Cloud Based Automation Software for Pharma Industry

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Abstract - *This system demonstrates the concept and implementation of a pharmaceutical management system with an inventory alert system. The main purpose is to improve accuracy, labor saving, labor saving, safety and efficiency improvement in the pharmaceutical business. This is the web platform for B2B consumer as well as medical stores that sells numerous pharma merchandise like ethical, surgical, generic, homeopathic merchandise now no longer at once to give up customers however to different corporations or retail scientific stores. System will get rid of conventional enterprise version with the aid of using the usage of the shop clerk or middleman & makes it fast, cost-efficient, & it available (24*7) & it deliver drug treatments from producer to retailer (no middle-man) throughout pan India. This System will offer computerized invoice generator, stock control, close to expiry notifications, POS systems to the medical owners & distributors & it is most effective for each retailers & distributors only. As a data-pushed version, each selection making at software program is constantly primarily based totally on data.*

***Key Words*: Pharma Products, Reduce Manpower, Inventory Management, Accuracy, Expiry notification**

1. INTRODUCTION

The Pharmacy Management System is a complete pharmacy workflow management system designed to improve accuracy, reduce manpower, time and costs, and improve safety and efficiency. In of the Most Pharmacy store still traditional model is followed i.e. salesman's are used for ordering new products. This traditional system requires a pharmacist or salesperson to manually monitor the entire process, confirming the presence of each drug in the pharmacy so that those products can be restocked.

Therefore, while brand new capsules or new batches of medicine arrive at pharmacies, access to guides is through the registry with the help of medical guides. And this goes along while the drug is being administered to every patient. At the end of the month, the pharmacy clerk must manually create a pharmacy drug list or record. These records are kept to maintain necessary inventories at the pharmacy. This software program can be used to provide product expiration notifications as well as an automated invoice generator for inventory retention. This allows pharmacy users to handle entrances and exits easier and better.

2. Problem Statement

Pharmacy dealers need to keep paper files in folders. Managing very large pharmacies with paper records can be cumbersome, and based on over-the-counter drug-related inventory, expiry dates, categories, and salt formulas, including substitutes, it can be difficult to track the amount. Pharmacists need to order medicines to replenish already declining supplies. Moreover, orders for medicines are made in a conventional way, without the help of intermediaries and sellers. Creating a purchase order takes a lot of time as the pharmacist has to check the inventory and roughly estimate the order quantity. Additionally, a significant amount of money is spent to give the fictitious salesman time to order new items. Notify the pharmacist of stocks that are close to the expiration date and prevents them from being sold out. This project reduces middlemen. Eliminating vendor and chain blocks that can be used to order new inventory reduces costs and time and helps solve the above problems.

3. Objective

a) Remove the Sales Representative and MR roles from the system.

b) Providing data analytics to healthcare owners and distributors.

c) facilitate access to merchant data;

d) change the database and make it ready for immediate use.

e) Allow several users to be active at the same time.

f) You will be notified about medications that are nearing/expiring or below threshold.

g) You will receive an inventory notification that the inventory has been completed

4. Literature Survey

Sr. No	Paper Title	Year	Author	Summary
1	Designing a Computerized Pharmacy Management System with Inventory Stock Alert System	2016	Asst.Lect. Asan Baker Kanbar, Hawbir Latif Abdulqadir, Rezhan Mohammad Ahmed	In this Paper, the system manages most of the pharmacy-related activities at the pharmacy. The main goal of is to improve precision, safety and efficiency in the pharmaceutical business. The project can also include barcode functionality with a barcode reader that recognizes expiry dates and other information about the associated drug.
2	Design an Information Management System for a Pharmacy	2018	Hewa Majeed Zangana	In this paper a system is essentially a computerized system that helps pharmacists improve inventory management, costs, medical safety, and more. The system allows users to enter manufacturing dates and expiry dates for specific products or pharmaceuticals during inventory opening and sales transactions. Before the products finally expire, the system also publishes a report showing the list of products that will expire after a certain date. It also includes manual entry when new batches of medicine arrive and when medicines are shipped from the pharmacy for a specified period of time.
3	Building IT-based Pharmacy: Computerized Pharmacy Management	2020	B Kurniawan* and M Ikhsan	The purpose of this research paper is to develop a computer-based system that enables pharmacists to perform their drug administration tasks. This study used descriptive methods to analyze how the Farma pharmacy handled drug supply, sales transactions, drug purchases, and manual reporting administrative activities.
4	Overview of The Pharmacy Management System in a Hospital	2020	Mahyuddin K. M. Nasution , Shahrul Azman Mohd Noah , Urip Harahap	This paper includes information technology and databases as a repository of information useful for hospital management, and various tools necessary to build a trustworthy system, and this document addresses these concerns. increase. Data enrichment and compliance with automated manual drug supply activities complete this brief review. However, there are various challenges regarding the interests of both internal and external hospitals.
5	Survey on Pharmacy Management System	2021	Madhavi Mali, Sandhya Alibade,Rajdeep Parbhane, Aparna Awade, Aruna Yadav	This pharmacy management software is an integrated system that manages goods and medicines and automatically performs tasks such as checking inventory, checking medicines, and managing bills and reports. The software provides pharmacies with a complete view of their business operations and an overview of costs, revenues and sales

5. Proposed System

The methodology used in designing and developing this system is through react JS, HTML5, CSS3, Bootstrap5, Django the database MYSQL will be used for storing Client Details. The Registration processes for each user will be done through a webpage that will store Email ID, Password and other such details in a Mongo DB database table. Admin has his own credentials through which he can add categories as well as products. Similarly, client has his own credentials through which he/she can access all the products & order them.

5.1 Admin Module

Once the admin login into system he will be able to see received order till date, expiry dates of products as well as products which are going to be finished. He will be able to add new category of products, edit as well as delete them. Admin can add new products, edit and delete them as per the requirements of users. After receiving the orders admin can track them and edit order status for delivering of those products.

5.2 Client Module

Client can login into system using valid credentials i.e., email id and password. After successful login client will be able to see all the products. This module is basically designed for providing easy access to order products. Client can easily order products, he/she will get notifications about the products going to be expired as well as products going to be finished from stalks so that he will be able to order them again without any difficulties.
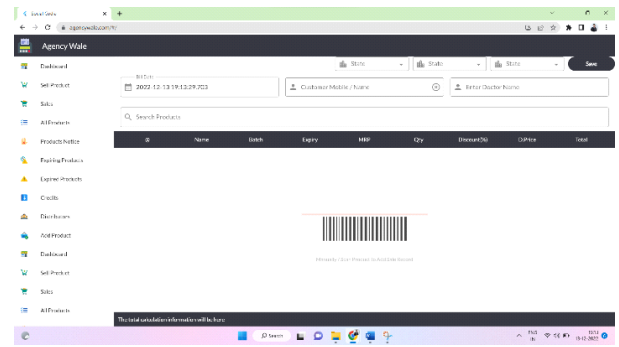
6. Results & Discussions:

Fig -1: Login Page
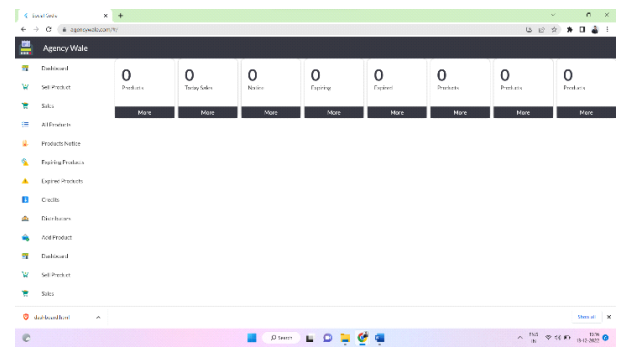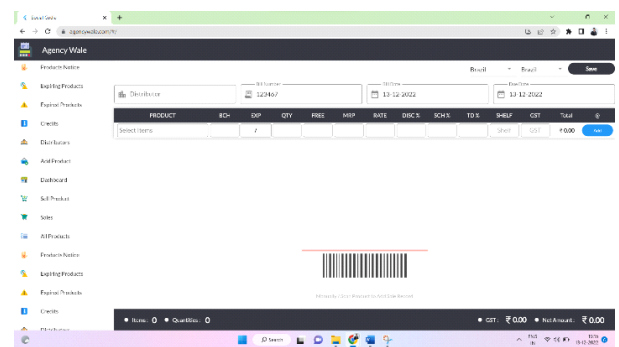

Fig -2: Sales page
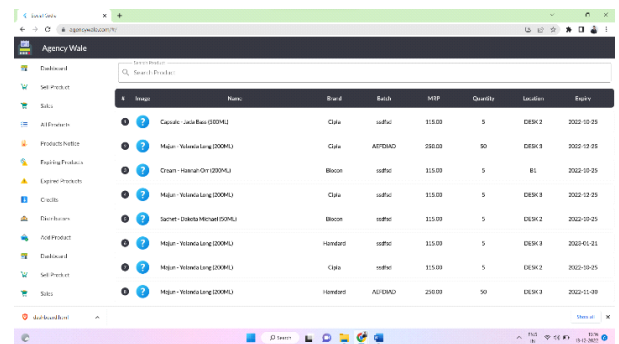

Fig -3: Dashboard

Fig -4: Add Products Page

Fig -5: All Products Page
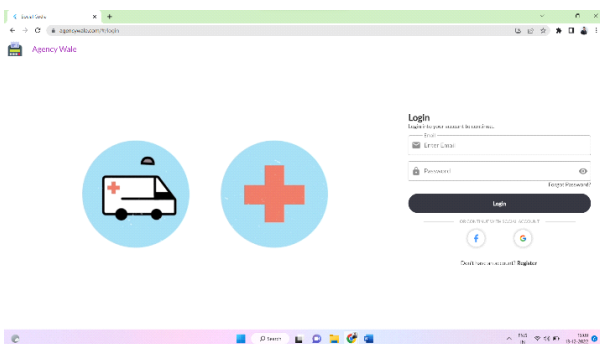
7. TOOLS & TECHNOLOGY USED

- **Operating System:** Windows 10

- **IDE:** Visual Studio Code

- **Front End:** React JS HTML5, CSS3, Bootstrap5

- **Back End:** Django (Python)

- **Database:** MYSQL

- **Technology:** Web Development

8. ACKNOWLEDGEMENT

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9. CONCLUSION

An Effective implementation of this software can easily and effectively store information about activities in a particular area, thus fulfilling all the basic needs of retailers. This achieves system design goals. This automated system helps retailers process new recipes and replenish inventory quickly and easily with a few keystrokes. You will receive notifications of discontinued products and stem processed products, so reordering is easy. It also saves you time and money as there are no middlemen. You can easily track your inventory with the help of this software.

10. FUTURE SCOPE

Our present application may be having less functionality or less problems we solved in the healthcare sector. But we believe in future we will be capture all the problems faced by industry in our research & we also tried to give the best tech solution for this industry, by using artificial Intelligence, data analytics, machine learning, image processing like new technologies with greater accuracy because they are capable of doing best solution for our application.

11. REFERENCES

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