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Pharmaceutical Inventory Management System

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Abstract - *The goal of a pharmaceutical inventory management system is to use computerized equipment and software to automate the present manual approach. The vital data may be preserved for a longer length of time with simple access and alteration. The conventional technique of handling paperwork was inefficient and time-consuming, an inventory management system is required for improved data handling and efficiency.*

***Key Words*: Pharmacy, inventory, management system, website, e-commerce, delivery, order medications.**

1. INTRODUCTION

In a medical store management system, one cannot only have the proper information of medicines with ease, but it can also reduce the workload of the druggist to a large extent. It will have the facility to store the information about the medicines details status reports, queries and details about its customer and its employees.

With the implementation of technologies such as a database management system, we can ease the process of storing information, reduce errors in the prescription of drugs, track expiration dates of current stock, etc. An online portal helps in reducing geographical limitations. One can order medicines from their home and get them delivered without going outside. Accessibility is increased as anyone can place an order at anytime, anywhere.

Creating a website necessitates several prerequisites. A thorough understanding of multi-tiered architecture, server and client-side scripting methods, and some implementation approaches such as programming languages such as HTML, CSS, and database using Google Firebase with no SQL and flask web server are necessary.

2. METHODOLOGY

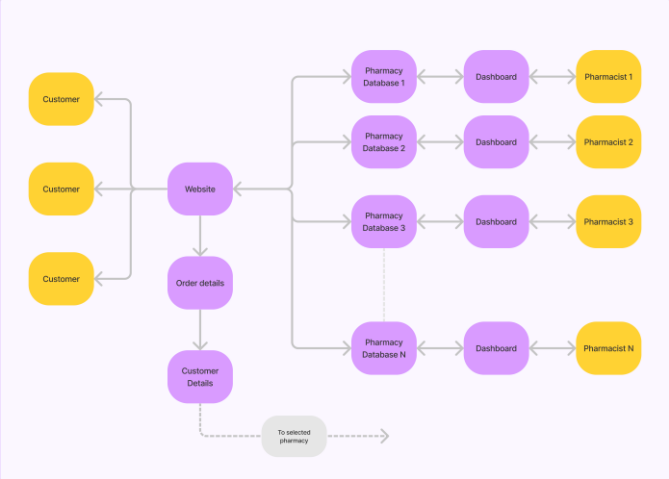

Fig 2.1 Block diagram

The website functions as shown in the block diagram above. Customers use the website and search the database of available drugs. This database is comprised of distinct databases for each pharmacy linked to the website.

After a customer places an order, the order and customer information are transferred to the pharmacy whose medications the client purchased. In this manner, the website accepts orders from customers and provides the relevant information to the appropriate pharmacy.

2.1 Website

The website is the actual interface that was created to meet the expectations of customers. After scanning the associated pharmacy databases, it will host all available medications. This website can also be used by a customer to contact a pharmacy.

2.2 Customer

The customer is the person who uses our project's e-commerce features. They will be able to use the website to explore, search, view, and purchase the medication they require.

2.3 Home page

After a successful login, the user will be directed to this page. It will show all the medications and classifications, as well as a search bar for finding a specific medication.

2.4 Medicines

This is the page where the visitor may view all the drugs and search for specific medications to order.

2.5 Categories

This is the page where the user may examine all the drugs and explore for different categories in which the medication is desired.

2.6 Cart

On this page, users may view all the medications they have added to their cart and manage their cart accordingly, such as removing medication from the cart.

2.7 Orders

The user may view all their orders on this page.

2.8 Admin

Shopkeepers who manage consumer orders and the back end are known as administrators or admin. There are numerous Shops, and each admin has their own backend login.

2.9 Dashboard

After a successful login, admin will be directed to this page. It will show all the medications they have listed. They can handle all the medications here, including adding new ones, updating existing ones, and deleting old ones.

2.10 Profile

This page will contain all the administrative information, such as the pharmacy's name, contact information, and shop address. This page's information can also be edited by the administrator.

2.11 Admin Orders

This page will display all their shop's orders as well as order details.

2.12 Figures

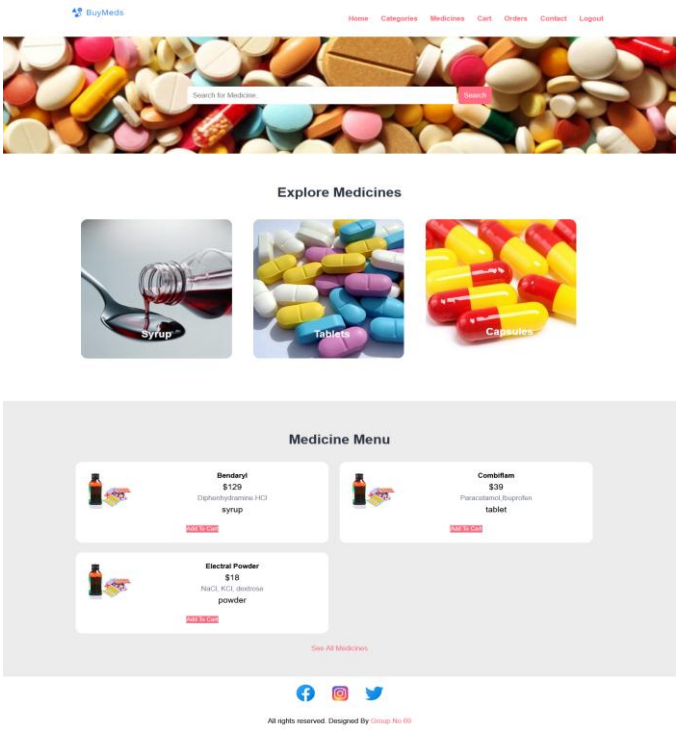

Fig 2.2 Home page of customer side

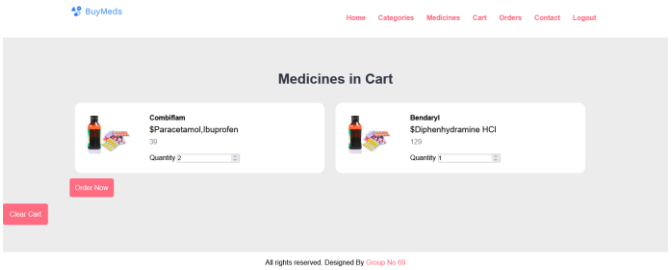

Fig 2.3 Customer's cart page

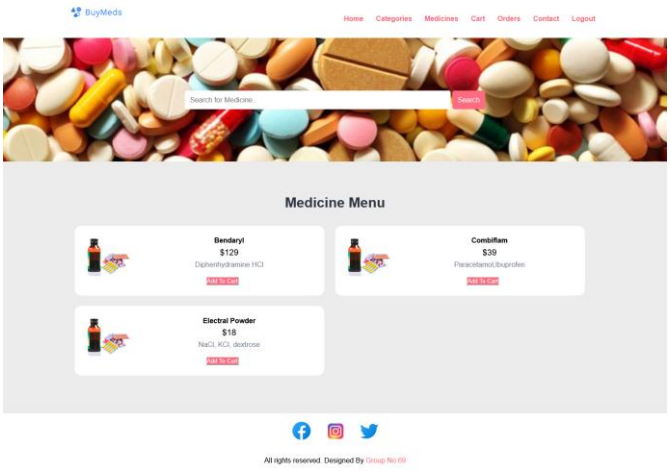

Fig 2.4 Medicines page

Fig 2.5 Admin dashboard

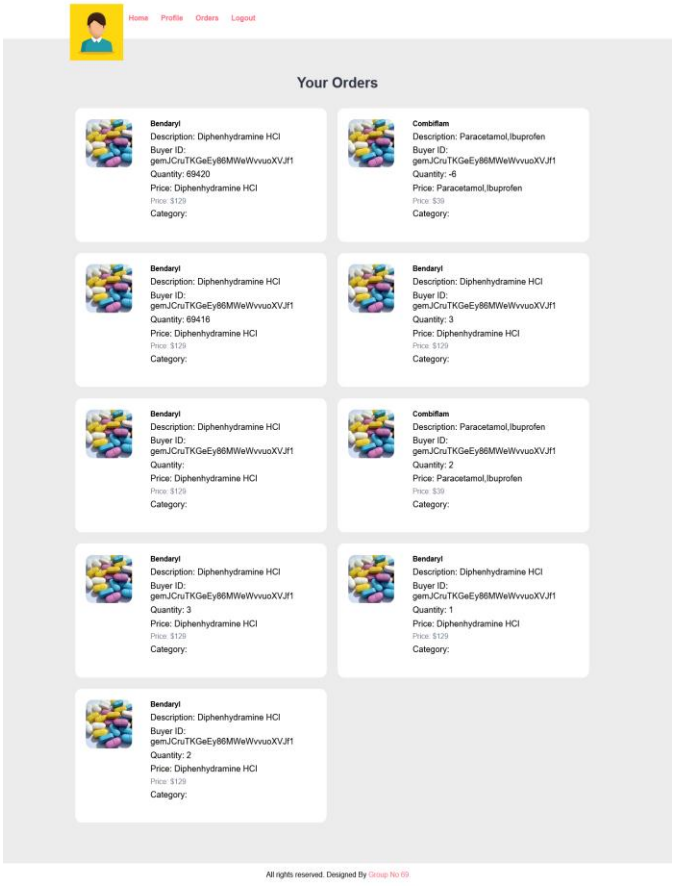

Fig 2.6 Admin's received orders page

3. CONCLUSIONS

Due to the COVID scenario and the constraints and care taken by consumers, online medicine stores have become quite essential. This use is equally beneficial to medical stores. In today's world, inventory management is critical in every company, especially medical stores. Because the conventional technique of handling paperwork was inefficient and time-consuming, an inventory management system is required for improved data handling and efficiency.

We gained a better grasp of the need for online pharmacy services as well as the criteria for maintaining such a service. We were able to complete the project's backend and front end. We learned about HTML/CSS, Flask, NoSQL, Jinja, Firestore, and Figma, among other technologies.

Implementing this project in real-world pharmacies can result in less paperwork for pharmacists, easier ordering of medications for consumers, access to statistical data on sales and stocks for a specific pharmacy, and an increase in efficiency for any drugstore.

4. FUTURE SCOPE

We can notify the pharmacist when the stock falls below a specified level, recommend comparable medications based on prior orders, automate the purchase from the wholesale market when supplies are depleted. We can also try to design an app for android devices that uses the same database and utilize search to automate online orders.

REFERENCES

[1] Baker, Asan. (2018). "Designing a Computerized Pharmacy Management System with Inventory Stock Alert System", International Journal of Emerging Trends & Technology in Computer Science. 5. 68-71.

[2] Asimare, Habitamu. (2015). "Pharmacy management system Requirement Analysis and Elicitation Document", University of Gondar.

[3] Shaw, Z. (2017). Learn Python 3 the Hard Way (1st ed.). Addison-Wesley Professional.

[4] Grinberg, M. (2018). Flask Web Development: Developing Web Applications with Python (2nd ed.). O'Reilly Media.

[5] Spurlock, J. (2013). Bootstrap: Responsive Web Development (1st ed.). O'Reilly Media.

[6] Flask Documentation. (2021). Flask. https://flask.palletsprojects.com/en/2.1.x/

[7] O. (2022, May 9). Pharmacy Management Software Development: Features & Functionalities You Can't Miss. Octal Blog. https://www.octalsoftware.com/blog/pharmacy-management-software-development/

[8] A. (2015, February 25). Online Medical Store synopsis. Scribd. https://www.scribd.com/document/256924692/Online-Medical-Store-synopsis

[9] Robbins, J. (2018). Learning Web Design: A Beginner's Guide to HTML, CSS, JavaScript, and Web Graphics (5th ed.). O'Reilly Media.

[10] Python 3.10.4 Documentation. (2022). Python Docs. https://docs.python.org/3/index.html

[11] DuRocher, D. (2021). HTML and CSS QuickStart Guide: The Simplified Beginners Guide to Developing a Strong Coding Foundation, Building Responsive Websites, and Mastering . . . of Modern Web Design (QuickStart Guides). ClydeBank Media LLC.