International Journal of Scientific Research in Engineering and Management (IJSREM)
Volume: 09 Issue: 08 | Aug - 2025 SJIF Rating: 8.586 ISSN: 2582-3930

Online Medicine Delivery System

Mr. JAFAR SADAQ [1] SIDDESH K T [2]

[1] *Student,4th Semester MCA, Department of MCA, BIET, Davangere*

[2] *Assistant Professor, Department of MCA, BIET, Davangere*

ABSTRACT

Health is a well-known term in society; good health is indeed our wealth. When we encounter health issues, our primary concern is to visit a pharmacy to obtain medication. Sometimes, this medication is prescribed by a doctor, while at other times, we directly communicate our symptoms to acquire the necessary medicine. Pharmacies manage the distribution of medications, and patients must visit these establishments to obtain information about available medicines. It can be quite challenging to locate pharmacies within the city and to determine which medications are stocked at specific locations.

In today's fast-paced era, the internet plays a crucial role in everyone's life, having become an integral part of our daily routines. As people's reliance on the internet grows, so does the necessity for its use.

Therefore, it is essential for individuals to access vital information regarding pharmacies and medication from the comfort of their homes, as well as to have the ability to order medicines online for doorstep delivery. Consequently, we are keen to design and develop an application for pharmacies to address the aforementioned.

I. INTRODUCTION

Emergency medicine is crucial for saving patients' lives. Numerous pharmacies offer various medications, each located in different areas. Some pharmacies specialize in specific medications, while others provide a broader range. The management of these pharmacies faces several challenges, such as maintaining extensive medication records manually and the difficulty of searching for specific medications during emergencies through manual processes. For customers, the task of visiting multiple pharmacies to find specific medications is time-consuming and financially burdensome. In response to this issue, we aim to develop an application for the pharmacy sector that will maintain a centralized database of medication details from all pharmacies, overseen by a primary administrator. Each pharmacy will have a unique login account, allowing them to manage their own medication details ultimately be stored in the centralized database, enabling customers to access essential information about medication availability. This system will indicatewhich pharmacies have the specific medications needed for patients, eliminating the need for customers to visit multiple locations. Instead, they can obtain the necessary information conveniently from their computers.

II. EXISTING SYSTEM

An online medicine delivery system is a web application that functions over the Internet, facilitating the dispatch of orders to customers via

credit cards, shipping companies, or a pay-on-delivery option.

Individuals can buy and sell their products from the comfort of their homes. This service is gaining popularity globally, including in domestic markets. The primary objective is to enhance the ordering and delivery processes of medicines, making them more efficient and user-friendly.

Creating a user-friendly environment is crucial. These systems are specifically designed to simplify the medicine purchasing process by removing the necessity of visiting a pharmacy in person.

Such platforms are increasingly worldwide, particularly in local markets, as they provide convenience, save time, and offer a broader selection of products. They enable both customers and sellers to engage from their homes, thereby streamlining the entire buying and selling process of pharmaceutical products.

III. PROBLEM STATMENTS

The conventional system for purchasing medicine presents numerous challenges, such as issues with accessibility, the unavailability of medications, and delays in obtaining essential drugs. This system frequently necessitates that patients or their caregivers physically visit various pharmacies in search of prescribed medications, which can be both timeconsuming and stressful, particularly for elderly individuals, those with disabilities, or residents of remote areas.

Moreover, there is often a significant lack of transparency concerning the availability of specific medications, resulting in inefficiencies and possible gaps in treatment. During emergencies or pandemics, these problems are further intensified, placing patient health at an even greater risk.

Another significant issue is the authenticity of the medications. In certain instances, patients may inadvertently acquire counterfeit or expired drugs due to insufficient regulation or a lack of visibility into a pharmacy's inventory and supply chain.

In the current context, numerous franchises such as Med-Plus and Apollo are located in different areas throughout the city and are connected to their respective stores through a centralized database. However, they are not interconnected with other pharmacies. Several applications, including app, are available, but they are exclusively limited to stores.

IV. PROPOSED SYSTEM

Users can customize their orders with the information regarding medicines. In the Online Medicine Ordering System, the administrator can manage functionalities such as adding new medicinal drug entries, editing or deleting medication items, and enabling or disabling medicine objects based on their availability and expiration dates. The administrator has the authority to view order details and update the delivery status of medicines. Additionally, transaction fees and consumer information are accessible to the administrator. This system provides a helpful service and effective management. The proposed Online Medicine Ordering System is intended to address the shortcomings of both traditional and current online medicine procurement methods. Its goal is to offer a streamlined, secure, and user-friendly platform that

improves the experience for both customers and administrators. Users will have the ability to conveniently place orders for medicines by accessing comprehensive information such as dosage, usage instructions, side effects, expiration dates, and availability. The system will enable users to upload prescriptions, choose preferred delivery options, schedule orders, and receive real-time updates regarding their order status. Furthermore, users can manage their profiles, review order history, and track ongoing deliveries—all from a single interface.

V. SYSTEM REQUIRMENT SPECIFICATION

Purpose: The aim of this document is to specify the system requirements necessary for the development and execution of the Online Medicine Ordering System. It details both functional and non-functional requirements to assist the development team and facilitate a seamless implementation of the system.

Scope: The system enables users to search for, order, and receive medications from authorized pharmacies. Administrators have the capability to manage the medicine inventory, view and process orders, and oversee system activities. The system guarantees secure transactions, real-time updates of inventory, and an intuitive user interface.

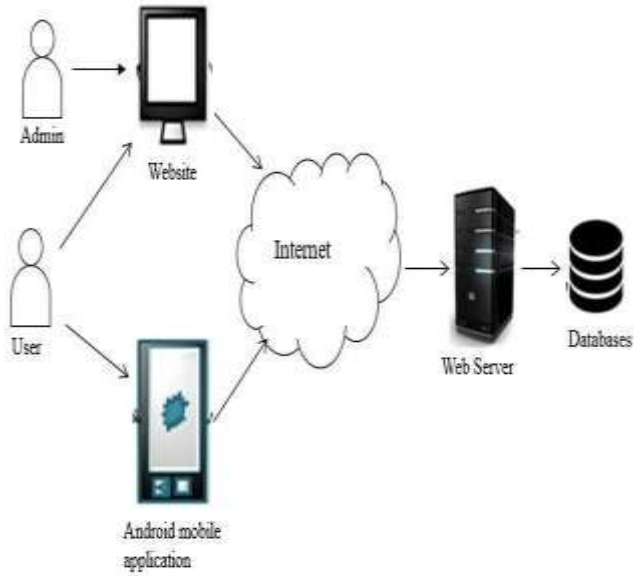
1 Functional Requirements

- FR1: The system must enable users to register, log in, and manage their profiles.
- FR2: The system must facilitate users in searching, viewing, and filtering medicines.
- FR3: The system must support the uploading of prescriptions for controlled medicines.
- FR4: The system must ensure a secure checkout process with various payment options.
- FR5: The system must allow users to monitor the status of their orders.
- FR6: The administrator must have the capability to add, edit, delete, enable, or disable medicine records.
- FR7: The administrator must be able to view, process, and update orders.
- FR8: The administrator must be able to oversee payments and user activities.

VI. SYSTEM DESIGN

Once the project statement has been established, the subsequent phase is the system design process, which involves outlining the architecture, components, interfaces, and data necessary for the system to meet the specified requirements.

1.System Architecture



System architecture serves as the conceptual

framework that delineates the structure, behavior, and various perspectives of a system. Architecture is a formal description and representation of a system, organized in amanner that facilitates reasoning about the system's structure, which includessystem components, the externally observable characteristics of those components, their interrelationships, and offers a blueprint from which products can be acquired and systems can be constructed.

VII. IMPLEMENTATION

The initiative has been created as an Android mobile application to guarantee maximum accessibility, user convenience, and effective functionality. Android, which is developed by Google, is an open-source, Linux-based platform that provides a comprehensive array of development tools, libraries, and APIs, rendering it exceptionally suitable for constructing feature- rich and scalable mobile applications. By utilizing Android Studio, the official Integrated Development Environment, the development process was enhanced with sophisticated coding, design, and testing capabilities.

Java was selected as the primary programming language due to its stability, extensive support, and compatibility with Android devices. The user interface of the application was crafted using XML, ensuring a clean, intuitive, and responsive layout that adjusts well to various screen sizes. RESTful APIs were incorporated to enable secure and efficient communication between the application and backend servers, while the Google Maps API offered precise real-time location services, allowing users to effortlessly locate nearby fuel stations. Focusing on security, the application includesrobust user authentication mechanisms, encrypted data storage, and secure transaction processing to safeguard sensitive user information. Comprehensive testing was performed across numerous Android devices and OS versions to guarantee optimal performance, compatibility, and a consistent user experience. The flexibility and rich features of Android made it the perfect platform for delivering the e-Refuel Hub solution.

VIII. RESULTS

Home Page

Admin Login Page

Admin Home page

Medical Shop Home page

Medical Login

Add Medicine

Medical Verification

View Medicine

Medical Login Page

Add Rider from Medical

View Rider

Order Details

Medicine buy Customers

Order details and Package

Add Customers Details

Adding Rider for this Order

Order Booking and order id

Rider Login Page

Rider Home Page

Tracking order id

Order out of delivery

IX. CONCLUSION

• This web application provides information on the availability of various medicines. The development of a web app enhances user convenience, moving away from the limitations of a traditional website.

• Additionally, the aim is to create a method for disseminating information regarding the availability of medicines in different pharmacies. Public users can access details about the availability, pricing, and quantity of medicines in stock.

• This Android and web application allows users to obtain information about the availability of various medicines. The creation of an Android app facilitates ease of use, rather than relying solely on a traditional website.

• Furthermore, the goal is to establish a means of sharing information about the availability of medicines across various medical shops. Public users can learn about the availability, cost, and quantity of medicines that are available.

X. REFERENCES

1. W3Schools.

"HTML, CSS, JavaScript Tutorials." Available at:

https://www.w3schools.com

2. MDN Web Docs.

"Web technology documentation for developers."

Available at: https://developer.mozilla.org

3. Geeks for Geeks.

"Web Development and Database Management Tutorials."

Available-at:
https://www.geeksforgeeks.org

4. MySQL Documentation.

"MySQL 8.0 Reference Manual." Available at:

https://dev.mysql.com/doc/

5. Bootstrap.

"Frontend framework for responsive web design."

Available at: https://getbootstrap.com

6. Stripe Documentation.

"Secure online payment processing for internet businesses."

Available at: https://stripe.com/docs

7. WHO – World Health Organization.

"Guidelines for Medicine Authentication and Delivery Systems."

Available at: https://www.who.int

8. NIST – National Institute of Standards and Technology. "Cybersecurity Framework."

Available-at:

https://www.nist.gov/cyberframework