

Requirement Analysis

1. Project Overview.

An online pharmacy management system is a software application designed to streamline and enhance the operations of a pharmacy. The main goal is to make pharmacy management operations easier, improve customer service, and enhance the overall experience for both customers and staff. It provides a digital platform for pharmacy management, sales, and customer interaction.

There are four modules in the project.

- i. Admin Module: Create, modify, and delete user accounts (staff, customers, and delivery team members). Add, update, and delete medicines in the inventory. Monitor sales data, generate reports, and manage orders.
- ii. Staff Module: Update stock levels, add new medicines, and manage product information. Process customer orders, including order verification and fulfilment. Assist customers with inquiries and issues.
- iii. Customer Module: User registration and login: Customers can create accounts, log in, and manage their profiles. Browse medicines, view product details, add items to the cart, and place orders. Track the status of orders, including estimated delivery times.
- iv. Delivery Team Module: Assign orders to delivery team members. Update order delivery status, including successful deliveries and exceptions. Enable communication between the delivery team and customers for smoother deliveries.

Some of benefits are Streamline pharmacy operations, reducing manual processes and paperwork. Provide customers with a user-friendly platform to browse and order medicines. Keep track of medicine stock levels in real-time, minimizing stockouts. Generate reports for sales analysis, customer trends, and inventory management. Ensure data security and compliance with healthcare regulations.

Technical Stacks: Python (Backend, using frameworks like Django or Flask), HTML, CSS, JavaScript (Frontend, with potential frontend frameworks), MySQL (or similar Database)

2. To what extend the system is proposed for?

The proposed Online Pharmacy Management System is designed to comprehensively address the diverse needs of pharmacy operations, making it a robust and versatile solution. The admin empowers administrators to efficiently manage user accounts, medicines, and sales data, giving them complete control over the system's functionalities. Staff members can manage order processing, and customer support, enhancing their daily tasks. Customers gain access to user-friendly features for browsing medicines, placing orders, and tracking deliveries, and improves their shopping experience. In addition to these, the Delivery Team can optimize order assignments, delivery tracking, and communication, ensuring that the delivery process runs smoothly.

This comprehensive approach addresses the entire spectrum of pharmacy operations, from backend administration to frontend customer interactions and delivery logistics. The system's scalability and adaptability allow it to meet the evolving needs of a pharmacy, making it an extensive solution that improve efficiency, customer satisfaction, and growth within the pharmaceutical domain.

3. Specify the Viewers/Public which is to be involved in the System.

The Online Pharmacy Management System is designed to serve various user roles, each with specific access and interaction capabilities. The viewers/public involved are,

- a. Admins: Admin users are responsible for overseeing the entire system. They have full access to all modules and functionalities and ensure the system operates smoothly.
- b. Staff Members: Pharmacy staff, including pharmacists, sales representatives interact with the system. They use the System to manage inventory, process orders, and provide customer support.
- c. Customers: Customers are the end-users of the system who access the System to browse medicines, place orders, track deliveries, and manage their profiles.
- d. Delivery Team: Delivery team members are responsible for delivering orders to customers, receive order assignments, update delivery statuses, and communicate with customers.
- e. Pharmacy Management: This includes the owners and managers of the pharmacy. They may have admin-level access or specific reporting access to monitor the pharmacy's performance.

- f. **Developers and IT Support:** The development and IT support teams are involved in maintaining, updating, and troubleshooting the system. They ensure the system's technical aspects run smoothly.
- g. **General Public:** While not directly involved in system usage, the general public can indirectly benefit from the system's availability if they become customers of the pharmacy.

By accommodating these different viewers and user roles, the System optimizes pharmacy operations, enhances customer experiences, and ensures regulatory compliance.

4. List the Modules included in your System?

- i. Admin
- ii. Staff
- iii. Customer
- iv. Delivery Team

5. Identify the users in your project?

- i. Admin user
- ii. Staff members
- iii. Customers
- iv. Delivery team members
- v. General public

6. Who owns the system?

The ownership of a project, such as the development and management of an online pharmacy system, can vary depending on the organization or individuals involved. Ownership can be for,

- a) **Individual Entrepreneur or Business Owner:** In the case of a privately owned pharmacy, the owner of the pharmacy often takes ownership of the project. They are responsible for funding, decision-making, and overseeing the development and management of the online pharmacy system.
- b) **Development Team or Software Development Company**:** The ownership of the project during development may be with the client (the pharmacy owner or organization). However, the development team or company is responsible for the technical aspects of the project.

It's crucial to establish clear ownership and governance structures from the outset to ensure the project's success, accountability, and effective decision-making throughout its development and operation.

7. System is related to which firm/industry/organization?

The System can be used by independent pharmacy stores that operate as standalone businesses or small chains can benefit from an online pharmacy management system to streamline their operations, improve customer service, and expand their reach. system can span various segments of the healthcare and pharmaceutical industry, from independent pharmacies to large healthcare organizations and pharmaceutical manufacturers. Its purpose is to enhance the efficiency, accuracy, and convenience of pharmacy operations, regardless of the specific context in which it is employed.

8. Details of person that you have contacted for data collection?

Medical shop: Kaleeckal Medicals,
Danapady Road,
Haripad

Owner: Bukhari AK

Phone: 9895994960

9. Questionnaire to collect details about the project? (min 10 questions, include descriptive answers, attach additional docs (e.g. Bill receipts, certificate models), if any?)

- a. Are you currently using any software or systems for managing your physical store's operations?

Yes, we use point-of-sale (POS) software for inventory management and sales tracking, but we do not have an online platform for customer orders.

- b. What features or functionalities do you expect from the Online Pharmacy Store to meet the needs of your customers and your business?

We expect features such as secure online ordering, real-time inventory updates, prescription uploads, medication reminders, and a user-friendly interface to enhance customer experience.

- c. How do you plan to train your staff to manage the online pharmacy store effectively, including order processing and customer support?

Staff members will undergo training on using the online platform, order processing, and customer support.

- d. How will you handle payment processing and ensure secure transactions for online orders?

Payment processing will be conducted through secure payment gateways, ensuring encrypted and safe transactions.