

**PHARMAWISE**

**PROJECT THESIS**

**SUBMITTED**

**TO**

**AWH ENGINEERING COLLEGE  
KUTTIKKATTOOR, CALICUT**

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OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE  
OF**

**Master Of Computer Applications**

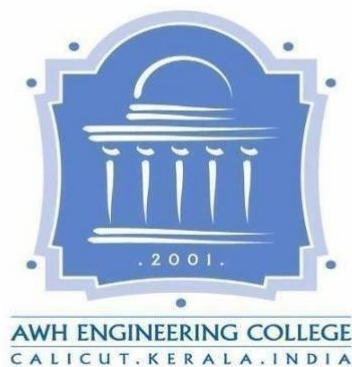
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**CERTIFICATE**

*This is to certify that this thesis entitled “**PHARMAWISE**” submitted here with is an authentic record of the thesis work done by **AKSHAY C K (AWH23MCA-2006)** under our guidance in partial fulfillment of the requirements for the award of **Master of Computer Applications** from **APJ Abdul Kalam Technological University** during the academic year 2024.*

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## **ABSTRACT**

PHARMA WISE is a web-based application that can be used by pharmacists to manage drugs in a store. It also provides an online shopping functionality that allows regular customers to buy drugs online after submitting their prescription. PHARMA WISE is also providing an online shopping functionality. And reduces the burden and helps to manage. It helps to improve inventory management, cost etc. The software used can generate invoices, as per the user's requirements which is really helpful in inventory management.

PHARMA WISE is a user-friendly application that reduces the burden and helps to manage. It helps to improve inventory management, cost etc. The software used can generate invoices, as per the user's requirements. The software also gives an analysis on which products are about to expire, which is really helpful in inventory management. The primary aim of PHARMA WISE is to improve accuracy and enhance safety and efficiency in the pharmaceutical store. This helps in effective management of drugs in stock. The user is provided with a user-friendly web-based interface that is very easy to use.

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# **INTRODUCTION**

## 1. INTRODUCTION

PHARMA WISE is a web-based application designed to revolutionize pharmaceutical store management by simplifying inventory tracking, order processing, and customer interactions. In an industry where accuracy, efficiency, and timely access to medications are paramount, PHARMA WISE offers a robust solution that streamlines daily operations for both pharmacists and customers. With a focus on modernizing pharmacy workflows, this application provides essential features such as stock management, expiry tracking, automated invoice generation, and an integrated online shopping platform. as per the user's requirements which is really helpful in inventory management.

For customers, PHARMA WISE makes it easier to purchase medications online after securely uploading their prescriptions, ensuring safe and efficient access to necessary drugs. Pharmacists benefit from a user-friendly interface that allows them to manage stock, view and update orders, and respond to customer complaints seamlessly. By leveraging technology to enhance efficiency and improve user experience, PHARMA WISE aims to address the everyday challenges faced by pharmacies while promoting better healthcare accessibility and safety.

Ultimately, PHARMA WISE is positioned as a powerful tool that meets the evolving needs of the pharmaceutical industry, supporting pharmacies in delivering high-quality service and effective medication management.

Overall, PHARMA WISE aims to be more than just a management tool; it is a strategic solution that empowers pharmacies to operate more efficiently, provides customers with convenient access to essential medications, and promotes high standards in pharmaceutical care. By bridging the gap between pharmacy operations and modern e-commerce, PHARMA WISE is well-positioned to enhance the way pharmacies serve their communities and to set a new standard for quality in pharmacy management.



# **SYSTEM ANALYSIS**

## **2.SYSTEM ANALYSIS**

### **2.1 Existing system**

The existing system for managing pharmacy inventory and customer orders often relies on manual processes and outdated methods.

- Pharmacists typically maintain physical records for inventory management, which can lead to errors, inefficiencies, and challenges in tracking stock levels.
- Customer transactions may also be processed manually, resulting in longer wait times and potential billing discrepancies.
- Additionally, existing systems may lack online shopping capabilities, limiting customer convenience and engagement.
- Overall, the existing approach can hinder effective drug management and customer satisfaction due to its reliance on cumbersome processes.

### **2.2 Proposed system**

PHARMA WISE is a web-based application designed to revolutionize the way pharmacists manage drug inventory and facilitate customer purchases. The proposed system includes features for:

- **Inventory Control:** Real-time tracking of stock levels, alerts for products nearing expiration, and streamlined order management.
- **Online Shopping:** A platform for customers to search for medications, submit prescriptions, and place orders from the comfort of their homes.
- **Billing and Transactions:** Automated invoice generation tailored to user needs, enhancing the efficiency of billing and cash transactions.
- **User Accounts:** Both pharmacists and customers must create accounts, with pharmacist accounts requiring admin approval to ensure security and authenticity.
- **Feedback Mechanism:** A feature for customers to provide feedback, fostering better service and product offerings

The primary goal of PHARMA WISE is to enhance the accuracy, safety, and efficiency of drug management while providing a user-friendly interface. By creating a comprehensive database of all medicines, the system ensures effective stock management and improves overall operational efficiency. This innovative solution not only alleviates the workload for pharmacists but also significantly enhances the customer experience, making pharmaceutical services more accessible and reliable.

## 2.3 Module Description

This project has 3 modules:

### **Admin:**

- Login
- View pharma Verify
- View Approved pharma
- View Rejected pharma
- View customer data
- View review
- View complaint & replay
- Change password

### **Pharmacy:**

- Sign Up
- Login
- View orders and update
- View prescription
- Manage medicine
- Manage stock
- Bill entry
- View payments
- View complaint & replay
- View review
- Manage profile

- Change password

**Customer:**

- Signup
- Login
- View pharmacy
- Search medicine
- Upload prescription
- Manage cart
- View bills and payment
- Send complaint & view replay
- Send review
- Manage profile
- Change password

**Sprint****Sprint 1**

Module	Task	Hours for completion	Expected date of Completion	Actual date of completion
Admin	Login	4 hours	15/08/2024	15/08/2024
	Pharmacy verification	2 hours	18/08/2024	18/08/2024
	View approved Pharmacy	2 hours	18/08/2024	18/08/2024
	View rejected pharmacy	2 hours	18/08/2024	18/08/2024
	View Customer data	3 hours	22/08/2024	22/08/2024
	View complaints and replay	2 hours	22/08/2024	22/08/2024
	Change password	2 hours	22/08/2024	22/08/2024
	View review	2 hours	29/08/2024	29/08/2024

**Sprint 2**

Module	Task	Hours for completion	Expected date of completion	Actual date of completion
pharmacy	login	2 hours	29/08/2024	29/08/2024
	Registration	4 hours	05/09/2024	05/09/2024
	Add medicine & view and update	6 hours	07/09/2024	07/09/2024
	View Orders and Update Status	6 hours	8/09/2024	8/09/2024
	View stock	2 hours	12/09/2024	12/09/2024
	View profile	4 hours	12/09/2024	12/09/2024

	View Review	2 hours	19/09/2024	19/09/2024
	Change Password	1 hours	19/09/2024	19/09/2024
	Add medicine	2 hours	19/09/2024	19/09/2024
	View and update medicine	1 hours	19/09/2024	19/09/2024
	View Orders and Update Status	6 hours	8/09/2024	8/09/2024

### Sprint 3

Module	Task	Hours for completion	Expected date of completion	Actual date of completion
Customer	login	2 hours	29/08/2024	29/08/2024
	Registration	4 hours	05/09/2024	05/09/2024
	Search medicine	6 hours	07/09/2024	07/09/2024
	Upload prescription	6 hours	8/09/2024	8/09/2024
	View profile and Update	2 hours	12/09/2024	12/09/2024
	View bill entry and payment	4 hours	12/09/2024	12/09/2024
	Add to cart	4 hours	19/09/2024	19/09/2024
	View Review	2 hours	19/09/2024	19/09/2024
	View Replies	1 hours	22/08/2024	22/08/2024
	Send Complaint	2 hours	22/08/2024	22/08/2024

---

## 2.1 User Stories

### Admin

- As an admin, I want to view and manage pharmacy registration and verify it.
- As an admin I want to view approved and rejected pharmacy.
- As an admin, I want to view details of customers.
- As an admin, I want to view review from customer.
- As an admin, I want to view complaints and send replay.
- As an admin, I want to change password.

### Pharmacy

- As a pharmacy, I want to view orders from customer and update.
- As a pharmacy, I want to add medicine to stock.
- As a pharmacy, I want to manage medicine add, edit, delete it.
- As a pharmacy, I want to the stocks.
- As a pharmacy, I want to view order payments.
- As a pharmacy, I want to view complaints and make replay for it.
- As a pharmacy, I want to view review from customer.
- As a pharmacy, I want to view profile and update details.
- As a pharmacy, I want to change password for my PHARMA WISE account.

### Customer

- As a customer, I want to browse medicine.
- As a customer, I want to add to cart the product.
- As a customer, I want to confirm order and make payment.
- As a customer, I want to view billing for my prescription uploaded and make payment.
- As a customer, I want to send complaints and suggestion of services.
- As a customer, I want view replies for the complaint.
- As a customer, I want to send review and ratings.
- As a customer, I want to view profile and update details.
- As a customer, I want to change password of my account.

# **FEASIBILITY STUDY**



### **3. FEASIBILITY STUDY**

An analysis of the ability to complete a project successfully, taking into account legal, economic, technological, scheduling, and other factors is considered a feasibility study. Rather than just diving into a project and hoping for the best, feasibility study allows project managers to investigate the possible negative and positive outcomes of a project before investing too much money and time.

#### **3.1 Economic feasibility**

The economic analysis is done to determine the benefits and savings that are expected from the candidate system and compare them with costs. Thus, coming to a conclusion on whether the system is economically feasible or not. This system is cost effective as well as time effective, thereby making it economically feasible. This study presents tangible and intangible benefits from the project by comparing the developments and operational costs. The technique of cost benefit analysis is often used as a basis for assessing economic feasibility.

#### **3.2 Technical Feasibility**

The project requires a robust backend to handle database transactions, user authentication, order management, and secure payment processing. Given the available technology stack (e.g., PHP, Python, or Java for backend; MySQL or PostgreSQL for database), it is feasible to implement the functionalities described. The front end can use modern frameworks like React or Angular for a user-friendly interface

#### **3.3 Operational Feasibility**

This system is designed to meet the needs of customers, pharmacies, and admins effectively. The customer module facilitates easy ordering and feedback, the pharmacy module enables efficient order management and customer service, and the admin module ensures smooth operations through oversight and control. Thus, the system is operationally feasible, as it addresses key needs with defined workflows.

### **3.4 Behavioral Feasibility**

Behavioral feasibility assesses how users (customers, pharmacies, and admins) are likely to adopt and interact with the Pharma Wise system. The project's success depends on its ease of use, accessibility, and the fulfillment of user needs

### **3.5 Software Feasibility**

Software feasibility involves assessing the requirements for system development, including platform, development tools, and scalability. The project's success depends on its ease of use, accessibility, and the fulfillment of user needs. The required software stack is feasible, allowing flexibility, scalability, and security for efficient development and system management.

### **3.5 Hardware Feasibility**

The hardware feasibility examines the physical requirements for hosting, data processing, and user access, focusing on server infrastructure, network requirements, and storage solutions. the system's infrastructure is well-supported by cloud solutions, enabling reliable data management, easy user access, and responsive performance under various usage demands.

# **SOFTWARE ENGINEERING PARADIGM**

## **4. SOFTWARE ENGINEERING PARADIGM**

The software engineering paradigm which is also referred to as a software process model or Software Development Life Cycle (SDLC) model is the development strategy that encompasses the process, methods and tools. SDLC describes the period of time that starts with the software system being conceptualized.

### **4.1 Agile model**

Agile model is an iterative and incremental software development approach that prioritizes flexibility, collaboration, and customer feedback. It emphasizes adaptability to changing requirements throughout the development process, dividing the project into small, manageable units called iterations or sprints. Cross-functional teams work closely together, allowing for continuous communication and quick adjustments to evolving customer needs. Agile methodologies, such as Scrum and Kanban, promote transparency, regular reassessment, and the delivery of a minimum viable product at the end of each iteration. This iterative cycle enables faster response to changes, promotes continuous improvement, and ultimately results in the timely delivery of high-quality software.

### **4.2 Scrum**

Scrum is an agile framework for managing and organizing software development projects. It is characterized by its iterative and incremental approach, dividing the project into fixed-length iterations called sprints, usually lasting two to four weeks. Scrum employs a structured framework that includes roles such as Product Owner, Scrum Master, and Development Team, as well as defined ceremonies like Sprint Planning, Daily Standups, Sprint Review, and Sprint Retrospective. The framework places a strong emphasis on collaboration, transparency, and adaptability, with the goal of delivering a potentially shippable product at the end of each sprint. Scrum provides a framework that enables teams to respond quickly to changing requirements and customer feedback, fostering a more efficient and responsive software development process.

# **SYSTEM REQUIREMENT SPECIFICATION**

## **5.SYSTEM REQUIREMENTS SPECIFICATION**

### **5.1 Software requirements**

- Operating system : Microsoft Windows 7 or above
- Frontend : HTML/CSS/BOOTSTRAP/JS
- Backend : MySQL
- Language : python
- IDE : Pycharm
- Framework : Django

### **5.2 Hardware requirements**

- Processor : Intel Pentium Core i3 or above
- Main memory :4 GB or above
- Hard Dick Capacity :100 GB or above

# **SYSTEM DESIGN**

## 6. SYSTEM DESIGN

System design is the first in the development phase for many engineered product or system. It may define the process of applying various techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization.

### 6.1. Database Design

Database design is the process of producing a detailed data model of a database. This logical data model contains all the needed logical and physical design choices and physical storage parameters needed to generate a design in a data definition language, which can then be used to create a database.

#### Normalization

It is a process of converting a relation to a standard form. The process is used to handle the problems that can arise due to data redundancy.

**Normal Forms:** These are the rules for structuring relations that eliminate anomalies.

#### 1. First Normal Form (1NF)

A relation is said to be in first normal form if the values in the relation are atomic for every attribute in the relation.

#### 2. Second Normal Form (2NF)

A relation is said to be in second Normal form if it is in first normal form and it should satisfy any one of the following rules.

- Primary key is a not a composite primary key
- No non key attributes are present
- Every non key attribute is fully functionally dependent on full set of primary keys.

#### 3. Third Normal Form (3NF)

A relation is said to be in third normal form if there exist no transitive dependencies



## 6.2 Tables

### LOGIN

Field name	Type	Width	Constraints
Login_Id	int	11	Primary key
Username	Varchar	100	Not null
Password	Varchar	100	Not null
Type	Varchar	40	Not null

### PHARMACY

Field name	Type	Width	Constraints
Shop_Id	int	11	Primary key
Login_Id	int	11	Foreign key
Email	Varchar	100	Not null
Owner_name	varchar	20	Not null
Owner_phone	varchar	100	Not null
Document	varchar	200	Not null
Place	varchar	100	Not null
Post	varchar	100	Not null
Pin	varchar	100	Not null
District	varchar	100	Not null
Status	varchar	100	Not null

### CUSTOMER

Field name	type	Width	Constraints
Cust_Id	int	11	Primary key
Login_Id	int	11	Foreign key
Name	Varchar	100	Not null
Email	Varchar	100	Not null
Phone	Varchar	100	Not null
Gender	Varchar	100	Not null

**ORDER MAIN**

Field name	Type	Width	Constraints
Ordermain_Id	Int	11	Primary key
User_Id	Int	10	Foreign key
Shop_Id	Int	10	Foreign key
Date	varchar	100	Not null
Amount	varchar	100	Not null
Status	varchar	100	Not null
Type	varchar	100	Not null
Online	varchar	100	Not null
Shop_bills	varchar	100	Not null

**PAYMENT**

Field name	Type	Width	Constraints
Payment_Id	Int	11	Primary key
Order_main_Id	Int	11	Foreign key
Date	Varchar	100	Not null
Amount	Varchar	100	Not null
Status	varchar	100	Not null

**MEDICINE**

Field name	Type	Width	Constraints
Medicine_id	Int	11	Primary key
Name	Int	100	Foreign key
Ingredients	Date	100	Not null
Quantity	Varchar	100	Not null
Warning	varchar	100	Not null
Exp_date	varchar	100	Not null
Manuf_date	varchar	100	Not null
Price	varchar	100	Not null
Category	varchar	100	Not null

**STOCK**

Field name	Type	Width	Constraints
Stock_Id	Int	11	Primary key
Medicine_Id	Int	11	Foreign key
Quantity	Varchar	100	Not null

**ORDER SUB**

Field name	Type	Width	Constraints
Order_sub_Id	Int	11	Primary key
Order_main_Id	Int	11	Foreign key
Stock_Id	Int	11	Foreign key
Quantiy	Varchar	100	Not null
Amount	Varchar	100	Not null

**CART**

Field name	Type	Width	Constraints
Cart_id	Int	11	Primary key
User_Id	Int	11	Foreign key
Stock_Id	Int	11	Foreign key
Quantity	Varchar	100	Not null

**COMPLAINT**

Field name	Type	Width	Constraints
Complaint_id	Int	11	Primary key
User_id	Int	11	Foreign key
Date	Varchar	100	Not null
Complaint	Varchar	100	Not null
Replay	Varchar	100	Not null
Status	Varchar	100	Not null

**PRISCRPTION**

Field name	Type	Width	Constraints
Priscrip_Id	Int	11	Primary key
User_Id	Int	11	Foreign key
File	Varchar	100	Not null

**REVIEW**

Field name	Type	Width	Constraints
Review_Id	Int	11	Primary key
User_Id	Int	11	Foreign key
Date	Varchar	100	Not null
Review	Varchar	100	Not null

**BILL ENTRY**

Field name	type	Width	Constraints
Bill_Id	Int	11	Primary key
Prscription_id	Int	11	Foreign Key
Stock_Id	Int	11	Foreign Key
Total_amount	Varchar	100	Not null
Quantity	Varchar	55	Not null
Pay_status	Varchar	100	Not null

**PRSCRIPTION PAYMENT**

Field name	type	Width	Constraints
Pri_payment_Id	Int	11	Primary key
Bill_entry_id	Int	11	Foreign Key
Date	Date	11	Not null
Amount	Varchar	100	Not null
Status	Varchar	55	Not null

## 6.2 UML Designs

The Unified Modeling Language (UML) is a standard language for specifying, visualizing, constructing, and documenting the artifacts of the software systems, as well as for business modeling and other non-software systems. The UML represents a collection of best engineering practices that have proven successful in the modeling of large and complex systems. The UML is a very important part of developing object-oriented software and the software development process. The UML uses mostly graphical notations to express the design of software projects. Using the UML helps project teams communicate, explore potential designs, and validate the architectural design of the software.

A sequence diagram is a type of UML diagram that visualizes the interactions and message exchanges between different objects or components in a system over a specific period of time. It shows the flow of control and the order of message invocations, allowing you to understand the dynamic behavior of the system. Sequence diagrams are commonly used to model the behavior of a single use case or a specific scenario.

A use case diagram is a type of UML diagram that represents the functionality of a system from the user's perspective. It provides a high-level view of the system's behavior and shows how users or actors interact with the system to accomplish specific goals or tasks. Use case diagrams are useful for capturing and visualizing the requirements of a system and identifying the actors involved and the use cases they participate in.

### 6.3 Use case diagram



## 6.4 Scenario

**Admin:**

- Admin can approve pharmacy
- Admin can view pharmacy
- Admin can view rejected pharmacy
- Admin can view customer data
- Admin can view review
- Admin can view complaints and make reply
- Admin can change password

**Pharmacy:**

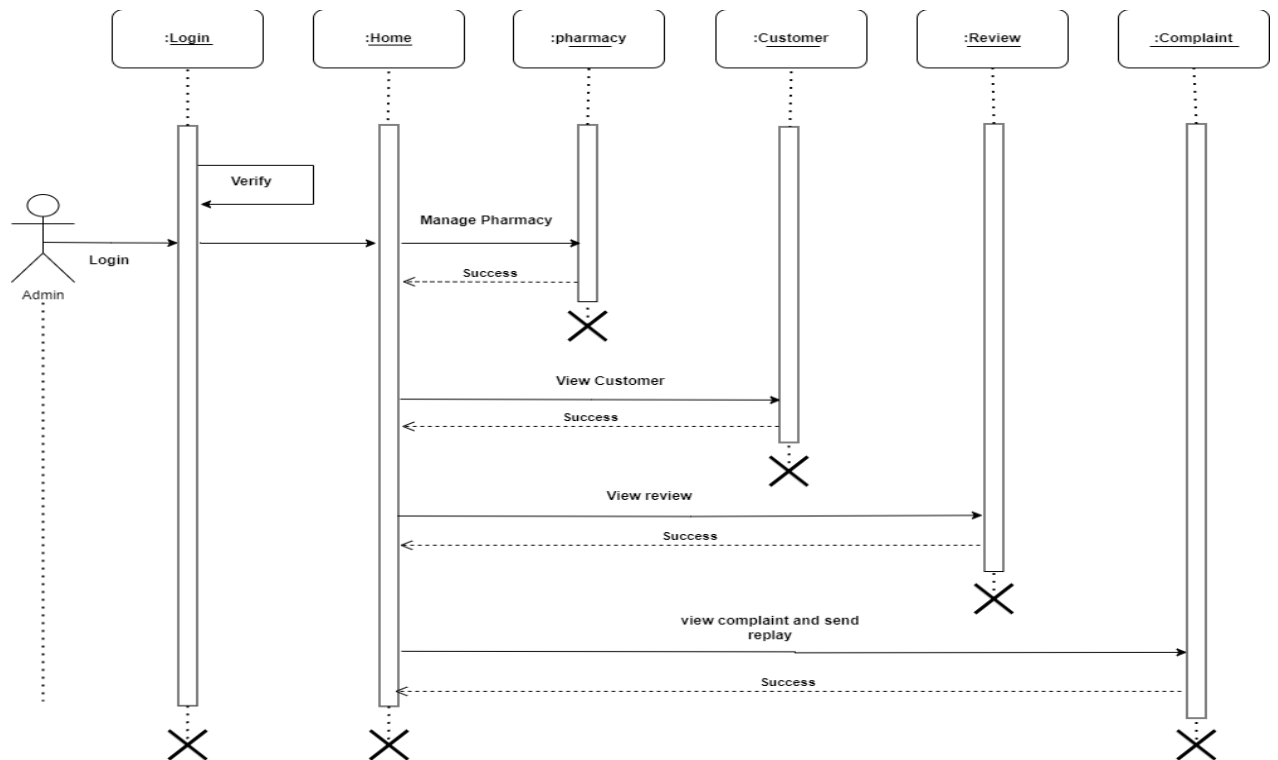
- Pharmacy can view orders and update
- Pharmacy can add medicine
- Pharmacy can view and update medicine
- Pharmacy can view and update stock
- Pharmacy can view order payment
- Pharmacy can view complaint and replay
- Pharmacy can view review
- Pharmacy can view profile and update
- Pharmacy can change password

**Customer:**

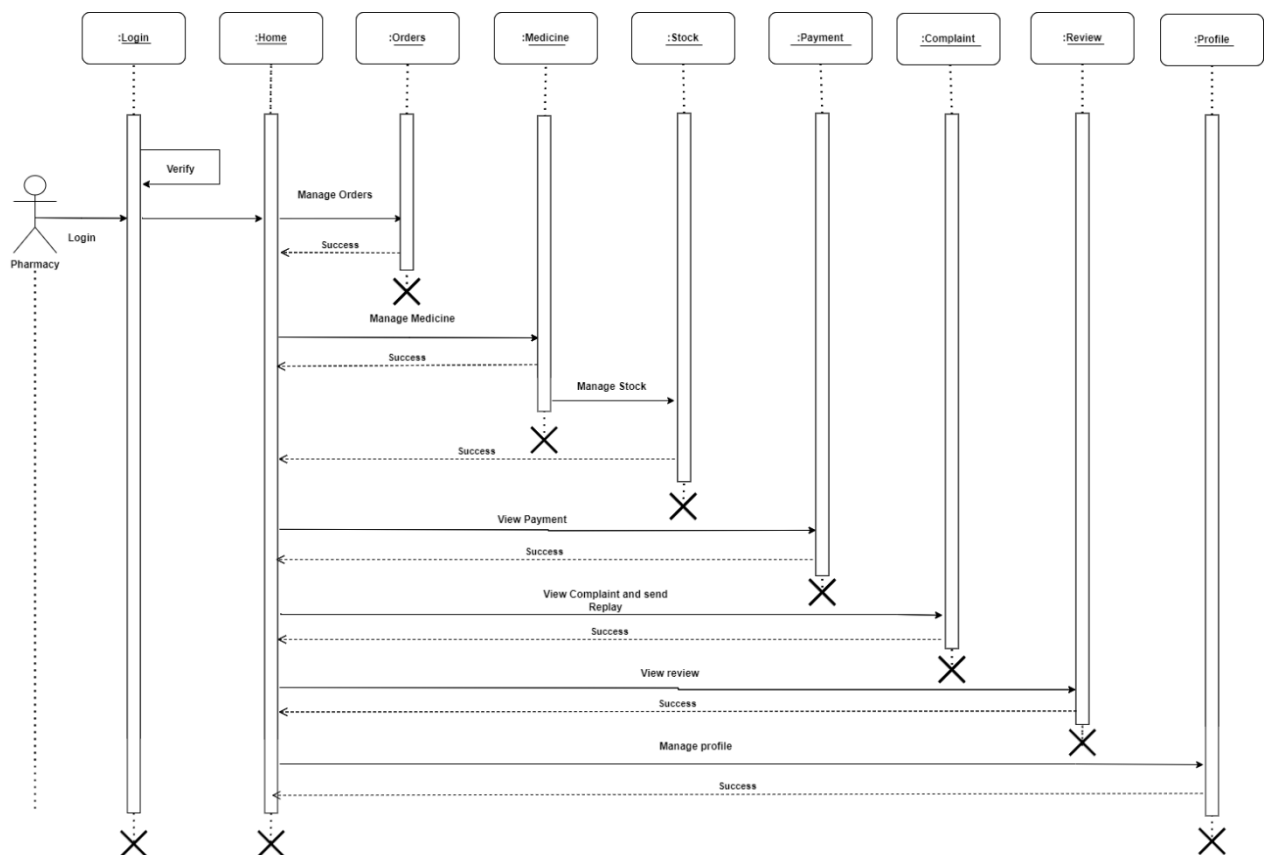
- Customer can search medicine
- Customer can add to cart
- Customer can order and payment
- Customer can view bills and payment
- Customer can send complaint
- Customer can view replies
- Customer can send review
- Customer can view profile and update

## 6.6 Sequence Diagram

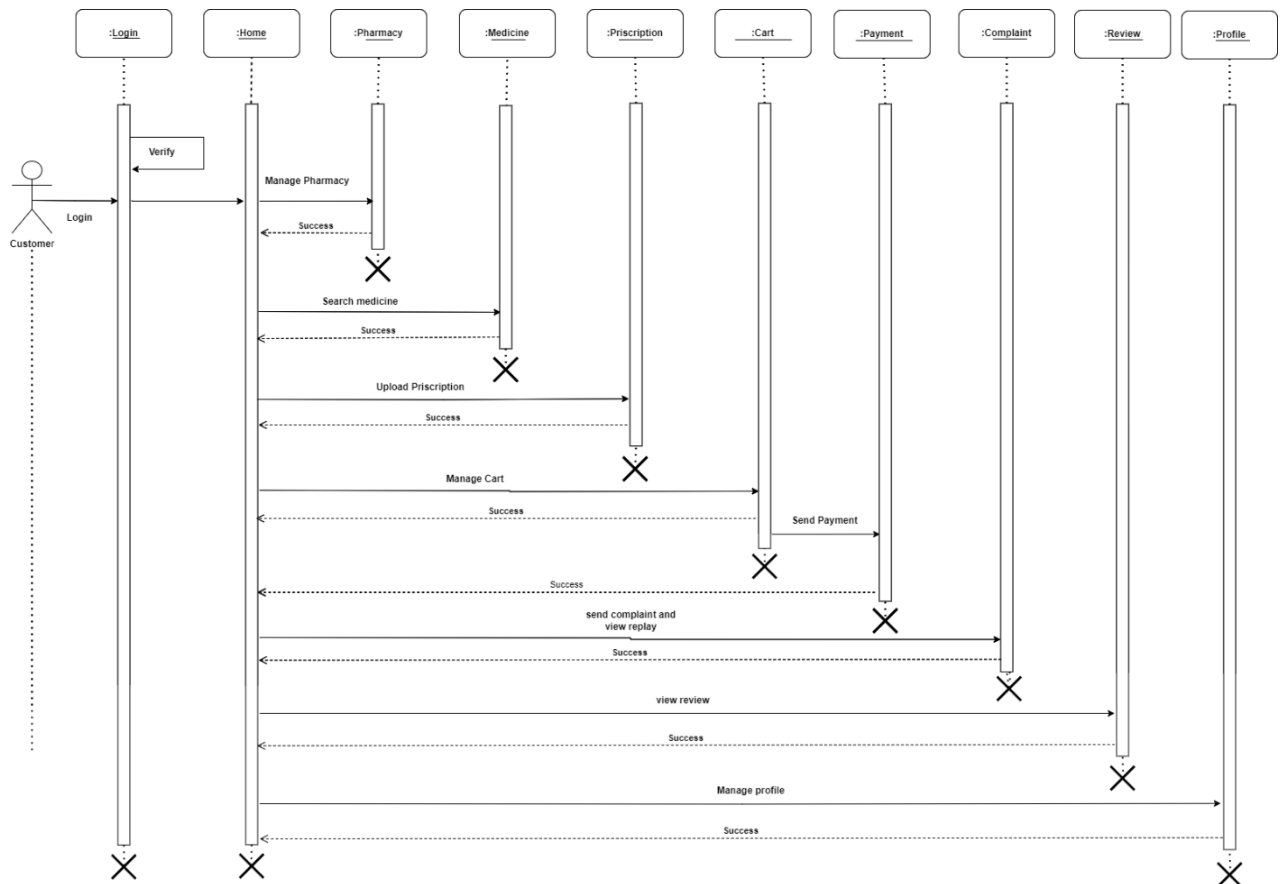
### Admin:



### Pharmacy:





**Customer :**

# **SYSTEM DEVELOPMENT**

## 7. SYSTEM DEVELOPMENT

System development is a series of operations to manipulate data to produce output from a computer system. The principal activities performed during the development phase can be divided into two major related sequences.

- External system development
- Internal system development

The major external system activities are:

- Implementation
- Planning
- Equipment acquisition
- Installation

### 7.1 coding

The purpose of code is to facilitate the identification and retrieval of items of information. A code is an ordered collection of symbols designed to provide unique identification of an entity or an attribute. Code also shows interrelationship among different items.

### Python

Python is a widely used high-level programming language for general purpose programming, created by Guido van Rossum and first released in 1991. An interpreted language, Python has a design philosophy that emphasizes code readability (notably using whitespace indentation to delimit code blocks rather than curly brackets or keywords), and a syntax that allows programmers to express concepts in fewer lines of code than might be used in languages such as C++ or Java.

### Libraries

Python's large standard library, commonly cited as one of its greatest strengths, provides tools suited to many tasks. For Internet-facing applications, many standard formats and protocols such as MIME and HTTP are supported. It includes modules for creating graphical user interfaces, connecting to relational databases, generating pseudorandom numbers, arithmetic with arbitrary precision decimals, manipulating regular expressions, and unit testing.

**Django**

Django is a high-level Python web framework that enables rapid development of secure and maintainable websites. Built by experienced developers, Django takes care of much of the hassle of web development, so you can focus on writing your app without needing to reinvent the wheel. It is free and open source, has a thriving and active community, great documentation, and many options for free and paid-for support

**MYSQL Client**

License GPL Platforms OS Independent Python versions Python 2.7 and 3.4+ PyPI. <https://pypi.org/project/mysqlclient/> MySQL client is a fork of MySQL python. It adds Python 3 support and fixes many bugs. It is the MySQL library that is recommended by the Django documentation.

**HTML**

The Hyper Text Markup Language or HTML is the standard markup language for documents designed to be displayed in a web browser. It is often assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

**CSS**

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML or XML (including XML dialects such as SVG, MathML or XHTML). CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

**JavaScript**

JavaScript often abbreviated as JS, is a programming language that is one of the core technologies of the World Wide Web, alongside HTML and CSS. As of 2022, 98% of websites use JavaScript on the client side for webpage behavior, often incorporating third-party libraries. All major web browsers have a dedicated JavaScript engine to execute the code on users' devices.

# **SYSTEM TESTING AND IMPLEMENTATION**

## **8.SYSTEM TESTING AND IMPLEMENTATION**

Testing is the vital to the success of the system. It makes a logical assumption that if all the parts of the system are correct, the goal will be successfully achieved in this project. It is the stage of implementation, which ensures that system works accurately and effectively before the live operation commences.

### **8.1 Types of Testing**

#### **Unit testing**

Unit testing is a software testing technique that focuses on testing individual units or components of a software system in isolation. The purpose of unit testing is to ensure that each unit functions correctly and produces the expected outputs when provided with specific inputs.

#### **Black box testing**

Black box testing is a software testing technique where the tester examines and tests the software without having knowledge of its internal structure, implementation details, or code.

#### **White box testing**

White box testing is a software testing technique that focuses on examining and validating the internal structure, design, and code of the software. Testers have access to the internal components, implementation details, and source code, allowing them to assess the internal logic and behavior of the software.

### **8.3 Implementation**

Implementation is the stage of project, when theoretical design is turned in to a working system. The most crucial stage is achieving a successful system and confidence that the new system will be work effectively. It involves careful planning, investigation of the manual system and to new system. Implementation means converting a new or revised system design into an operational one. The implementation includes all those activities that take place to convert from the old system to the new

# **SYSTEM MAINTENANCE**

## 9. SYSTEM MAINTENANCE

Maintenance is making adaptation of the software for external changes (requirements changes or enhancements) and internal changes (fixing bugs). When changes are made during the maintenance phase all preceding steps of the model must be revisited.

There are 3 types of maintenance:

- Corrective (Fixing bugs/errors)
- Adaptive (Updates due to environment changes)
- Perfective (Enhancements, requirements changes)

Maintenance is an enigma of the system development. The definition of the software maintenance can be given describing four activities that are undertaken after the program is released for use. The maintenance activity occurs since it is unreasonable to assume that software testing will uncover all in a large system. The second activity that contributes to the definition of maintenance occurs since rapid changes are encountered in every aspect of computing. The third activity involves recommendation for new capabilities, modification to the existing functions and general enhancements when the software is used. The fourth maintenance activity occurs when software is changed to improve future maintainability or reliability.



## **FUTURE ENHANCEMENT**

## 10. FUTURE ENHANCEMENT

Future enhancements for PHARMA WISE could add value by incorporating advanced technology, improving usability, and expanding functionalities to meet evolving industry needs. Here are some potential future enhancements for the platform:

### **Patient Medication History and Health Records**

- Allow customers to securely maintain their medication history and health records within PHARMA WISE. This could be particularly helpful for customers and healthcare providers, giving them a central repository for tracking past prescriptions, allergies, and health conditions.

### **Enhanced Security with Biometric Authentication**

- Integrate biometric authentication (e.g., fingerprint, facial recognition) for customer login, providing a higher level of security, especially when dealing with sensitive personal and medical information.

### **Multi-Language Support**

- To increase accessibility, offer multi-language support, allowing customers and pharmacists from diverse linguistic backgrounds to interact with the platform in their preferred language.

### **Mobile App for On-the-Go Access**

- Develop a mobile app version of PHARMA WISE to enable users to manage orders, track prescriptions, and receive notifications on the go. A mobile app would enhance user engagement and accessibility.

# CONCLUSION

## 11. CONCLUSION

In summary, PHARMAWISE is a comprehensive web-based application designed to streamline the management of drug inventory for pharmacists while providing a convenient online shopping experience for customers. By integrating features such as inventory control, order management, and billing, PHARMAWISE enhances operational efficiency and accuracy in pharmaceutical management. The system's user-friendly interface promotes ease of use for both pharmacists and customers, ensuring effective communication and transaction processes. Ultimately, PHARMAWISE serves as a valuable tool that improves safety, efficiency, and overall management in the pharmacy sector, aligning with the project's goal of facilitating a seamless pharmaceutical shopping experience.

The PHARMA WISE project represents a significant step forward in modernizing pharmacy management and enhancing customer service within the pharmaceutical industry. By providing a comprehensive, web-based platform, PHARMA WISE empowers pharmacists to efficiently manage inventory, streamline billing, track orders, and respond to customer needs. It also offers customers a convenient and secure way to upload prescriptions, place orders, and track purchases, all from the comfort of their own homes.

Through features like inventory monitoring, automated invoicing, and data analysis for stock control and expiration tracking, PHARMA WISE supports pharmacies in maintaining accuracy and compliance while reducing operational costs. The system's user-friendly interface and seamless functionality make it accessible to both pharmacists and customers, fostering a more efficient and transparent experience for all parties involved.

Overall, PHARMA WISE contributes to enhancing safety, accuracy, and efficiency in pharmacy operations, benefiting both healthcare providers and their clients. Future enhancements, such as integration with health insurance, telemedicine, and advanced analytics, have the potential to make PHARMA WISE even more impactful. In conclusion, PHARMA WISE is not just a pharmacy management tool - it is a platform designed to support the evolving needs of the healthcare sector, with a commitment to delivering high-quality, patient-centered care.

# **APPENDIX**

## 12.APPENDIX

### Login:

PharmaWise

Welcome!

Sign in to your account

Name  
admin

Password

Pharmacy Signup | Customer Signup

Login →

### Admin Dashboard:

PharmaWise

HOME PHARMACY CUSTOMERS REVIEWS COMPLAINTS OTHERS LOGOUT

Smart Choices for Better Health!

PharmaWise suggests a solution that making pharmacy operations and online drug sales smarter and more efficient.

### Accept & verify Pharmacy:

PharmaWise

HOME PHARMACY CUSTOMERS REVIEWS COMPLAINTS OTHERS LOGOUT

Search a Pharmacy Search

SL NO	SHOP NAME	EMAIL	OWNER	PHONE	ADDRESS	LICENCE	PHOTO	STATUS
1	Leo medicals	leomedicals@gmail.com	Vshnu das	kuttikattoor kuttikattoor 673585 kozhikode	8943027041	pending		
2	Open medicals	openmed@gmail.com	open group	narikkuni narikkuni 673585 kozhikode	9667773331	pending		

## View Approved Pharmacies:

PharmaWise

HOME PARMACY CUSTOMERS REVIEWS COMPLAINTS OTHERS LOGOUT

Search a Pharmacy

SL NO	NAME	EMAIL	OWNER	Phone	ADDRESS	LICENCE	PHOTO	STATUS
1	Open medicals	openmed@gmail.com	open group	9667773331	narikkuni narikkuni kozhikode 673585			approved
2	Shop@2	basghhhjb@gmail.com	ghghbh	6667772231	dsdshjhj jomio gtdf 673546			approved

## Pharmacy :

### Pharmacy Dashboard

PharmaWise

HOME MEDICINES ORDERS STOCK PAYMENTS OTHERS LOGOUT

## Smart Choices for Better Health!

PharmaWise suggests a solution that making pharmacy operations and online drug sales smarter and more efficient.

[Get Started](#)

## Pharmacy View orders

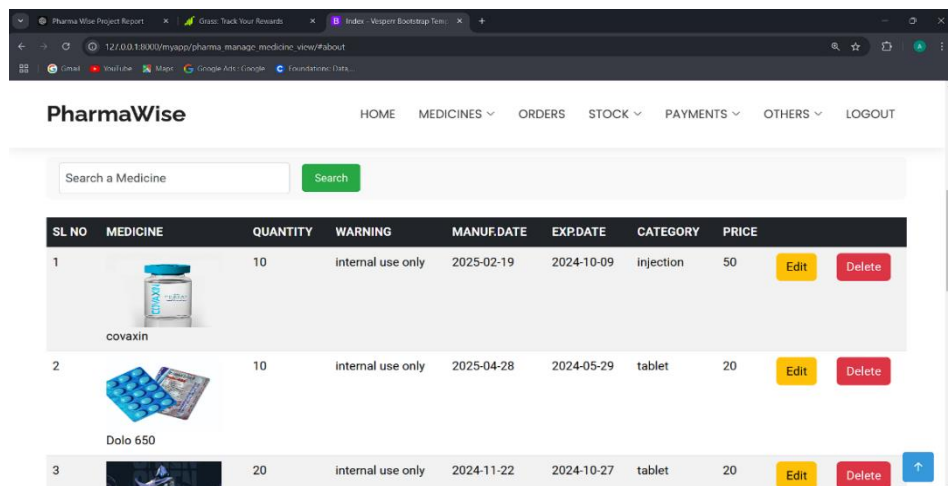
PharmaWise

HOME MEDICINES ORDERS STOCK PAYMENTS OTHERS LOGOUT




From  To

SL NO	USERNAME	DATE	STATUS		
1	Abhi	None	Successfull	<a href="#">More</a>	<a href="#">Update</a>
2	Abhi	None	Successfull	<a href="#">More</a>	<a href="#">Update</a>
3	Abhi	None	Successfull	<a href="#">More</a>	<a href="#">Update</a>
4	Abhi	None	Successfull	<a href="#">More</a>	<a href="#">Update</a>
5	Abhi	None	Successfull	<a href="#">More</a>	<a href="#">Update</a>

## View Medicines

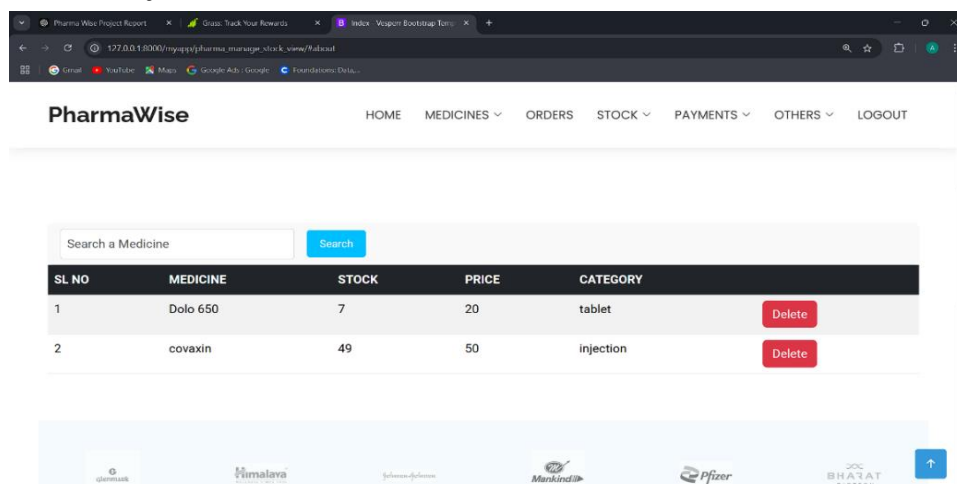


The screenshot shows the PharmaWise Admin Dashboard. At the top, there's a navigation bar with links: HOME, MEDICINES, ORDERS, STOCK, PAYMENTS, OTHERS, and LOGOUT. Below the navigation bar is a search bar labeled "Search a Medicine" with a green "Search" button. The main content area displays a table of medicines with the following columns: SL NO, MEDICINE, QUANTITY, WARNING, MANUF.DATE, EXP.DATE, CATEGORY, and PRICE. There are three medicines listed:

SL NO	MEDICINE	QUANTITY	WARNING	MANUF.DATE	EXP.DATE	CATEGORY	PRICE
1	 covaxin	10	internal use only	2025-02-19	2024-10-09	injection	50
2	 Dolo 650	10	internal use only	2025-04-28	2024-05-29	tablet	20
3	 	20	internal use only	2024-11-22	2024-10-27	tablet	20

Each medicine row has "Edit" and "Delete" buttons. There is also a blue upward arrow button at the end of the third row.

## Pharmacy Dashboard



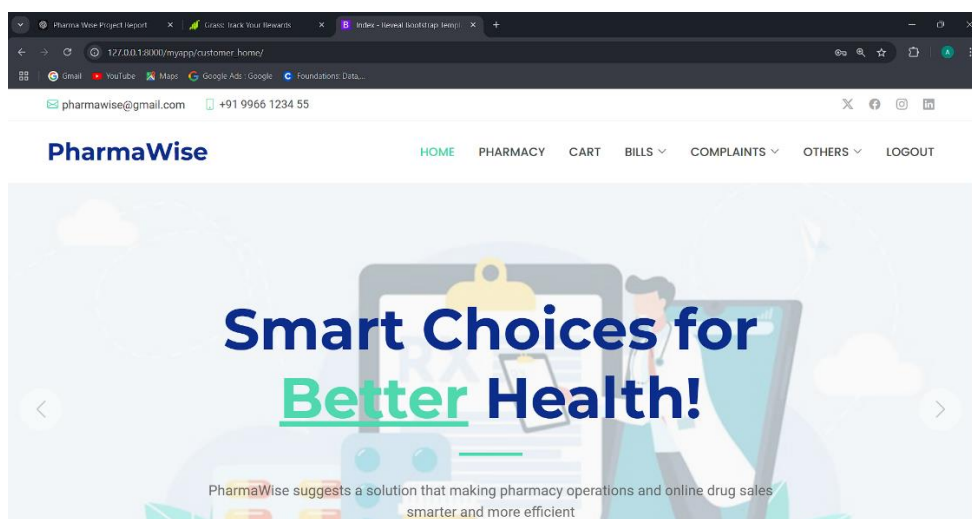
The screenshot shows the PharmaWise Pharmacy Dashboard. At the top, there's a navigation bar with links: HOME, MEDICINES, ORDERS, STOCK, PAYMENTS, OTHERS, and LOGOUT. Below the navigation bar is a search bar labeled "Search a Medicine" with a blue "Search" button. The main content area displays a table of medicines with the following columns: SL NO, MEDICINE, STOCK, PRICE, and CATEGORY. There are two medicines listed:

SL NO	MEDICINE	STOCK	PRICE	CATEGORY
1	Dolo 650	7	20	tablet
2	covaxin	49	50	injection

Each medicine row has a "Delete" button. At the bottom of the dashboard, there are logos for various pharmaceutical companies: GSK, Himalaya, Johnson & Johnson, Mankind, Pfizer, and ZOC BHARAT.

## Customer:

## Customer Dashboard



The screenshot shows the PharmaWise Customer Dashboard. At the top, there's a navigation bar with links: HOME, PHARMACY, CART, BILLS, COMPLAINTS, OTHERS, and LOGOUT. Below the navigation bar is a large promotional banner with the text "Smart Choices for Better Health!" in blue and green. Below the banner, there's a message: "PharmaWise suggests a solution that making pharmacy operations and online drug sales smarter and more efficient".



## View Pharmacy

pharmawise@gmail.com +91 9966 1234 55

**PharmaWise** HOME PHARMACY CART BILLS COMPLAINTS OTHERS LOGOUT

Search a Pharmacy

SL NO	NAME	EMAIL	OWNER	PHONE	ADDRESS	PHOTO	MEDICINE	PPRSCRIPTION
1	Leo medicals	leomedicals@gmail.com	Vshnu das	8943027041	kuttikattoor kuttikattoor 673585 kozhikode		<input type="button" value="View"/>	<input type="button" value="Upload"/>
2	Open medicals	openmed@gmail.com	open group	9667773331	narikkuni narikkuni 673585 kozhikode		<input type="button" value="View"/>	<input type="button" value="Upload"/>

## View Pharmacy

pharmawise@gmail.com +91 9966 1234 55

**PharmaWise** HOME PHARMACY CART BILLS COMPLAINTS OTHERS LOGOUT

Search a Medicine

SL NO	MEDICINE	QUANTITY	WARNING	MANF.DATE	EXP.DATE	CATEGORY	PRICE
1	 Dolo 650	7	internal use only	2024-05-29	2025-04-28	tablet	20 <input type="button" value="Add Cart"/>
2	 covaxin	49	internal use only	2024-10-09	2025-02-19	injection	50 <input type="button" value="Add Cart"/>

## View Notification

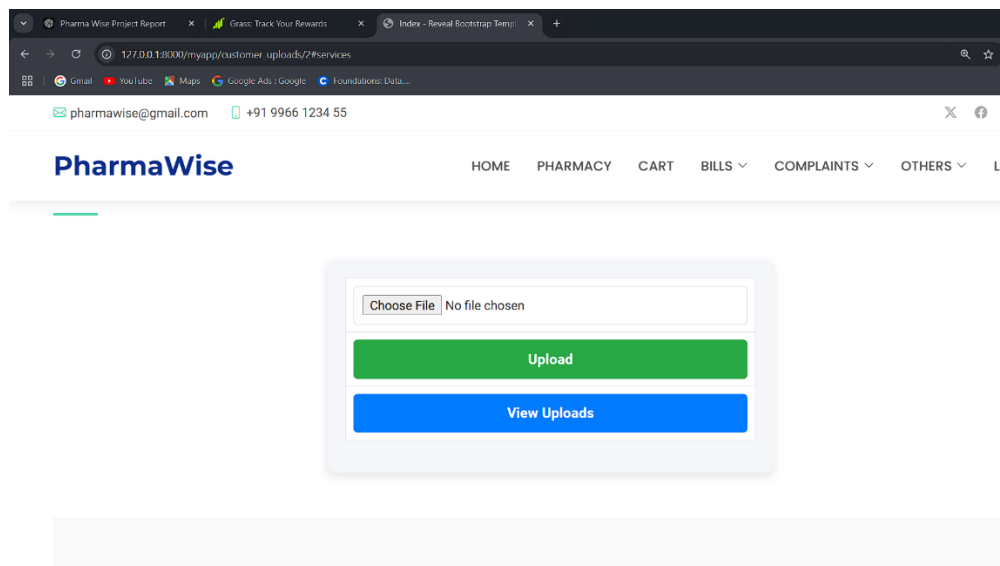
pharmawise@gmail.com +91 9966 1234 55

**PharmaWise** HOME PHARMACY CART BILLS COMPLAINTS OTHERS LOGOUT

**Services**

SL NO	PHARMACY	NOTIFICATION	DATE
1	Leo medicals	delivered	Oct. 29, 2024
2	Leo medicals	packed	Oct. 29, 2024
3	Leo medicals	delivered	Oct. 31, 2024
4	Leo medicals	packed	Oct. 31, 2024
5	Leo medicals	assigned	Oct. 31, 2024

## Upload prescription



## View Bil Entries

The screenshot shows the PharmaWise web application interface for viewing bill entries. The navigation bar includes the PharmaWise logo and links for HOME, PHARMACY, CART, BILLS, COMPLAINTS, OTHERS, and LOGOUT. Below the navigation bar, there is a table with the following columns: SL NO, DATE, MEDICINE, QUANTITY, TOTAL AMOUNT, PRSCRIPTION, and PAY STATUS. The table contains three entries:

SL NO	DATE	MEDICINE	QUANTITY	TOTAL AMOUNT	PRSCRIPTION	PAY STATUS
1	Oct. 31, 2024	covaxin	1	50		paid
2	Nov. 1, 2024	covaxin	1	50		Payment
3	Oct. 31, 2024	Dolo 650	1	20		Payment

The browser's address bar shows the URL '127.0.0.1:8000/myapp/customer\_view\_bill\_payment/#services'.

## View Cart

## View Cart

The screenshot shows the PharmaWise web application interface for viewing the cart. The navigation bar includes the PharmaWise logo and links for HOME, PHARMACY, CART, BILLS, COMPLAINTS, OTHERS, and LOGOUT. Below the navigation bar, there is a section titled 'Services' with a table containing the following columns: SL NO, NAME, QUANTITY, PRICE, AMOUNT, and STOCK. The table contains one entry:

SL NO	NAME	QUANTITY	PRICE	AMOUNT	STOCK
1	 Dolo 650	1	20	20	Available

Below the table, there is a 'TOTAL AMOUNT' row showing 20. A red 'Remove' button is next to the first entry, and a yellow 'Payment' button is at the bottom right. The browser's address bar shows the URL '127.0.0.1:8000/myapp/customer\_view\_cart/#services'.

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