	
		Antihistamine	muhl-tay-vhai-tamins	Benadryl	see-kon	Antihistamines & Antiallergics / Cough & Cold Prep	285.00 PHP	

### 7.1.2.20 Update Medicine Buttons

When pressing the first Update Button, it pops up the Update Product Form where you'll be able to make the necessary changes for a certain medicine. After editing, the next Update Medicine Button at the bottom of the form will automatically change the database inputs according to what changes were made. All of these changes will be reflected in the admin UI, clerk UI, and customer UI.

STIMULUS								
		Example	example	example	Vitamin C	100		

**PHARMALOGUE**

**Category**

- Analgesics (Non-Opi)
- Nonsteroidal Anti-In
- Vitamins &/or Minerals
- Vitamins & Minerals
- Vitamin C
- Supplements & Adjuva
- Vitamins & Minerals
- Cough & Cold Prepara
- Antihistaminic & COPD
- Antihistamines & Ant
- Antihistamines & Ant

**Action**

**Update Product**

Medicine Image

Choose File 20201022\_132652.jpg

Required

Generic Name	Generic Name Pronunciation
Edited	example

Drug Brand	Drug Brand Pronunciation
example	example

Drug Category	Branch Availability
Vitamin C	Pala-o

Drug Description	Directions for Use
Example	Example

BRANCHES Log-out Add Category

Drug Description

for the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, or arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.

ful for reducing fever and for the temporary relief of minor aches, pains, and discomfort associated with the common colds or flu, inoculations or vaccinations. is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids). Available in different flavors: Grape.

**PHARMALOGUE**

**Category**

- Analgesics (Non-Opi)
- Nonsteroidal Anti-In
- Vitamins &/or Minerals
- Vitamins & Minerals
- Vitamin C
- Supplements & Adjuva
- Vitamins & Minerals
- Cough & Cold Prepara
- Antihistaminic & COPD
- Antihistamines & Ant
- Antihistamines & Ant

**Action**

**Side Effects**

example

**Storage Instructions**

example

**Active Ingredients**

example

**Inactive Ingredients**

example

**Drug Description**

for the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, or arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.

ful for reducing fever and for the temporary relief of minor aches, pains, and discomfort associated with the common colds or flu, inoculations or vaccinations. is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids). Available in different flavors: Grape.

**RESPONSE**

		Edited	example	example	Vitamin C	100

### 7.1.2.21 Add Category Buttons

The first Add Category Button pops up an Add Category form where the admin will be able to input what category name he/she would like to add onto the system.

STIMULUS							
PHARMA LOGUE							
Category							
<a href="#" style="margin-right: 10px; border: 1px solid #00AEEF; padding: 2px 10px; color: inherit; text-decoration: none;">Add Medicine</a> <span style="border: 2px solid #00AEEF; padding: 2px 10px; border-radius: 5px; color: inherit; text-decoration: none; background-color: #00AEEF; color: white; font-weight: bold;">Add Category</span>							
<div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;">           Analgesics (Non-Opioid)             <input checked="" type="checkbox"/>             Nonsteroidal Anti-In             <input checked="" type="checkbox"/>             Vitamins &amp;/or Minera             <input checked="" type="checkbox"/>             Vitamins &amp; Minerals             <input checked="" type="checkbox"/>             Vitamin C             <input checked="" type="checkbox"/>             Supplements &amp; Adujva             <input checked="" type="checkbox"/>             Vitamins &amp; Minerals             <input checked="" type="checkbox"/>             Cough &amp; Cold Prepara             <input checked="" type="checkbox"/>             Antiasthmatic &amp; COPD             <input checked="" type="checkbox"/>             Antihistamines &amp; Ant             <input checked="" type="checkbox"/>             Antihistamines &amp; Ant             <input checked="" type="checkbox"/> </div>	<b>Action</b> <a href="#">Edit</a> <a href="#">Delete</a>	<b>Product Image</b> 	<b>Generic Name</b> Acetaminophen   Paracetamol	<b>Generic Pronunciation</b> Biogesic	<b>Drug Brand</b> bayo-jeh-sic	<b>Brand Pronunciation</b> Analgesics (Non-Opioid) & Antipyretics	<b>Drug Category</b> 4.50 PHP/Tablet
							For the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, minor arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.
							useful for reducing fever and for the temporary relief of minor aches, pains, and discomfort associated with the common colds or flu, inoculations or vaccinations. It is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids). Available in different flavors: Grape.

PHARMA LOGUE							
Category							
<a href="#" style="margin-right: 10px; border: 1px solid #00AEEF; padding: 2px 10px; color: inherit; text-decoration: none;">Add Medicine</a> <span style="border: 2px solid #00AEEF; padding: 2px 10px; border-radius: 5px; color: inherit; text-decoration: none; background-color: #00AEEF; color: white; font-weight: bold;">Add Category</span>							
<div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;">           Analgesics (Non-Opioid)             <input checked="" type="checkbox"/>             Nonsteroidal Anti-In             <input checked="" type="checkbox"/>             Vitamins &amp;/or Minera             <input checked="" type="checkbox"/>             Vitamins &amp; Minerals             <input checked="" type="checkbox"/>             Vitamin C             <input checked="" type="checkbox"/>             Supplements &amp; Adujva             <input checked="" type="checkbox"/>             Vitamins &amp; Minerals             <input checked="" type="checkbox"/>             Cough &amp; Cold Prepara             <input checked="" type="checkbox"/>             Antiasthmatic &amp; COPD             <input checked="" type="checkbox"/>             Antihistamines &amp; Ant             <input checked="" type="checkbox"/>             Antihistamines &amp; Ant             <input checked="" type="checkbox"/> </div>	<b>Action</b> <a href="#">Edit</a> <a href="#">Delete</a>	<b>Product Image</b> 	<b>Generic Name</b> Acetaminophen   Paracetamol	<b>Generic Pronunciation</b> Tempra Forte - 30mL	<b>Drug Brand</b> tem-proh forte	<b>Brand Pronunciation</b> Analgesics (Non-Opioid) & Antipyretics	<b>Drug Category</b> 65.00 PHP
							useful for reducing fever and for the temporary relief of minor aches, pains, and discomfort associated with the common colds or flu, inoculations or vaccinations. It is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids). Available in different flavors: Grape.
<div style="border: 1px solid #00AEEF; border-radius: 10px; padding: 5px; width: fit-content; margin: auto;"> <b>Add Category</b>   <input style="width: 100%; height: 30px; margin-top: 5px;" type="text" value="Enter the category name"/> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <span><a href="#">Close</a></span> <span><a href="#">Add Category</a></span> </div> </div>							

**PHARMA LOGUE**

Add Category

Action	Product Image	Generic Name	Generic Pronunciation	Drug Brand	Brand Pronunciation	Drug Category	Drug Description
<input type="checkbox"/> Edit <input type="checkbox"/> Delete		Acetaminophen   Paracetamol	Fever	Tempra Forte - 30mL	tem-prah-for-te	Analgesics (Non-Opioid) & Antipyretics	For the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, minor arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.

**RESPONSE**

**PHARMA LOGUE**

Action	Product Image	Generic Name	Generic Pronunciation	Drug Brand	Brand Pronunciation	Drug Category	Drug Description
<input type="checkbox"/> Edit <input type="checkbox"/> Delete		Acetaminophen   Paracetamol	Biogesic	bayo-jeh-sic	Analgesics (Non-Opioid) & Antipyretics	4.50 PHP/Tablet	For the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, minor arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.
<input type="checkbox"/> Edit <input type="checkbox"/> Delete		Acetaminophen   Paracetamol	Tempra Forte - 30mL	tem-prah-for-te	Analgesics (Non-Opioid) & Antipyretics	65.00 PHP	useful for reducing fever and for the temporary relief of minor aches, pains, and discomfort associated with the common colds or flu, inoculations or vaccinations. It is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids). Available in different flavors: Grape, Orange, Lemon, and Berry.
<input checked="" type="checkbox"/> Edit <input checked="" type="checkbox"/> Delete		Fever					

### 7.1.2.22 Delete Category Button

The Delete Category button permanently deletes a category from the database and the system.

STIMULUS							
 <span style="float: right;">BRANCHES Log-out</span>							
<span style="float: left;">Category</span> <span style="float: right;">Add Medicine Add Category</span>							
Action	Product Image	Generic Name	Generic Pronunciation	Drug Brand	Brand Pronunciation	Drug Category	Drug Description
<input checked="" type="checkbox"/> Analgesics (Non-Opioid)		Acetaminophen   Paracetamol	Biogesic	bayo-jeh-sic	Analgesics (Non-Opioid) & Antipyretics	4.50 PHP/Tablet	For the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, minor arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.
<input checked="" type="checkbox"/> Nonsteroidal Anti-Inflammatories		Acetaminophen   Paracetamol	Tempra Forte - 30mL	tem-proh-for-te	Analgesics (Non-Opioid) & Antipyretics	65.00 PHP	useful for reducing fever and for the temporary relief of minor aches, pains, and discomfort associated with the common colds or flu, inoculations or vaccinations. It is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids). Available in different flavors: Grape, C

RESPONSE							
 <span style="float: right;">BRANCHES Log-out</span>							
<span style="float: left;">Category</span> <span style="float: right;">Add Medicine Add Category</span>							
Action	Product Image	Generic Name	Generic Pronunciation	Drug Brand	Brand Pronunciation	Drug Category	Drug Description
<input checked="" type="checkbox"/> Analgesics (Non-Opioid)		Acetaminophen   Paracetamol	Biogesic	bayo-jeh-sic	Analgesics (Non-Opioid) & Antipyretics	4.50 PHP/Tablet	For the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, minor arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.
<input checked="" type="checkbox"/> Nonsteroidal Anti-Inflammatories		Acetaminophen   Paracetamol	Tempra Forte - 30mL	tem-proh-for-te	Analgesics (Non-Opioid) & Antipyretics	65.00 PHP	useful for reducing fever and for the temporary relief of minor aches, pains, and discomfort associated with the common colds or flu, inoculations or vaccinations. It is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids). Available in different flavors: Grape, C

### 7.1.2.23 Update Category Buttons

The first Update Category button pops up an Update Category form where the admin will be able to make changes to the category name. After, pressing the next Update Category button within the form will automatically change the category name. Any changes will be reflected in the admin UI, clerk UI, and customer UI.

STIMULUS								
 <span style="float: right;">BRANCHES Log-out</span>								
<b>Category</b> <span style="float: right; border: 1px solid #ccc; padding: 2px 10px; border-radius: 5px; background-color: #e0f2e0;">Add Medicine</span> <span style="float: right; border: 1px solid #ccc; padding: 2px 10px; border-radius: 5px; background-color: #e0f2e0;">Add Category</span>								
Action	Product Image	Generic Name	Generic Pronunciation	Drug Brand	Brand Pronunciation	Drug Category	Drug Description	
		Acetaminophen I Paracetamol	Biogesic	bayo-jeh-sic	Analgesics (Non-Opioid) & Antipyretics	4.50 PHP/Tablet	For the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, minor arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.	> fo ac l hi
		Acetaminophen I Paracetamol	Tempra Forte - 30mL	tem-prah-for-te	Analgesics (Non-Opioid) & Antipyretics	65.00 PHP	useful for reducing fever and for the temporary relief of minor aches, pains, and discomfort associated with the common colds or flu, inoculations or vaccinations. It is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids). Available in different flavors: Grape,	: c yi tc

PHARMA LOGUE								
 <span style="float: right;">BRANCHES Log-out</span>								
<b>Category</b> <span style="float: right; border: 1px solid #ccc; padding: 2px 10px; border-radius: 5px; background-color: #e0f2e0;">Add Medicine</span> <span style="float: right; border: 1px solid #ccc; padding: 2px 10px; border-radius: 5px; background-color: #e0f2e0;">Add Category</span>								
Action	Product Image	Generic Name	Generic Pronunciation	Drug Brand	Brand Pronunciation	Drug Category	Drug Description	
		Acetaminophen I Paracetamol	Biogesic	bayo-jeh-sic	Analgesics (Non-Opioid) & Antipyretics	4.50 PHP/Tablet	For the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, minor arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.	> fo ac l hi
		Acetaminophen I Paracetamol	Tempra Forte - 30mL	tem-prah-for-te	Analgesics (Non-Opioid) & Antipyretics	65.00 PHP	useful for reducing fever and for the temporary relief of minor aches, pains, and discomfort associated with the common colds or flu, inoculations or vaccinations. It is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids). Available in different flavors: Grape,	: c yi tc

**Update Category**

Close
Update Category

**PHARMA LOGUE**

**Category**

Action	Product Image	Generic Name	Generic Pronunciation	Drug Brand	Brand Pronunciation	Drug Category	Drug Description
Edit Delete		Acetaminophen I Paracetamol	Tempra Forte - 30mL	tem-prah forte	Analgesics (Non-Opioid) & Antipyretics	4.50 PHP/Tablet	For the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, minor arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.

**Update Category**

Close
 Update Category

**RESPONSE**

**PHARMA LOGUE**

**Category**

Action	Product Image	Generic Name	Generic Pronunciation	Drug Brand	Brand Pronunciation	Drug Category	Drug Description
Edit Delete		Acetaminophen I Paracetamol	Biogesic	bayo-jeh-sic	Analgesics (Non-Opioid) & Antipyretics	4.50 PHP/Tablet	For the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, minor arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.
Edit Delete		Acetaminophen I Paracetamol	Tempra Forte - 30mL	tem-prah forte	Analgesics (Non-Opioid) & Antipyretics	65.00 PHP	useful for reducing fever and for the temporary relief of minor aches, pains, and discomfort associated with the common colds or flu, inoculations or vaccinations. It is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids). Available in different flavors: Grape.

### 7.1.2.24 Update Quantity Button

The first Update Quantity button pops up an Update Quantity form where the clerk will be able to make changes to each medicine's stock / quantity. After, pressing the next Update Quantity button within the form will automatically change the said medicine's quantity / stock. Any changes will be reflected in the admin UI, clerk UI, and customer UI.

STIMULUS										
PHARMALOGUE										
Action	Stocks	Generic Name	Generic Pronunciation	Drug Brand	Brand Pronunciation	Drug Medicine	Drug Description	Direction for Usage	Ac	
<a href="#" style="border: 1px solid red; color: black; padding: 2px 10px;">Edit</a>	930	Acetaminophen   Paracetamol	a-set-a-mee'-noe-fen   par-a-ce-ta-mol	Biogesic	bayo-jeh-sic	Analgesics (Non-Opioid) & Antipyretics	4.50 PHP/Tablet	For the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, minor arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.	>1 - 2 ts for Adul yea advisabl year recomi tha Parace hours be	
<a href="#" style="border: 1px solid red; color: black; padding: 2px 10px;">Edit</a>	249	Acetaminophen   Paracetamol	a-set-a-mee'-noe-fen   par-a-ce-ta-mol	Tempra Forte - 30mL	tem-prah for-te	Analgesics (Non-Opioid) & Antipyretics	65.00 PHP	useful for reducing fever and for the temporary relief of minor aches, pains, and discomfort associated with the common colds or flu, inoculations or vaccinations. It is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids). Available in different flavors: Grape, Orange, Strawberry	>2 - 5, ages 3 n mL (1 to 5 yec tsp) fc years taken presc	

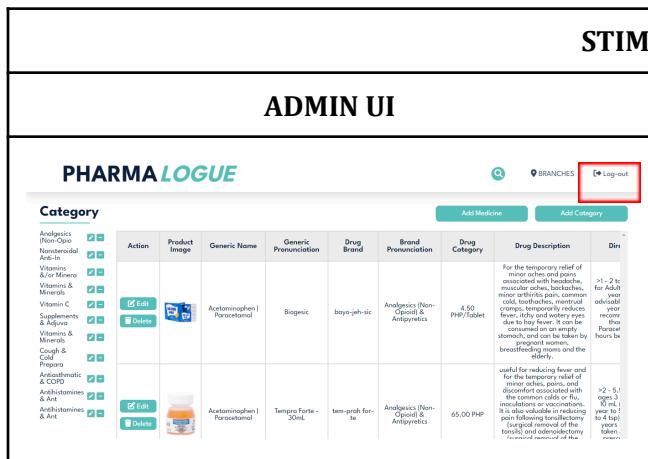
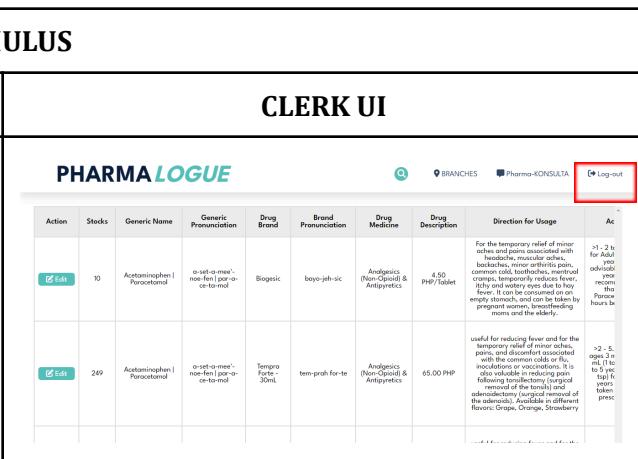
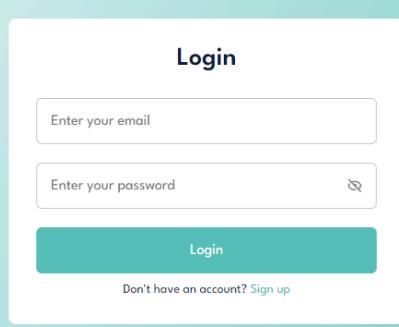
  

PHARMALOGUE										
Action	Stocks	Generic Name	Generic Pronunciation	Drug Brand	Brand Pronunciation	Drug Medicine	Drug Description	Direction for Usage	Ac	
<a href="#" style="border: 1px solid red; color: black; padding: 2px 10px;">Edit</a>	930	Acetaminophen   Paracetamol	a-set-a-mee'-noe-fen   par-a-ce-ta-mol	<b>Update Quantity</b>  <input type="text" value="930"/>				4.50 PHP/Tablet	For the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, minor arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.	>1 - 2 ts for Adul yea advisabl year recomi tha Parace hours be
<a href="#" style="border: 1px solid red; color: black; padding: 2px 10px;">Edit</a>	249	Acetaminophen   Paracetamol	a-set-a-mee'-noe-fen   par-a-ce-ta-mol	Tempra Forte - 30mL	tem-prah for-te	Analgesics (Non-Opioid) & Antipyretics	65.00 PHP	useful for reducing fever and for the temporary relief of minor aches, pains, and discomfort associated with the common colds or flu, inoculations or vaccinations. It is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids). Available in different flavors: Grape, Orange, Strawberry	>2 - 5, ages 3 n mL (1 to 5 yec tsp) fc years taken presc	

PHARMA LOGUE									
Action	Stocks	Generic Name	Generic Pronunciation	Drug Brand	Brand Pronunciation	Drug Medicine	Drug Description	Direction for Usage	Ac
<button>Edit</button>	930	Acetaminophen   Paracetamol	a-set-a-mee'-noe-fen   par-a-ce-ta-mol				4.50 PHP/Tablet	For the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, minor arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.	>1 - 2 to for Adul yea advisabl year recom tha Parac hours br
<button>Edit</button>	249	Acetaminophen   Paracetamol	a-set-a-mee'-noe-fen   par-a-ce-ta-mol	Tempra Forte - 30mL	tem-prah for-te	Analgesics (Non-Opioid) & Antipyretics	65.00 PHP	useful for reducing fever and for the temporary relief of minor aches, pains, and discomfort associated with the common colds or flu, inoculations or vaccinations. It is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids). Available in different flavors: Grape, Orange, Strawberry	>2 - 5, ages 3 n mL (1 to to 5 yec tsp) fr years taken presc
RESPONSE									
Action	Stocks	Generic Name	Generic Pronunciation	Drug Brand	Brand Pronunciation	Drug Medicine	Drug Description	Direction for Usage	Ac
<button>Edit</button>	10	Acetaminophen   Paracetamol	a-set-a-mee'-noe-fen   par-a-ce-ta-mol	Biogesic	bayo-jeh-sic	Analgesics (Non-Opioid) & Antipyretics	4.50 PHP/Tablet	For the temporary relief of minor aches and pains associated with headache, muscular aches, backaches, minor arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and watery eyes due to hay fever. It can be consumed on an empty stomach, and can be taken by pregnant women, breastfeeding moms and the elderly.	>1 - 2 to for Adul yea advisabl year recom tha Parac hours br
<button>Edit</button>	249	Acetaminophen   Paracetamol	a-set-a-mee'-noe-fen   par-a-ce-ta-mol	Tempra Forte - 30mL	tem-prah for-te	Analgesics (Non-Opioid) & Antipyretics	65.00 PHP	useful for reducing fever and for the temporary relief of minor aches, pains, and discomfort associated with the common colds or flu, inoculations or vaccinations. It is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids). Available in different flavors: Grape, Orange, Strawberry	>2 - 5, ages 3 n mL (1 to to 5 yec tsp) fr years taken presc

### 7.1.2.25 Log Out Text Link

Lastly, the Log Out Text Link logs out the admin & clerk / pharmacist from the system and returns them both back to the Login page

STIMULUS											
ADMIN UI						CLERK UI					
RESPONSE											
											
											

## 8. Other Nonfunctional Requirements

### 8.1 Performance Requirements

- ❖ Pharmalogue gives the speed of response. There will be no delay in the output of the system like "loading". Pharmalogue performs fast input and response quickly. Each page must load within "5 seconds". Not having a speed of response often means losing the essence of the system, which has a significant impact on the probability of positive end users' feedback.
- ❖ Pharmalogue shall be able to display confirmation messages or automated responses about certain questions at any time of the day if the clerk is not available in the Pharma-Konsulta.
- ❖ The server of Pharmalogue shall be able to allow many devices to be in the system and adapt easily to screen sizes.
- ❖ If for any reason that the front end of the Pharmalogue is not well viewed in a browser window, the user must open a new window.

### 8.2 Safety Requirements

- ❖ If there is extensive damage to a large portion of the database due to a catastrophic failure or event failure, such as a disk drive crash, memory chip failure, system crash, power loss, or powerline surge, server maintenance, server failure, the recovery method restores a previously backed-up copy of the database.
- ❖ Once the admin or clerk forgets their passwords, they must go to the database manager for evaluation processes to see what happens or to see if they adhere to data and security properly.

### 8.3 Security Requirements

- ❖ Pharmalogue will have existing database storage where the admin and pharmacy's personal details or identity are stored and where the needed medical information of the customer is located.
- ❖ Before any admin or specific pharmacy clerk is given access to the system, they must sign in first if they don't have an account and will be given approval from the database manager and they must not forget their registered account for always logging in for safety purposes with their password has at least 8 characters that are already verified during the creation of the account.
- ❖ Authentication and Access control for admin and pharmacy clerk. With this, unauthorized users are effectively restricted. Aside from the customers, the admin and pharmacy clerk
- ❖ password used for log-in must have a bit strength of at least 8 characters, must be changed every year, and shall only be able to log into a device whereas logging in into another device would not be allowed or is rejected.

- ❖ Confidentiality. Admin and Pharmacy clerks' personal information is kept confidential. In fact, Pharamlagoue should not leave any cookies on the customer's device containing the user's password or confidential information.
- ❖ Keeping a retention policy. This ensures that information no longer needed every year is disposed of properly, timely, thoroughly, and safely using the proper CRUD functions of the SQL in the database.

## 8.4 Software Quality Attributes

- ❖ **User's Adaptability-** Pharmalogue must adhere to simplicity in its User Interface all the time and in any improvement initiatives taken by the front-end developers for it to be easily navigated and friendly to use by the users.
- ❖ **Availability-** Pharmalgoue must be available 24 hours a day so that customers researching at any specific time can access the medical information provided in the system. In times that the pharmacy clerk is not available and the customer uses Pharma-Konsulta, there will be appropriate automated responses that will be generated from the system depending on the messages sent by the customers.
- ❖ **Correctness-** When it comes to the medicine information shown in the system, it must be double-checked all the time by the admin and the pharmacy clerk must update the quantities of the stock every day so that the admin is aware and the customer will know the accurate branches to go. Every year, the maps must be double-checked so that the pharmacy is aware of the changes made in the map or can eliminate those branches not existing.
- ❖ **Maintainability-** The admin, database manager, and pharmacy clerk should maintain correct information and the database manager must maintain correct approval of the requests from the admin and the pharmacy clerk if there are new employees or new data to be inputted in the system. What must be inputted and outputted to the system must be reliable and coherent. In case, there is a failure in the system, a re-initialization of the program will be done as well as the system design is being done with modularity in mind so that its maintainability can be done efficiently. This also means that customization and adding new features are easier and simple.
- ❖ **Usability-** The highlight functionality of the system must be existing all the time such as the viewing of stock availability, viewing of medical information, viewing of available medicines in a certain branch, the messaging features, map of the branches, updating of the medical information, adding of the medical information, etc.
- ❖ **Accessibility-** Pharmalogue should always be accessible for any screen size and to specific devices such as laptops, mobile phones, tablets, and desktop computers.
- ❖ **Scalability-** Pharmalogue which is made as a web application system should be scalable and manage the data load.

## Appendix A: Glossary

**Activity diagram.** It is a flowchart created using the Unified Modeling Language (UML) that depicts how a system or process works from one activity to the next.

**Actor.** An individual that interacts with the system.

**Account Lockout Policy.** Refers to how a system features a preset security protocol that enables administrators to specify the time frame and circumstances for temporary account disablement due to repeated failed password attempts.

**Admin.** A person assigned by Botica Ycsobel, usually a manager, to take over the role & responsibility of controlling the flow of medicinal information in Pharmalogue.

**Alternative Flow.** Capture variations or exceptional scenarios that may occur during the interaction with the system. These represent deviations from the normal flow and describe how the system should handle them.

**Catalogue.** A collection or a list of items for sale, often alphabetically arranged, consisting of additional details that the reader might be interested in knowing.

**Chatbot.** An automated chatting feature integrated into Pharmalogue's system. The chatbot sends an automated response to the customer once Botica Ycsobel's clerks / pharmacists are currently unavailable.

**Class Diagram.** A class diagram is a visual representation that depicts the structure and relationships between classes in an object-oriented system, illustrating the attributes, methods, and associations of each class.

**Clerk.** Also known as a pharmacist. A Botica Ycsobel employee who normally works at the pharmacy's front counter, processing prescription requests and insurance information from clients, as well as taking payments when clients pick up their prescriptions. Additionally, they monitor patient data, record inventory from shipments, replenish shelves, and clean the pharmacy.

**Collaboration Diagram.** Also known as a communication diagram, illustrates how objects or components within a system collaborate and communicate with each other to accomplish a specific task or achieve a desired outcome.

**Context Diagram.** A context diagram is a high-level visual representation that illustrates the interactions between a system being analyzed and its external entities, providing an overview of the system's boundaries and external dependencies.

**Component Diagram.** A component diagram is a visual representation that illustrates the high-level structure of a system, showing the software components, their dependencies, and interfaces, highlighting the modular composition of the system.

**CRUD.** Refers to the complete functioning of the database in the system which means Complete, Read, Update, and Delete.

**Customer.** Any person who has the potential of purchasing Botica Ycsobel's medicines.

**Entity - Relationship Diagram.** An entity-relationship diagram (ER diagram) is a visual representation that depicts the logical structure of a database system, showing the entities (objects), their attributes, and the relationships between entities.

**Feature-Driven Methodology.** Refers to a type of agile software development methodology in which it focuses on dividing the tasks into smaller tasks where teams focus on some specific features weekly and each of the members must finish the task assigned to them.

**FIFO Management.** Refers to the management of stocks in inventory in which products stored first are to be retrieved first.

**Global reference.** Refers to an overall view of the entities and their relationships in the Pharmalogue.

**Iterative Development.** Refers to the process of having the large application's software development lifecycle (SDLC) divided into manageable pieces which divides a lengthy SDLC into smaller portions that build upon one another.

**Normal Flow.** Describes the primary sequence of steps performed by the actor and the system to accomplish the desired outcome.

**Package Diagram.** A package diagram is a visual representation that illustrates the organization and relationships between packages or namespaces in a system, helping to manage the system's complexity and providing a hierarchical view of the system's structure.

**Pharmacist.** Also known as a clerk. A Botica Ycsobel employee who normally works at the pharmacy's front counter, processing prescription requests and insurance information from clients, as well as taking payments when clients pick up their prescriptions. Additionally, they monitor patient data, record inventory from shipments, replenish shelves, and clean the pharmacy.

**Pharmaceutical catalogue.** A collection or a list of Botica Ycsobel's over-the-counter medicines which includes information like price, quantity, and etc.

**PharmaKonsulta.** The name of Pharmalogue's consultation feature wherein the customer is able to contact Botica Ycsobel's clerks via a chatbot.

**Pharmalogue.** A pharmaceutical catalogue system developed by the project team to resolve Botica Ycsobel's issues with slow queueing and inefficient medicine ordering & purchasing processes. The system also acts as a semi-inventory system for Botica Ycsobel to counteract their manual inventory tracking system.

**Post-conditions.** Define the state of the system or any changes that occur after the successful completion of the use case. They specify the expected outcomes or results.

**Pre-conditions.** Define any conditions or requirements that must be met before the use case can be initiated.

**Relationship.** Relationships or associations are shown by connecting actors and use cases with lines.

**Requirements.** The functional and nonfunctional specification that defines what the catalog system (Pahrmalogue) should accomplish.

**Requirement Traceability Matrix (RTM).** A document that helps in managing and tracking the relationship between the software requirements and the entities involved.

**Scalability.** Refers to the capacity of a system to effectively manage expanding user populations, data quantities, or transaction burdens, while maintaining satisfactory performance and functionality.

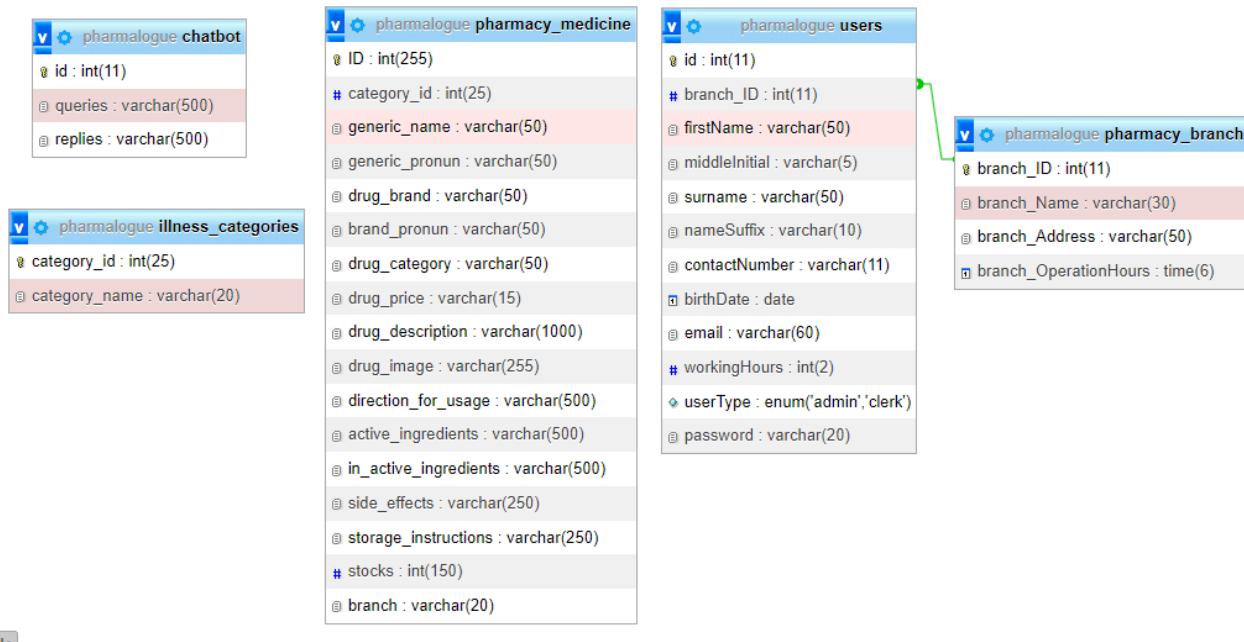
**Sequence Diagram.** A type of Unified Modeling Language (UML) diagram used in software development to illustrate the interactions and order of messages exchanged between objects or components within a system over a specific period of time.

**Use Case.** A concept used in software development and systems engineering to describe interactions between a system or software application and its users or external entities.

**Use Case Diagram.** A type of Unified Modeling Language (UML) diagram used in software development and systems engineering to illustrate the interactions between users or external entities and the system being designed.

**User Interface (UI).** The medium wherein customers and the system interact.

## Appendix B: Database Schema



```
-- phpMyAdmin SQL Dump
-- version 5.2.0
-- https://www.phpmyadmin.net/
--
-- Host: 127.0.0.1
-- Generation Time: Jun 19, 2023 at 07:12 PM
-- Server version: 10.4.27-MariaDB
-- PHP Version: 8.0.25

SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
START TRANSACTION;
SET time_zone = "+00:00";

/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!40101 SET NAMES utf8mb4 */;

--
-- Database: `pharmalogue`
--



-----
```

```
--  
-- Table structure for table `chatbot`  
  

CREATE TABLE `chatbot` (  

  `id` int(11) NOT NULL,  

  `queries` varchar(500) NOT NULL,  

  `replies` varchar(500) NOT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci;  
  

--  
-- Dumping data for table `chatbot`  
  

INSERT INTO `chatbot` (`id`, `queries`, `replies`) VALUES  

(1, 'HilhilHi!hi!Hello!helloHello!hello!', 'Hello, how may we help you?  
  
\r\n\r\nTo know more about how PharmaKonsulta works, type \"FAQs\"'),  

(2, 'FAQ!FAQS!FAQS!faqlfaqs', 'Thank you for wanting to learn more about our services.  
  
\r\n\r\nTo get the answers for each question, type the question number corresponding to the said question.  
  
\r\n\r\nCommon FAQs:  
\r\n1. When will the the consultation session be available?  
\r\n2. What is Botica Ycsobel's contact information  
\r\n3. Can we purchase medicine from the website?'),  

(3, '1|1.|Question #1|Question 1|One|Number one|Number 1', 'Our consultation sessions are available from from 8:00 AM to 6:30 PM PHT!'),  

(4, '2|2.|Question #2|Question 2|Two|Number two|Number 2', 'This chatbot isn\'t currently being monitored by our pharmacists. To connect with our pharmacists, kindly refer to Botica Ycsobel's contact information as stated below:  
  
\r\nContact Information  
\r\nEmail:<br>botica.ycsobel@gmail.com<br>\r\nTelephone:<br>551-1234<br>\r\nContact number:<br>0912-345-6789'),  

(5, '3|3.|Question #3|Question 3|Three|Number three|Number 3', 'Sadly, our customers aren\'t able to purchase the medicines displayed in our Pharmalogue as we believe that face-to-face transactions are much safer for our customers!  
  
\r\nIf you wish to purchase any of our medicine, we suggest taking a quick trip to one of our branches!  
  
\r\nBotica Ycsobel Branches:  
\r\n1. Pala-o<br>\r\n2. Tambacan<br>\r\n3. Tubod<br>\r\n4. Suarez<br>\r\n5. Buru-un<br>\r\n6. Fuentes');
```

---

```
--  
-- Table structure for table `illness_categories`  
  

```

```
CREATE TABLE `illness_categories` (
```

```

`category_id` int(25) NOT NULL,
`category_name` varchar(20) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci;

```

```
--  
-- Dumping data for table `illness_categories`  
--
```

```

INSERT INTO `illness_categories` (`category_id`, `category_name`) VALUES
(12, 'Analgesics (Non-Opi)',  

(13, 'Nonsteroidal Anti-In'),  

(14, 'Vitamins &/or Minera'),  

(15, 'Vitamins & Minerals '),
(16, 'Vitamin C'),  

(17, 'Supplements & Adjuva'),  

(18, 'Vitamins & Minerals '),
(19, 'Cough & Cold Prepara'),  

(20, 'Antiasthmatic & COPD'),  

(21, 'Antihistamines & Ant'),  

(22, 'Antihistamines & Ant');

```

```
--  
-- Table structure for table `pharmacy_branch`  
--
```

```

CREATE TABLE `pharmacy_branch` (
`branch_ID` int(11) NOT NULL,  

`branch_Name` varchar(30) NOT NULL,  

`branch_Address` varchar(50) NOT NULL,  

`branch_OperationHours` time(6) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci;

```

```
--  
-- Dumping data for table `pharmacy_branch`  
--
```

```

INSERT INTO `pharmacy_branch` (`branch_ID`, `branch_Name`, `branch_Address`,  

`branch_OperationHours`) VALUES
(1, 'Palao(Main)', '67G3+PQG, Iligan City, Lanao del Norte', '24:00:00.000000'),
(2, 'Tambacan', 'NEED SPECIFICATION', '24:00:00.000000'),
(3, 'Tubod', 'NEED SPECIFICATIONN', '12:34:56.000000'),
(4, 'Suarez', 'NEED SPECIFICATIONNN', '12:34:56.000000'),

```

```
(5, 'Buru-un', 'NEED SPECIFICATIONNNN', '12:34:56.000000'),
(6, 'Fuentes', 'NEED SPECIFICATIONNNN', '12:34:56.000000');
```

---

```
--  
-- Table structure for table `pharmacy_medicine`  
--
```

```
CREATE TABLE `pharmacy_medicine` (  
  `ID` int(255) NOT NULL,  
  `category_id` int(25) NOT NULL,  
  `generic_name` varchar(50) NOT NULL,  
  `generic_pronun` varchar(50) NOT NULL,  
  `drug_brand` varchar(50) NOT NULL,  
  `brand_pronun` varchar(50) NOT NULL,  
  `drug_category` varchar(50) NOT NULL,  
  `drug_price` varchar(15) NOT NULL,  
  `drug_description` varchar(1000) NOT NULL,  
  `drug_image` varchar(255) NOT NULL,  
  `direction_for_usage` varchar(500) NOT NULL,  
  `active_ingredients` varchar(500) NOT NULL,  
  `in_active_ingredients` varchar(500) NOT NULL,  
  `side_effects` varchar(250) NOT NULL,  
  `storage_instructions` varchar(250) NOT NULL,  
  `stocks` int(150) NOT NULL,  
  `branch` varchar(20) NOT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci;
```

```
--  
-- Dumping data for table `pharmacy_medicine`  
--
```

```
INSERT INTO `pharmacy_medicine` (^ID^, `category_id`, `generic_name`, `generic_pronun`,  
  `drug_brand`, `brand_pronun`, `drug_category`, `drug_price`, `drug_description`, `drug_image`,  
  `direction_for_usage`, `active_ingredients`, `in_active_ingredients`, `side_effects`,  
  `storage_instructions`, `stocks`, `branch`) VALUES  
(9, 0, 'Acetaminophen | Paracetamol ', 'a-set-a-mee\'-noe-fen | par-a-ce-ta-mol', 'Biogesic ',  
  'bayo-jeh-sic ', 'Analgesics (Non-Opioid) & Antipyretics', '4.50 PHP/Tablet', 'For the temporary  
 relief of minor aches and pains associated with headache, muscular aches, backaches, minor  
 arthritis pain, common cold, toothaches, menstrual cramps, temporarily reduces fever, itchy and  
 watery eyes due to hay fever.\r\n\r\nIt can be consumed on an empty stomach, and can be taken by  
 pregnant women, breastfeeding moms and the elderly. \r\n', 'biogesic.png', '>1 - 2 tablets every 4-6  
 hours for Adults and children ages 12 years and older. \r\n  >Not advisable for children under 12
```

years of age.  
 >It is not recommended to take more than 4g (8 tablets) of Paracetamol in a span of 24 hours because this can lead to an overdose.  
 'Acetaminophen 500 mg (Pain Reliever/Fever Reducer), Dexbrompheniramine maleate 1 mg (Antihistamine)  
 'dicalcium phosphate, microcrystalline cellulose, povidone, silicon dioxide,  
 sodium carboxymethyl starch, starch, stearic acid, talc.  
 >Dizziness  
 >Drowsiness  
 >Constipation  
 >Upset Stomach  
 >Blurred vision  
 >Drying of mouth, nose, and throat may occur  
 Store at temperatures not exceeding 30°C.

'Celsius', 930, 'Pala-o'),  
 (10, 0, 'Acetaminophen | Paracetamol ', 'a-set-a-mee'-noe-fen | par-a-ce-ta-mol', 'Tempra Forte - 30mL', 'tem-prah for-te', 'Analgesics (Non-Opioid) & Antipyretics', '65.00 PHP', 'useful for reducing fever and for the temporary relief of minor aches, pains, and discomfort associated with the common colds or flu, inoculations or vaccinations.  
 It is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids).  
 Available in different flavors: Grape, Orange, Strawberry  
 'tempraforte30.png', >2 - 5.5 mL (1/2 to 1 tsp) for ages 3 months to 1 year  
 >5 - 10 mL (1 to 2 tsp) for ages 1 year to 5 years  
 >10 - 20 mL (2 to 4 tsp) for ages 6 years to 12 years  
 All doses should be taken 3-4 times daily or as prescribed by the doctor.  
 'Acetaminophen ', 'artificial flavouring, artificial colouring (in cherry-flavoured only), citric acid, glycerin, polyethylene glycol, propylene glycol, purified water, sodium citrate, and sodium saccharin. Alcohol-, ASA-, and sucrose-free.  
 'Hematological: Skin Rashes  
 Store at temperatures not exceeding 30°C. Protect from light. When stored below 30°C and protected from light, Paracetamol (TEMPRA). The syrup will remain stable until the expiration date indicated on the package.  
 249, 'Tambacan'),

(11, 0, 'Acetaminophen | Paracetamol ', 'a-set-a-mee'-noe-fen | par-a-ce-ta-mol', 'Tempra Forte - 60mL', 'tem-prah for-te', 'Analgesics (Non-Opioid) & Antipyretics', '131.25 PHP', 'useful for reducing fever and for the temporary relief of minor aches, pains and discomfort associated with the common colds or flu, inoculations or vaccinations.  
 It is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids).  
 Available in different flavors: Grape, Orange, Strawberry  
 'tempraforte60.png', >2 - 5.5 mL (1/2 to 1 tsp) for ages 3 months to 1 year  
 >5 - 10 mL (1 to 2 tsp) for ages 1 year to 5 years  
 >10 - 20 mL (2 to 4 tsp) for ages 6 years to 12 years  
 All doses should be taken 3-4 times daily or as prescribed by the doctor.  
 'Acetaminophen ', 'artificial flavouring, artificial colouring (in cherry-flavoured only), citric acid, glycerin, polyethylene glycol, propylene glycol, purified water, sodium citrate, and sodium saccharin. Alcohol-, ASA-, and sucrose-free.  
 'Hematological: Skin Rashes', 'Store at temperatures not exceeding 30°C. Protect from light.  
 When stored below 30°C and protected from light, Paracetamol (TEMPRA) Syrup will remain stable until the expiration date indicated on the package.  
 500, 'Tubod'),

(13, 0, 'Acetaminophen | Paracetamol ', 'a-set-a-mee'-noe-fen | par-a-ce-ta-mol', 'Tempra Forte - 120mL', 'tem-prah for-te', 'Analgesics (Non-Opioid) & Antipyretics', '217.75 PHP', 'useful for reducing fever and for the temporary relief of minor aches, pains and discomfort associated with the common colds or flu, inoculations or vaccinations.  
 It is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids).  
 Available in different flavors: Grape, Orange, Strawberry  
 'tempraforte120.png', >2 - 5.5 mL (1/2 to 1 tsp) for ages 3 months to 1 year  
 >5 - 10 mL (1 to 2 tsp) for ages 1 year to 5 years  
 >10 - 20 mL (2 to 4 tsp) for ages 6 years to 12 years  
 All

doses should be taken 3-4 times daily or as prescribed by the doctor.\r\n\r\n', 'Acetaminophen \r\n', 'artificial flavouring, artificial colouring (in cherry-flavoured only), \r\n citric acid, glycerin, polyethylene glycol, propylene glycol, purified water, \r\n sodium citrate, and sodium saccharin. Alcohol-, ASA-, and sucrose-free.\r\n', 'Hematological: Skin Rashes', 'Store at temperatures not exceeding 30°C. Protect from light.\r\nWhen stored below 30°C and protected from light, Paracetamol (TEMPRA) Syrup will remain stable until the expiration date indicated on the package.\r\n', 40, 'Tambacan'),

(14, 0, 'Acetaminophen | Paracetamol ', 'a-set-a-mee'-noe-fen | par-a-ce-ta-mol', 'Tempra Forte Tablet ', 'tem-prah for-te', 'Analgesics (Non-Opioid) & Antipyretics', '4.45 PHP/Tablet', 'Useful for reducing fever and for the temporary relief of minor aches, \r\npains and discomfort associated with the common colds or flu, inoculations or vaccinations. \r\n\r\nIt is also valuable in reducing pain following tonsillectomy (surgical removal of the tonsils) and adenoidectomy (surgical removal of the adenoids).\r\n\r\nAvailable in different flavors: Grape, Orange, Strawberry\r\n\r\n', 'tempratablet.png', '>Half Tablet for children ages 6-12 years old\r\n\r\n >1 - 2 tablet for children ages 12 years and older\r\n\r\n >All doses to be taken 3-4 times daily with or without food, or as recommended by the doctor.\r\n', 'Acetaminophen', 'Butylated Hydroxyanisole, Citric Acid, D&C Red 33, Polyethylene Glycol, Purified Water, Sodium Chloride, Sodium Citrate\r\n\r\n', '>Hematological: Skin Rashes\r\n\r\n >hypersensitivity reactions\r\n\r\n >changes in number of white blood cells and platelets\r\n\r\n >minor stomach and intestinal disturbances\r\n\r\n', 'Store at temperatures not exceeding 30°C. Protect from light.\r\nWhen stored below 30°C and protected from light.\r\n', 600, 'Tubod'),

(15, 0, 'Acetaminophen | Paracetamol ', 'a-set-a-mee'-noe-fen | par-a-ce-ta-mol', 'Kiddilets', 'kid-di-lets', ' Analgesics (Non-Opioid) & Antipyretics', '2.75 PHP/Tablet', 'These are chewable paracetamol tablets for kids. For fever reduction.\r\nFor the temporary relief of minor aches and pains such as toothache, headache, \r\n backache, menstrual cramps, muscular aches, minor arthritis pain, and pain \r\n associated with the common cold and flu.\r\nAvailable in different flavors: Lemon, Orange, Straberry\r\n\r\n', 'Kiddilets.jpg', '>1 tablet for ages 2 to 3 years old\r\n\r\n >1-2 tablet for ages 4 to 6 years old\r\n\r\n >2-3 tables for ages 7 to 12 years old\r\n\r\n >Should be taken every 4 hours, or as recommended by the doctor \r\n', 'Acetaminophen ', 'Excipients \r\n', '>Hematological: Skin Rashes\r\n\r\n >Minor stomach and intestinal disturbances\r\n\r\n', 'Store at temperatures not exceeding 30°C. \r\n\r\n\r\n', 55, 'All Branches'),

(16, 0, 'Acetaminophen | Paracetamol ', 'a-set-a-mee'-noe-fen | par-a-ce-ta-mol', 'Tylenol', 'tai-luh-naal', 'Analgesics (Non-Opioid) & Antipyretics', '9.25 PHP/Tablet', ' Temporary relief of pain & discomfort from headache, fever, cold or flu, \r\n minor muscular aches, overexertion, menstrual cramps, toothache, minor arthritic pain. \r\n\r\n\r\nThis medicine shouldn't be taken by those who have alcohol, liver disease, and pregnant women.\r\n\r\n', 'tylenol.png', '>1-2 tables for ages 12 years old and above\r\n\r\n >Should be taken every 6 hours, or as recommended by the doctor \r\n', 'Acetaminophen \r\n', 'magnesium stearate, modified starch, powdered cellulose, pregelatinized starch, sodium starch glycolate\r\n\r\n', 'Allergic Reaction: Hives, difficulty in breathing, swelling of your face, lips, tongue, or throat.\r\n\r\n', 'Store at room temperature away from light and moisture. Do not store it in the bathroom.\r\n', 56, 'Tubod'),

(17, 0, 'Acetaminophen | Paracetamol ', 'a-set-a-mee'-noe-fen | par-a-ce-ta-mol', 'Calpol Infant Suspension (Oral Drops) - 120mL', 'kal-pol', 'Analgesics (Non-Opioid) & Antipyretics', '62.75PHP', 'For babies aged from 0-2 years old weighing more than 4kg and not premature. This provides soothing relief from pain and fever for your children, when they need it most. It starts to work on

fever in just 15 minutes but is still gentle on delicate tummies. Gets to work on mild to moderate fever and pain associated with: Fever and pain after Vaccination, Toothache, Headache, Migraine, Muscle ache, Sore throat, and Musculoskeletal pain\r\n', 'calpol.png', '>1.5- 2 yrs. old (26-34 pounds): 1.5- 2.3 mL\r\n >1-1.5 yrs. old (24-26 pounds): 1.7-1.8 mL\r\n >6-12 months old (18-24 pounds): 1.2-1.7 mL\r\n >0-6 months old (7-18 pounds): 0.5-1.2 mL\r\n All doses to be given every 4-6 hours, or as prescribed by the doctor.\r\n', 'Acetaminophen \r\n', 'sucrose (contains 2.2 g of sucrose per 5 ml), sorbitol liquid ((E420) contains 0.45 g sorbitol liquid per 5ml), sodium (contains 0.86mg per 5ml), propylene glycol (E1520), methyl parahydroxybenzoate (E218), ethyl parahydroxybenzoate (E214), propyl parahydroxybenzoate (E216) and carmoisine (E122). \r\n', '>Hematological: Skin Rashes\r\n >stomach pain, nausea, and vomiting\r\n', 'Store at room temperature away from light and moisture. Do not store it in the bathroom.\r\n', 600, 'All Branches'), (18, 0, 'Acetaminophen | Paracetamol ', 'a-set-a-mee'-noe-fen | par-a-ce-ta-mol', 'Calpol Suspension', 'kal-pol', 'Analgesics (Non-Opioid) & Antipyretics', '156.00 PHP', 'For babies aged from 2-6 years old weighing more than 4kg and not premature. This provides soothing relief from pain and fever for your children, when they need it most. It starts to work on fever in just 15 minutes but is still gentle on delicate tummies. Gets to work on mild to moderate fever and pain associated with: Fever and pain after Vaccination, Toothache, Headache, Migraine, Muscle ache, Sore throat, and Musculoskeletal pain\r\n', 'calpolsuspension.png', '>Children 5-6 yrs. old (48-53 pounds): 13-15 mL\r\n >4-5 yrs. old (40-48 pounds): 11-13 mL\r\n >3-4 yrs. old (33-40 pounds): 9-11 mL\r\n >2-3 yrs. old (26-33 pounds): 8-9 mL\r\n All doses to be given every 4-6 hours, or as prescribed by the doctor.\r\n\r\n\r\n\r\n', 'Acetaminophen \r\n', 'sucrose (contains 2.2 g of sucrose per 5 ml), sorbitol liquid ((E420) contains 0.45 g sorbitol liquid per 5ml), sodium (contains 0.86mg per 5ml), propylene glycol (E1520), methyl parahydroxybenzoate (E218), ethyl parahydroxybenzoate (E214), propyl parahydroxybenzoate (E216) and carmoisine (E122). \r\n\r\n\r\n', 'Hematological: allergic dermatitis or skin reactions.\r\n\r\n\r\n', 'Store at room temperature away from light and moisture. Do not store it in the bathroom.\r\n', 44, 'Pala-o'), (19, 0, 'Acetaminophen | Paracetamol ', 'a-set-a-mee'-noe-fen | par-a-ce-ta-mol', ' Alaxan FR', 'a-lak-san ef-ar', 'Analgesics (Non-Opioid) & Antipyretics / Nonsteroi', '8.5 PHP', 'Effective for fever reduction. Used for the relief of mild to moderately severe pain of musculoskeletal origin such as muscle pain (myalgia), arthritis, rheumatism, sprain, strain, bursitis (inflammation of the fluid-filled sac or bursa that lies between a tendon and skin), tendonitis, backache and stiff neck.\r\n\r\n\r\nUsed for the relief of tension headache, dysmenorrhea, toothache, pain after tooth extraction and minor surgical operations.\r\n', 'alaxanfr.png', '1 tablet every 6 hours, or as prescribed by a doctor.', 'Acetaminophen 325mg + Ibuprofen 200 mg\r\n', 'Aspirin. Phenylbutazone, indomethacin, salicylates, other NSAIDs. Anticoagulants and thrombolytic agents. ACE inhibitors. Diuretics. Lithium. Alcohol.\r\n', '>Minor allergic-type: Skin Rashes \r\n >GI ulceration and/or bleeding\r\n >indigestion\r\n >Heartburn\r\n >Nausea & vomiting\r\n >Anorexia\r\n >Diarrhea\r\n >Constipation and stomatitis\r\n >flatulence, bloating, abdominal pain, effects on ki', 'Store at temperatures not exceeding 30°C.\r\n', 24, 'Tubod'), (20, 0, 'Acetaminophen | Paracetamol ', 'a-set-a-mee'-noe-fen | par-a-ce-ta-mol', 'Rexidol Forte', 'rek-si-dol for-te', 'Analgesics (Non-Opioid) & Antipyretics', '5.00 PHP', 'Relief of mild to moderate pain including headache, migraine, backache, muscular aches, menstrual cramps, arthritis pain, toothache and pain associated with the common cold and flu. Reduction of fever.\r\n', 'rexidol.png', '1-2 tablet every 6 hours, or as prescribed by a doctor for ages 12 years old and older\r\n', ' 500mg of Paracetamol and 65 mg of Caffeine \r\n', 'maize starch, purified talc, pregelatinised\r\n\r\n',

'>Paracetamol: Hypersensitivity including skin rashes, and minor stomach and \r\n intestinal disturbances. \r\n >Caffeine: Tremor, difficulty of sleeping, nervousness, restlessness, irritability, \r\n anxiety, headache, ringing of the ears, fast or i', 'Store at temperatures not exceeding 30°C.\r\n', 32, 'Buru-un'),

(21, 0, 'Acetaminophen | Paracetamol ', 'a-set-a-mee'-noe-fen | par-a-ce-ta-mol', 'Saridon', 'sa-ri-don', 'Analgesics (Non-Opioid) & Antipyretics', '7.25 PHP', 'For fast and effective relief of mild to severe headaches. For the relief of pain such as headache, toothache, menstrual discomfort, postoperative and rheumatic pain. For the relief of pain and fever associated with colds and \"flu\".\r\n\r\n', 'saridon.png', '>1-2 tablet every 6 hours, or as prescribed by a doctor for adults\r\n >1 tablet every 6 hours, or as prescribed by a doctor for ages 12 years old to \r\n 16 years old.\r\n >It is recommended that Saridon Triple Action should not be used during pregnancy, particularly in the first trimester and in the final six weeks.\r\n', ' Paracetamol 250 mg, Propyphenazone 150 mg, Caffeine 50 mg.\r\n', 'cellulose, corn starch, magnesium stearate, sodium starch, glycolate\r\n', '>Abdominal pain\r\n >Skin rashes\r\n >Heart palpitations\r\n >The tablet can cause some anxiety, restlessness and nervousness\r\n >Loss of appetite\r\n >Sleep disorders\r\n >Insomnia\r\n', 'Store at temperatures not exceeding 25°C.\r\n', 399, 'Fuentes'),

(22, 0, 'Mefenamic Acid', 'meh-fe-na-mik a-sid', 'Dolfenal ', ' dol-fe-nhul ', 'Nonsteroidal Anti-Inflammatory Drugs (NSAIDs)', '16.75 PHP ', 'Symptomatic relief of mild to moderate pain including headache, dental pain, post-operative and post-partum pain, primary dysmenorrhea, and menorrhagia. Symptomatic relief of musculoskeletal and joint disorders including osteoarthritis and rheumatoid arthritis.\r\n', 'dolfenal.png', '1 tablet every 8 hours, or as prescribed by the physician for ages 15 years and older.\r\n\r\n', 'Paracetamol 250 mg, Propyphenazone 150 mg, Caffeine 50 mg.\r\n', 'Corn starch pregelatinized, methyl cellulose, sodium lauryl sulphate, microcrystalline cellulose, corn starch, silicon dioxide colloidal, magnesium stearate, purified water.\r\n', '>Abdominal pain, constipation, diarrhea, dyspepsia, flatulence, gross bleeding/perforation, heartburn, nausea, gastrointestinal ulcers (gastric/duodenal\r\n >vomiting, abnormal kidney function, anemia, dizziness, edema, elevated liver enzymes, heada', 'Store at temperatures not exceeding 25°C.\r\n', 23, 'All Branches'),

(23, 0, 'Mefenamic Acid', 'meh-fe-na-mik a-sid', 'Ponstan ', 'pon-stan', 'Nonsteroidal Anti-Inflammatory Drugs (NSAIDs)', '39.25 PHP', 'used to relieve the symptoms of period pain and treat heavy periods. It also provides short term relief of pain in conditions such as: muscle and joint injuries such as sprains, strains and tendonitis, dental pain. \r\n', 'ponstan.png', '1 tablet every 8 hours, or as prescribed by the physician for ages 15 years and older.\r\n', 'Mefenamic Acid', 'Lactose monohydrate, Titanium dioxide, Iron oxide yellow, Brilliant blue, Gelatin, Carbon black\r\n', '>Stomach upset including nausea (feeling sick)\r\n >Vomiting\r\n >Heartburn\r\n >Indigestion\r\n >Cramps\r\n >Loss of appetite\r\n >Constipation & Diarrhea\r\n >Dizziness, light-headedness\r\n >Drowsiness\r\n >Sleeplessness\r\n >Allergic Re', 'Store at temperatures not exceeding 25°C.\r\n', 199, 'All Branches'),

(24, 0, 'Multivitamins', 'muhl-tay-vhai-ta-mins', 'Enervon C Tablet', ' eh-ner-vohn see', 'Vitamins &/or Minerals', '6.75 PHP', ' A nutritional supplement to help promote increased energy and enhance the immune system. For the treatment of Vitamin B-complex deficiencies and Vitamin C deficiencies.\r\n', 'enervon.png', '>1 tablet daily, or as prescribed by the doctor. \r\n >Enervon® is formulated for adults 18 years old and above.\r\n >supplement is safe to take while pregnant and breastfeeding in normal doses.\r\n', 'Thiamine Mononitrate (Vitamin B1) 50 mg, Riboflavin (Vitamin B2) 20 mg, \r\n Pyridoxine Hydrochloride (Vitamin B6) 5 mg, Cyanocobalamin (Vitamin

B12) 5 \r\n mcg, Nicotinamide 50 mg, Calcium Pantothenate 20 mg, Ascorbic Acid \r\n (Vitamin C) 500 mg.\r\n', 'N/A', '>headache, fatigue, insomnia.\r\n >stomach cramps, nausea and vomiting.\r\n >skin reactions and manifestations of the respiratory system.\r\n >hyperoxaluria and the formation of kidney stones of calcium oxalate (when used in high doses).\r\n Note: Not, 'Best stored at room temperature away from direct light and moisture. Store at temperatures not exceeding 30°C. To prevent drug damage, you should not store Enervon-C in the bathroom or the freezer.', 349, 'Suarez'),

(25, 0, 'Multivitamins', 'muhl-tay-vhai-ta-mins', 'Revicon ', 'rhe-vhe-kon', 'Vitamins &/or Minerals', '5.5 PHP', 'A nutritional supplement to help promote increased energy and enhance the immune system - it contains essential multivitamins, minerals, and amino acids to help keep your muscles, bones, blood, eyes, and heart healthy, helping you be productive at work. For the treatment of Vitamin B-complex deficiencies and Vitamin C deficiencies.\r\n', 'revicon.png', '>1-2 tablets daily, or as prescribed by the doctor. \r\n >Revicon® Forte is formulated for adults 18 years old and above. \r\n >supplement is not recommendable for breastfeeding women as it contains a relatively higher amount of vitamin A than what is recommended during breastfeeding. \r\n', 'Multivitamins, minerals, amino acids.\r\n', 'N/A', '>Dermatitis and photosensitivity reactions.\r\n >yellow-orange discoloration to urine. \r\n >epigastric pain/discomfort, nausea, diarrhea, or constipation\r\n Note: Not everyone experiences these side effects. Additionally, there may be some side effe', 'Store at temperatures not exceeding 30°C. Protect from light.. \r\n', 55, 'Tubod'),

(26, 0, 'Multivitamins', 'muhl-tay-vhai-ta-mins', 'Stresstab', 'stres-tab', 'Vitamins &/or Minerals', '11.25 PHP', 'Multivitamins + Iron (Stresstabs) is indicated for the prevention and treatment of Vitamin B-complex (helps preserve skin health), Vitamin C(helps promote collagen), Vitamin E(helping protect the skin) and Iron deficiencies during periods of stress. Stresstabs is specifically formulated to help replenish nutrients lost due to stress.\r\n', 'stresstab.png', '>1 tablet daily, or as prescribed by the doctor ages 18 years old and older.\r\n >supplement is not recommendable for breastfeeding women as it contains a relatively higher amount of vitamin A than what is recommended during breastfeeding. \r\n', 'Vitamin C, E, and Iron - includes eight (8) B-complex Vitamins (B1, B2, B6, B12, Biotin, Nicotinamide, Pantothenic Acid, and Folic Acid) at safe levels\r\n', 'N/A', '>Constipation, diarrhea, or upset stomach\r\n >Rare Reaction: allergic reaction - rash, itching/swelling (especially of the \r\n face/tongue/throat), severe dizziness, trouble breathing.\r\n Note: Not everyone experiences these side effects. Additional', 'Store at temperatures not exceeding 30°C. Protect from light.. \r\n', 564, 'All Branches'),

(27, 0, 'Multivitamins', 'muhl-tay-vhai-ta-mins', 'Sangobion', 'sang-goh-byuhn', 'Vitamins & Minerals (Pre & Post Natal) / Antianemi', '30.00 PHP', 'Multivitamins + iron + Calcium (Sangobion Forte) a drug that treats and prevents anemia caused by a lack of iron and other minerals involved in hematopoiesis, also, it treats Vitamin Deficiency, Folic Acid Deficiency, Vitamin B12 Deficiency, and Skin infections. This is also used to supplement folic acid, vitamin B12 in women during pregnancy and lactation.\r\n', 'sangobion.png', '>1 tablet daily, or as prescribed by a healthcare professional for children ages 12 years old and older.\r\n >1-2 tablets daily, or as prescribed by a healthcare professional for adults and women during pregnancy.\r\n', 'Iron Gluconate, Manganese Sulfate, Copper Sulfate, Vit C, Folic Acid, Vit B12, Sorbitol\r\n', 'N/A', '>Vomiting\r\n >Dizziness\r\n >Abdominal bloating\r\n >Redness\r\n >Dark stool\r\n >Temporary faintness\r\n >Continuing Constipation\r\n >Diarrhea\r\n >Allergic reactions\r\n Note: Not everyone experiences these side effects. Additionally, there ', 'Store at temperatures not exceeding 30°C. Protect from light.. \r\n', 567, 'All Branches'),

(28, 0, 'Multivitamins', 'muhl-tay-vhai-ta-mins', 'Hemarate FA', 'N/A', 'Vitamins & Minerals (Pre & Post Natal) / Antianemi', '25.25 PHP', 'Hemarate® FA that addresses iron-deficiency and iron-deficiency anemia. With regular intake, it can increase Hemoglobin and Hematocrit levels.\r\n\r\n', 'hemaratefa.png', '>1 tablet daily, or as prescribed by a healthcare professional for children ages 18 years old and older.\r\n\r\n >1 tablet daily, or as prescribed by a healthcare professional for women during pregnancy.\r\n\r\n', 'Elemental Fe (as Fe sulfate), folic acid, vit B6, vit B12\r\n\r\n', 'N/A', '>Nausea\r\n\r\n >Vomiting\r\n\r\n >Bloating\r\n\r\n >upper abdominal discomfort\r\n\r\n >diarrhea or constipation.\r\n\r\nNote: Not everyone experiences these side effects. Additionally, there may be some side effects not listed above. If you have any concerns about ', 'Store at temperatures not exceeding 30°C. Protect from light.. \r\n', 324, 'Tambacan'),

(29, 0, 'Multivitamins', 'muhl-tay-vhai-ta-mins', 'Centrum Advance ', 'sen-troom ad-vans', 'Vitamins &/or Minerals', '10.50 PHP', 'Multivitamins+Minerals (Centrum Advance) is specially formulated to help protect your entire body with a wide range of vitamins, minerals, and antioxidants. Prevention & treatment of vit & mineral deficiencies.\r\n\r\n', 'centrumadvance.png', '>1 tablet daily, or as prescribed by a healthcare professional for children ages 18 years old and older.\r\n\r\n', 'Acetate &, Beta-Carotene (Vitamin A), Thiamine Nitrate (Vit B1), Riboflavin (Vit B2), Nicotinamide (Vit B3), Pantothenic Acid (Vit B5) (as Calcium Pantothenate), Pyridoxine Hydrochloride (Vit B6), Biotin (Vit B7), Folic Acid (Vit B9), Cyanocobalamin (Vit B12), Ascorbic Acid (Vit C), Vitamin D3, IU dl-Alpha-Tocopheryl Acetate (Vit E), Vitamin K1, Calcium (as Calcium Carbonate and Calcium, Hydrogen Phosphate Anhydrous), Chromium (as Chloride), Copper (as Sulfate Anhydrous), Iodine (as Potassium Io', 'N/A', '>abdominal discomfort\r\n\r\n >Constipation\r\n\r\n >Diarrhea\r\n\r\n >Nausea\r\n\r\n >stomach discomfort \r\n\r\n >hypersensitivity.\r\n\r\nNote: Not everyone experiences these side effects. Additionally, there may be some side effects not listed above. If you have any ', 'Store at temperatures not exceeding 30°C. Protect from light.. \r\n', 560, 'All Branches'),

(30, 0, 'Multivitamins', 'muhl-tay-vhai-ta-mins', 'ImmunPro', 'im-myun pro', 'Vitamins &/or Minerals', ' 7.50 PHP', 'Immunpro Sodium Ascorbate Zinc is a nutritional supplement for the treatment and prevention of vitamin C and zinc deficiencies. Vitamin C and Zinc together help the body's natural defense against damaging free radicals (antioxidant effect) and help boost the immune system.\r\n\r\n', 'immunopro.png', '1 tablet daily, or as prescribed by a healthcare professional for children ages 18 years old and older.\r\n\r\n', 'Sodium Ascorbate (Vitamin C), Zinc Sulfate Monohydrate\r\n\r\n', 'N/A', 'stomach and intestines disturbances\r\n\r\nNote: Not everyone experiences these side effects. Additionally, there may be some side effects not listed above. If you have any concerns about a side effect, please consult your doctor or pharmacist.\r\n\r\n', 'Store at temperatures not exceeding 30°C. Protect from light.. \r\n', 700, 'Buru-un'),

(31, 0, 'Multivitamins', 'muhl-tay-vhai-ta-mins', 'Poten Cee Sugar Free', 'poh-ten see', 'Vitamin C', ' 6.50 PHP', 'Ascorbic Acid (Poten-Cee) is a Vitamin C that helps boost immunity against colds, flu and other upper respiratory ailments and \r\nnis essential in the production of collagen for healthy skin and hair.\r\n\r\n', 'potencee.png', '1-2 tablets daily, or as prescribed by a healthcare professional for children ages 12 years old and older.', 'Hydrolyzed collagen, Ascorbic acid, Magnesium stearate, and Silicon dioxide.\r\n\r\n', 'Rice flour.\r\n\r\n', 'Stomach upset and diarrhea\r\n\r\nNote: Not everyone experiences these side effects. Additionally, there may be some side effects not listed above. If you have any concerns about a side effect, please consult your doctor or pharmacist.\r\n\r\n', 'Store at temperatures not exceeding 25°C. Protect from light.. \r\n', 43, 'All Branches'),

(32, 0, 'Multivitamins', 'muhl-tay-vhai-ta-mins', 'Cecon', 'see-kon', 'Vitamin C', '9.65 PHP', 'Cecon is a chewable, orange-flavored tablet used to prevent or treat low levels of vitamin C in people who do

not get enough of the vitamin from their diets. Vitamin C plays an important role in the body. Strengthens immune system. Antioxidant. Stimulates collagen synthesis. Helps in wound healing and regeneration process.

'Cecon.png', '1-2 tablets daily, or as prescribed by a healthcare professional for children ages 18 years old and older.'

'Ascorbic acid, Sodium ascorbate', 'N/A', '>Diarrhea', '>Nausea', '>Vomiting', '>abdominal cramps/pain', '>heartburn'

Note: Not everyone experiences these side effects. Additionally, there may be some side effects not listed above. If you have any concerns about a side effect, please ', 'Store at temperatures not exceeding 30°C. Protect from light..

(33, 0, 'Multivitamins', 'muhl-tay-vhai-ta-mins', 'Ad-C Plus', 'see-kon', 'Vitamin C / Vitamins &/or Minerals / Supplements &', '9.50 PHP', 'Prevents and treats vitamin C deficiency. Supports healthy immune system. Hasten wound healing and helps increase body resistance to severe infections and common colds. Prevents growth retardation, immune dysfunction, delayed sexual maturation, anorexia, diarrhea & delayed wound healing and neural tube defects.'

'Ad-C Plus.png', '>1 tablet daily, or as prescribed by a healthcare professional for children ages 18 years old and older.'

'Prescription from the doctor is needed for pregnant and lactating moms.'

'ascorbic acid and zinc (as elemental).', 'N/A', '>Ascorbic acid: GI disturbances in large dose (2 g/day). Heartburn, stomach cramps.', '>Zinc: Abdominal pain. Gastric irritation, irritability, lethargy, anemia, and dizziness.'

Note: Not everyone experiences these side effects. Additionally, there m', 'Store at temperatures not exceeding 30°C. Protect from light..

(34, 0, 'Dextromethorphan | Coughs and Cold', 'muhl-tay-vhai-ta-mins', 'Solmux Advance', 'see-kon', 'Cough & Cold Preparations', '13.00 PHP', 'Solmux Advance fights cough due to viruses because of its combination of Carbocisteine which causes phlegm to melt, making it easier to cough up and expel. Reduces and removes bacteria in phlegm. Zinc helps boost immunity. Functions as an antioxidant.', 'solmuxadvance.png', '1 tablet every 8 hours, or as prescribed by a healthcare professional for ages 12 years old and older.'

'Carbocisteine (500mg), Zinc (5mg)', 'N/A', '>Nausea', '>stomach discomfort', '>Diarrhea', '>skin rashes'

Note: Not everyone experiences these side effects. Additionally, there may be some side effects not listed above. If you have any concerns about a side effect, please consult your doc', 'Store at temperatures not exceeding 30°C. Protect from light..

(35, 0, 'Dextromethorphan | Coughs and Cold', 'muhl-tay-vhai-ta-mins', 'Tuceran', 'see-kon', 'Cough & Cold Preparations', '10.75 PHP', 'This medicine is used for the relief of cough, clogged nose, postnasal drip, headache, body aches, and fever associated with the common cold, sinusitis, flu, and other minor respiratory tract infections. It also helps decongest sinus openings and passages.', 'Tuseran.png', '1 tablet every 6 hours, or as prescribed by a healthcare professional for ages 12 years old and older.'

'Dextromethorphan HBr (antitussive), Phenylpropanolamine HCl (nasal decongestant) and Paracetamol (fever reducer and pain reliever).', '>Nausea', '>Vomiting', '>stomach discomfort', '>Constipation', '>Dizziness', '>Drowsiness', '>Excitation', '>mental confusion', '>Hypersensitivity'

Note: Not everyone experiences these side effects. Additionally, there may be some sid', 'Store at temperatures not exceeding 30°C. Protect from light..

(36, 0, 'Dextromethorphan | Coughs and Cold', 'muhl-tay-vhai-ta-mins', 'Symdex', 'see-kon', 'Cough & Cold Preparations', '4.25 PHP', 'This medicine is used to temporarily relieve symptoms caused by the common cold, flu, allergies, or other breathing illnesses (such as sinusitis, bronchitis). Antihistamines help relieve watery eyes, itchy eyes/nose/throat, runny nose, and sneezing. Decongestants help to relieve stuffy nose and ear congestion symptoms.', 'Symdex.png', '>1

tablet every 6 hours, or as prescribed by a healthcare professional for ages 13 years old and older.  
 >Half a tablet every 6 hours, or as prescribed by a healthcare professional for ages 7 to 12 years old.  
 ', 'Dextromethorphan HBr (antitussive), Phenylpropanolamine HCl (nasal decongestant) and Paracetamol (fever reducer and pain reliever).  
 >\n\n', 'N/A', '>Drowsiness  
 >decreased mental alertness  
 >dizziness headache  
 >blurred vision  
 >Fatigue  
 >Weakness  
 >dry mouth  
 >increased blood pressure  
 Note: Not everyone experiences these side effects. Additionally, there may be some', 'Store at temperatures not exceeding 30°C. Protect from light..', 320, 'Tambacan'),

(37, 0, 'Dextromethorphan | Coughs and Cold', 'muhl-tay-vhai-ta-mins', 'Neozep', 'see-kon', 'Cough & Cold Preparations', '6.50 PHP', 'These medicines are used for the relief of clogged nose, runny nose, postnasal drip, itchy and watery eyes, sneezing, headache, body aches, and fever associated with the common cold, allergic rhinitis, sinusitis, flu, and other minor respiratory tract infections. They also help decongest sinus openings and passages.  
 >\n', 'Neozep.png', '1 tablet every 6 hours, or as prescribed by a healthcare professional for ages 12 years old and older.  
 ', 'Phenylephrine HCl, Chlorphenamine Maleate and Paracetamol', 'N/A', '>tremor (muscle shaking)  
 >restlessness, anxiety (feeling of uneasiness)  
 >insomnia/sleeplessness  
 >nervousness, dizziness  
 >increased blood pressure  
 >Palpitation  
 >arrhythmia (irregular heart beat)  
 >Weakness  
 >respi', 'Store at temperatures not exceeding 30°C. Protect from light.', 270, 'Suarez'),

(38, 0, 'Dextromethorphan | Coughs and Cold', 'muhl-tay-vhai-ta-mins', 'Decolgen', 'see-kon', 'Cough & Cold Preparations', '6.50 PHP', 'These medicines are used for the relief of clogged nose, runny nose, postnasal drip, itchy and watery eyes, sneezing, headache, body aches, and fever associated with the common cold, allergic rhinitis, sinusitis, flu, and other minor respiratory tract infections. They also help decongest sinus openings and passages.  
 >\n', 'decolgen.png', '1 tablet every 6 hours, or as prescribed by a healthcare professional for ages 12 years old and older.  
 ', 'Phenylephrine HCl, Chlorphenamine Maleate and Paracetamol', 'N/A', '>tremor (muscle shaking)  
 >restlessness, anxiety (feeling of uneasiness)  
 >insomnia/sleeplessness  
 >nervousness, dizziness  
 >increased blood pressure  
 >Palpitation  
 >arrhythmia (irregular heart beat)  
 >Weakness  
 >respirato', 'Store at temperatures not exceeding 30°C. Protect from light..  
 ', 230, 'Tambacan'),

(39, 0, 'Dextromethorphan | Coughs and Cold', 'muhl-tay-vhai-ta-mins', 'Nasatapp', 'see-kon', 'Cough & Cold Preparations', '8.50 PHP', 'Indicated for allergic and vasomotor or other hyperactive nasal disorders and acute coryza, relief of nasal congestion and hypersecretion. Relief of nasal congestion in infants up to children 12 years of age.  
 >\n', 'Nasatapp.png', '1 tablet twice a day, or as prescribed by a healthcare professional  
 ', 'phenylpropanolamine HCl and brompheniramine maleate', 'N/A', '>Severe hypertension  
 >Drowsiness  
 >Lassitude  
 >Nausea  
 >Giddiness  
 >dry mouth  
 >Mydriasis  
 >increased irritability and excitement.  
 Note: Not everyone experiences these side effects. Additionally, there may be some side e', 'Store at temperatures not exceeding 30°C. Protect from light..', 560, 'Tubod'),

(40, 0, 'Dextromethorphan | Coughs and Cold', 'muhl-tay-vhai-ta-mins', 'Bioflu', 'see-kon', 'Cough & Cold Preparations', '9.00 PHP', ' Bioflu® provides relief from flu and its multiple symptoms such as fever, body pain, headache, colds, cough from post-nasal drip and sore throat.  
 >\n', 'bioflu.png', '1 tablet every 6 hours, or as prescribed by a healthcare professional for ages 12 years and older  
 ', 'Phenylephrine HCl, chlorphenamine maleate, paracetamol', 'N/A', '>tremor (muscle shaking)  
 >restlessness, anxiety (feeling of uneasiness)  
 >insomnia/sleeplessness  
 >nervousness,

dizziness\r\n >increased blood pressure\r\n >Palpitation\r\n >arrhythmia (irregular heart beat)\r\n >Weakness\r\n >respi', 'Store at temperatures not exceeding 30°C. Protect from light.. \r\n', 98, 'Fuentes'),

(41, 0, 'Dextromethorphan | Coughs and Cold', 'muhl-tay-vhai-ta-mins', 'Ascof Forte for Adults', 'see-kon', 'Antiasthmatic & COPD Preparations / Cough & Cold P', '8.50 PHP', 'For the relief of mild to moderate cough due to common colds, flu and mild to moderate acute bronchitis; for relief of reversible mild to moderate bronchospasm in adults and children 2 years of age and older with obstructive airway disease such as asthma and chronic bronchitis.\r\n', 'Ascof Forte.png', 'Take three times a day, or as prescribed by a healthcare professional for ages 13 years and older\r\n', 'Phenylephrine HCl, chlorphenamine maleate, paracetamol\r\n', 'N/A', 'None were reported.\r\nNote: Not everyone experiences these side effects. Additionally, there may be some side effects not listed above. If you have any concerns about a side effect, please consult your doctor or pharmacist.\r\n', 'Store at temperatures not exceeding 30°C. Protect from light.. \r\n', 35, 'Tambacan'),

(42, 0, 'Dextromethorphan | Coughs and Cold', 'muhl-tay-vhai-ta-mins', 'ASCOF for kids', 'see-kon', 'Antiasthmatic & COPD Preparations / Cough & Cold P', '155.50 PHP', 'For the relief of mild to moderate cough due to common colds, flu and mild to moderate acute bronchitis; for relief of reversible mild to moderate bronchospasm in adults and children 2 years of age and older with obstructive airway disease such as asthma and chronic bronchitis.\r\n\r\nFlavors: Strawberry, Ponkan, Grapes\r\n', 'Ascof Kids.png', '>15 mg/kg/dose (or 0.25 mL/kg/dose) administered 3 times a day, or as prescribed by the physician.\r\n >2-4 years old (10 to 15.5 kg): ½-1 teaspoonful 3 times a day, or as prescribed by the physician.\r\n >4-6 years old (15.5 to 20 kg): 1 teaspoonful 3 times a day, or as prescribed by the physician.\r\n >6-12 years old (20-40 kg): 1½-2 teaspoons 3 times a day, or as prescribed by the physician.\r\n >13 years old and above (over 40 kg): 2 teaspoons 3 times a day, or as prescribed by the ', 'Phenylephrine HCl, chlorphenamine maleate, paracetamol\r\n', 'N/A', '>Itchiness\r\n >Nausea\r\n >vomiting and diarrhea \r\nNote: Not everyone experiences these side effects. Additionally, there may be some side effects not listed above. If you have any concerns about a side effect, please consult your doctor or pharma', 'Store at temperatures not exceeding 30°C. Protect from light.. \r\n', 430, 'Pala-o'),

(43, 0, 'Dextromethorphan | Coughs and Cold', 'muhl-tay-vhai-ta-mins', 'Robitussin Soft Gel', 'Antiasthmatic & COPD Preparations / Cough & Cold P', 'see-kon', '12.00 PHP', 'Guaifenesin (Robitussin) provides symptomatic relief from congested chests which may be associated with the common cold and increase the flow of natural secretions along the lower respiratory tract. It is also used to reduce sticky phlegm.\r\n', 'Robitussin Soft Gel.png', '>1 tablet every 4 hours for ages 6 - 12 years old \r\n >1-2 tablet every 4 hours for ages 12 years and older\r\n', 'DEXTROMETHORPHAN HYDROBROMIDE\r\n', 'FD&C Blue No.1, FD&C Red No. 40, Coconut Oil, Gelatin, Glycerin, Mannitol, Polyethylene Glycol, Povidone, Propyl Gallate, Propylene Glycol, Water, Sorbitol.\r\n', '>Nausea\r\n >Vomiting\r\n >Hypersensitivity\r\nNote: Not everyone experiences these side effects. Additionally, there may be some side effects not listed above. If you have any concerns about a side effect, please consult your doctor or pharmacist.\r\n', 'Store at temperatures not exceeding 30°C. Protect from light.. \r\n', 641, 'Tubod'),

(44, 0, 'Dextromethorphan | Coughs and Cold', 'muhl-tay-vhai-ta-mins', 'Decolcin ', 'see-kon', 'Cough & Cold Preparations', '14.00 PHP', ' For the relief of cough, clogged nose, postnasal drip, headache, body aches, and fever associated with the common cold, allergic rhinitis, sinusitis, flu,

and other minor respiratory tract infections. It also helps decongest sinus opening and passages.\r\n', 'decolsin.png', '1 tablet every 6 hours for ages 12 years and older\r\n\r\n', 'Dextromethorphan, Phenylpropanolamine, and Paracetamol\r\n', 'N/A', '>Nausea\r\n >Vomiting\r\n >stomach discomfort\r\n >Constipation\r\n >Dizziness\r\n >Drowsiness\r\n >Excitation\r\n >mental confusion\r\n >Hypersensitivity\r\nNote: Not everyone experiences these side effects.

Additionally, there may be some sid', 'Store at temperatures not exceeding 30°C. Protect from light.. \r\n', 340, 'Suarez'),

(45, 0, 'Antihistamine ', 'muhl-tay-vhai-ta-mins', 'Allerkid', 'see-kon', 'Antihistamines & Antiallergics', '282.50 PHP', 'These medicines are used for the relief of symptoms associated with: Allergic rhinitis such as sneezing, runny, itchy nose; and itchy, watery eyes; Allergic conjunctivitis; Skin symptoms of allergy such as itch and rash.\r\n', 'Allerkid.png', '>2.5 mg once a day for infants ages 6 months to 12 months\r\n >2.5 mg once or twice a day for children ages 12 months to 2 years old\r\n >5mL every 12 hours for children ages 2 to 5 years old\r\n >10mL every 12 hours for children ages 6 to 12 years old\r\n', 'Cetirizine dihydrochloride\r\n', 'N/A', '>Headache\r\n >Sore throat\r\n >Stomach pain\r\n >Coughing\r\n >Drowsiness/Sleepiness\r\n >Diarrhea\r\n >Bronchospasm (sudden, uncontrolled narrowing of airways in lungs);\r\n >Epistaxis (nose bleeding); \r\n >Nausea;\r\n >Vomiting.\r\n\r\n\r\nNote:', 'Store at temperatures not exceeding 30°C. Protect from light.. \r\n', 300, 'Suarez'),

(46, 0, 'Antihistamine ', 'muhl-tay-vhai-ta-mins', 'Alnix Plus Tablet', 'see-kon', 'Antihistamines & Antiallergics / Cough & Cold Prep', '25.75 PHP', 'This medicine is used for the relief of clogged nose; sneezing; runny, itchy nose; and itchy, watery eyes associated with allergic rhinitis.\r\n', 'Alnix Plus Tablet.png', '1 tablet every 12 hours for ages 12 years old and older, or as directed by a doctor.\r\n', 'cetirizine and phenylephrine HCl.\r\n', 'lactose; magnesium stearate; povidone; titanium dioxide; hydroxypropyl methylcellulose; polyethylene glycol; and corn starch.\r\n', '>Headache\r\n >Sore throat\r\n >Stomach pain\r\n >Coughing\r\n >Drowsiness/Sleepiness\r\n >Diarrhea\r\n >Bronchospasm (sudden, uncontrolled narrowing of airways in lungs);\r\n >Epistaxis (nose bleeding); \r\n >Nausea;\r\n >Vomiting.\r\n\r\n\r\nNote:', 'Store at temperatures not exceeding 30°C. Protect from light.. \r\n', 300, 'Tubod'),

(47, 0, 'Antihistamine ', 'muhl-tay-vhai-ta-mins', 'Allerzet Tablet', 'see-kon', 'Antihistamines & Antiallergics / Cough & Cold Prep', '27.00 PHP', 'This medicine is used for: Allergic rhinitis: Symptomatic relief of seasonal (e.g., hay fever) and perennial allergic rhinitis.\r\nChronic idiopathic urticaria: Symptomatic treatment of uncomplicated skin manifestations.\r\n', 'Allerzet Tablet.png', '1 tablet once a day at bedtime for ages 12 years and older, or as recommended by a healthcare professional\r\n', 'cLevocetirizine dihydrochloride\r\n', 'Lactose microcrystalline cellulose maize starch pregelatinised maize starch silicon dioxide magnesium stearate Opadry Clear YS-1R-7006 carnauba wax purified talc, lactose and gluten\r\n', '>Diarrhea\r\n >Constipation\r\n >otitis media\r\n >Vomiting\r\n >Cough\r\n >dry mouth\r\n >Fatigue\r\n >headache\r\nNote: Not everyone experiences these side effects. Additionally, there may be some side effects not listed above. If you have any', ' Store at temperatures not exceeding 30°C. Protect from light.. \r\n', 300, 'Tambacan'),

(48, 0, 'Antihistamine ', 'muhl-tay-vhai-ta-mins', 'Lorapaed', 'see-kon', 'Antihistamines & Antiallergics / Cough & Cold Prep', '285.00 PHP', 'This medicine is used for the relief of clogged nose, sneezing, runny, itchy nose, and itchy, watery eyes associated with allergic rhinitis.\r\n', 'Lorapaed.png', '>2.5mL for children ages 2 years old and older and weighs 30kg or less \r\n', '>5mL for children ages 2 years old and older and weighs more than 30 kg\r\n', 'Loratadine and

Phenylephrine HCl.\r\n', 'corn starch, lactose, and magnesium stearate.\r\n', '>Headache\r\n >Nausea\r\n >dry mouth\r\n >Tiredness\r\n >difficulty sleeping\r\n >increased appetite\r\n >increased weight\r\n >palpitations.\r\nNote: Not everyone experiences these side effects. Additionally, there may be some side effects not ', 'Store at temperatures not exceeding 30°C. Protect from light..', 300, 'Tubod'), (49, 0, 'Antihistamine ', 'muhl-tay-vhai-ta-mins', 'Benadryl', 'see-kon', 'Antihistamines & Antiallergics / Cough & Cold Prep', '285.00 PHP', 'Benadryl® AH offers effective restful relief from allergies for adults - used to relieve symptoms of allergy, hay fever, and the common cold. These symptoms include rash, itching, watery eyes, itchy eyes/nose/throat, cough, runny nose, and sneezing. It is also used to prevent and treat nausea, vomiting and dizziness caused by motion sickness. \r\n', 'Benadryl.png', '1 tablet every 6 to 8 hours as directed by the doctor.\r\n', 'Diphenhydramine Hydrochloride\r\n', 'Citric acid, D&C Red No. 33, FD&C Red No. 40, flavoring, purified water, sodium citrate, and sucrose\r\n', '>Headache\r\n >Nausea\r\n >dry mouth\r\n >Tiredness\r\n >difficulty sleeping\r\n >increased appetite\r\n >increased weight\r\n >palpitations.\r\nNote: Not everyone experiences these side effects. Additionally, there may be some side effects not ', 'Store at temperatures not exceeding 30°C. Protect from light.. \r\n', 345, 'Buru-un');

---

-- Table structure for table `users`

```
CREATE TABLE `users` (
  `id` int(11) NOT NULL,
  `branch_ID` int(11) NOT NULL,
  `firstName` varchar(50) NOT NULL,
  `middleInitial` varchar(5) NOT NULL,
  `surname` varchar(50) NOT NULL,
  `nameSuffix` varchar(10) NOT NULL,
  `contactNumber` varchar(11) NOT NULL,
  `birthDate` date NOT NULL,
  `email` varchar(60) NOT NULL,
  `workingHours` int(2) NOT NULL,
  `userType` enum('admin','clerk') NOT NULL,
  `password` varchar(20) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci;
```

-- Dumping data for table `users`

```
INSERT INTO `users` (`id`, `branch_ID`, `firstName`, `middleInitial`, `surname`, `nameSuffix`,  
`contactNumber`, `birthDate`, `email`, `workingHours`, `userType`, `password`) VALUES  
(1, 1, 'Usha Nicole', 'C.', 'Cobrado', 'N/A', '09267217905', '2002-10-11',  
'ushanicole.cobrado@g.msuiit.edu.ph', 8, 'admin', 'admin1!!'),  
(2, 2, 'Nina Eunice', 'M.', 'Sacala', 'N/A', '09123456789', '2000-01-01',  
'ninaeunice.sacala@g.msuiit.edu.ph', 10, 'clerk', 'admin1!!'),  
(3, 1, 'Jaymark', 'M.', 'Edayan', 'N/A', '09123456780', '2000-10-10',  
'jaymark.edayan@g.msuiit.edu.ph', 10, 'admin', 'Admnn1!');
```

```
--  
-- Indexes for dumped tables
```

```
--  
-- Indexes for table `chatbot`
```

```
--  
ALTER TABLE `chatbot`  
ADD PRIMARY KEY (`id`);
```

```
--  
-- Indexes for table `illness_categories`
```

```
--  
ALTER TABLE `illness_categories`  
ADD PRIMARY KEY (`category_id`);
```

```
--  
-- Indexes for table `pharmacy_branch`
```

```
--  
ALTER TABLE `pharmacy_branch`  
ADD PRIMARY KEY (`branch_ID`);
```

```
--  
-- Indexes for table `pharmacy_medicine`
```

```
--  
ALTER TABLE `pharmacy_medicine`  
ADD PRIMARY KEY (`ID`),  
ADD UNIQUE KEY `ID` (`ID`);
```

```
--  
-- Indexes for table `users`
```

```
--  
ALTER TABLE `users`  
ADD PRIMARY KEY (`id`),  
ADD KEY `branch_ID` (`branch_ID`);
```

```
--  
-- AUTO_INCREMENT for dumped tables  
--  
  
--  
-- AUTO_INCREMENT for table `illness_categories`  
--  
ALTER TABLE `illness_categories`  
    MODIFY `category_id` int(25) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=26;  
  
--  
-- AUTO_INCREMENT for table `pharmacy_branch`  
--  
ALTER TABLE `pharmacy_branch`  
    MODIFY `branch_ID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=7;  
  
--  
-- AUTO_INCREMENT for table `pharmacy_medicine`  
--  
ALTER TABLE `pharmacy_medicine`  
    MODIFY `ID` int(255) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=52;  
  
--  
-- AUTO_INCREMENT for table `users`  
--  
ALTER TABLE `users`  
    MODIFY `id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=8;  
  
--  
-- Constraints for dumped tables  
--  
  
--  
-- Constraints for table `users`  
--  
ALTER TABLE `users`  
    ADD CONSTRAINT `Foreign Key` FOREIGN KEY (`branch_ID`) REFERENCES  
    `pharmacy_branch` (`branch_ID`);  
    COMMIT;  
  
/*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;  
/*!40101 SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;  
/*!40101 SET COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION */;
```

## Appendix C: Working Bibliography

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15 years helping New Zealand businesses

## **Project Log File**

**Name:** Usha Nicole C. Cobrado

**Project Name:** Pharmalogue

**Team Role:** Front-end, Back-end, SRS Documentation

### **Pharmalogue IEEE SRS:**

Contributions:

- Wrote Section 2: Project Description
  - Overview of the Current System & Activity Diagram
  - Problem Statement
  - Objectives (General & Specific Objectives)
  - Significance of the System
  - Scope and Limitations
  - Gantt Chart
- Wrote Section 7: The System
  - System Overview
  - System Features
  - System Functions
- Proof-read the entire SRS document

### **Pharmalogue System:**

Contribution:

- Developed & finalized the Login & Sign Up CRUD & their UI
- Developed & finalized the Admin UI & all its functionalities
- Developed & finalized the Automated Chatbot, all its functionalities, & its database
- Finalized the Clerk UI design
- Developed the initial Navigation Bar design
- Developed the pop-up functions for the Admin & Clerk UI buttons & forms
- Aided in the integration of all the UIs
- Developed the initial Category section for the Customer & Admin UI

File location:

[https://drive.google.com/drive/folders/1TkEnYQYEd8lCxhTwrzlrjqXpSpK7eOxR?usp=drive\\_link](https://drive.google.com/drive/folders/1TkEnYQYEd8lCxhTwrzlrjqXpSpK7eOxR?usp=drive_link)

## **Project Log File**

**Name:** Noven Grace Regahal

**Project Name:** Pharmalogue

**Team Role:** Front End, Back End, SRS Document

### **Pharmalogue IEEE SRS:**

Contribution:

- Made Section 1: Introduction
  - Purpose
  - Intended Audience and Reading Suggestions
  - References
- Made Section 6: Data Models
  - Entity-Relationship Diagram
  - Class Diagram
  - Context Diagram
  - Component Diagram
  - Package Diagram

### **Pharmalogue System:**

Contributions:

- Developed the initial Home page UI
- Developed the Branch Mapping feature of the system
- Developed Search Bar front-end
- Developed Clerk initial UI
- Developed Clerk back-end

File location:

[https://drive.google.com/drive/folders/1TkEnYQYEEd8lCxhTwrzlrjqXpSpK7eOxR?usp=drive\\_link](https://drive.google.com/drive/folders/1TkEnYQYEEd8lCxhTwrzlrjqXpSpK7eOxR?usp=drive_link)

## Project Log File

**Name:** Nina Eunice Sacala

**Project Name:** Pharmalogue

**Team Role:** Front-End, SRS Documentation

### Pharmalogue IEEE SRS:

Contributions:

- Made the Executive Summary
- Made Section 4: Requirements Definition
  - Requirement Traceability Matrix
  - Activity Diagrams
- Made Section 5: Analysis and Design
  - Use Case Diagram
  - Use Case Description
  - Sequence Diagrams
  - Collaboration Diagrams

### Pharmalogue System:

Contributions:

- Raised suggestions for the color scheme and wireframes
- Helped in the overall system integration
- Made the Homepage UI
- Helped in the initial Pharmacy Admin UI
- Helped in the Initial Login CRUD
- Helped in the details of the medicines and the pictures of the medicines to be inputted in the database
- Finalized the view of the navigation bar

File location:

[https://drive.google.com/drive/folders/1TkEnYQYEEd8lCxhTwrzlrjqXpSpK7eOxR?usp=drive\\_link](https://drive.google.com/drive/folders/1TkEnYQYEEd8lCxhTwrzlrjqXpSpK7eOxR?usp=drive_link)

## Project Log File

**Name:** Suad Sharief

**Project Name:** Pharmalogue

**Team Role:** Front-End, Back-End, SRS Documentation

### Pharmalogue IEEE SRS:

Contributions:

- Made Section 3: Methodology
  - Requirements Analysis and Model
  - Requirements Specification
  - Design
  - Implementation
  - Testing
  - Deployment and Maintenance
- Made Section 4: Other Nonfunctional Requirements
  - Performance Requirements
  - Safety Requirements
  - Security Requirements
  - Software Quality Attributes

### Pharmalogue System:

Contribution:

- Made the creation of the Initial Login UI and Signup UI.
- Made the creation of the Initial Chatbot UI.
- Made the Initial Login CRUD and Sign Up CRUD.
- Made the Initial hover style for the items in the navigation bar.
- Made the final search functionality such as hover and in connection with retrieving the values from the database.
- Made the retrieving code for reflecting the medicine categories from the database to the Customer UI and Admin UI.
- Made the final Medicine Catalogue UI where customers can click “view information” for each medicine.
- Input the values for the `pharmacy_medicine` table in the pharmalogue database.
- Helped in the overall integration of the system from the Customer UI, Clerk UI, and Admin UI.

File location:

[https://drive.google.com/drive/folders/1TkEnYQYEEd8lCxhTwrzlrjqXpSpK7eOxR?usp=drive\\_link](https://drive.google.com/drive/folders/1TkEnYQYEEd8lCxhTwrzlrjqXpSpK7eOxR?usp=drive_link)