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PHARMAFLOW TRACKER

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ABSTRACT

The Medicine Inventory and Availability System is an advanced digital platform that is created to make a revolutionary change in the way patients, caregivers, and healthcare professionals obtain and manage drugs. This total package reduces the drug dispensing process by giving the participants a user-friendly interface on which they can always search for the specific medicine from multiple pharmacies, compare prices, and find the nearest pharmacy where the medicine is in stock.

I. INTRODUCTION

Deciding whether or not to give patients drugs is indeed a significant issue that needs to be resolved. The medical process for people with chronic diseases like diabetes, hypertension, and heart disease is to administer medicines to them. For them, taking medicine is not simply a formality; it is a must to be able to overcome the symptoms, prevent the complications and enjoy a harmonious life. Notwithstanding this, the way to the supply of medicines is quite complex since it is a process that involves many different things.

II. METHODOLOGY

1. Requirement Analysis – Define core functionalities like **user authentication, health data input, and personalized diet/workout recommendations.**

2. Data Collection & Processing – Gather **nutritional, medical, and fitness datasets, preprocess user health data, and categorize food items.**

3. Web Development –

- **Frontend:** HTML – CSS for the User Interface
- **Backend:** Python web framework like Fast-API to handle Server Side Logic.

4. Testing & Validation – Perform **unit, integration, and user testing** to ensure accuracy and usability.

5. Deployment & Maintenance – Deploy using **AWS/GCP, ensure updates, and optimize based on user feedback.**

III. MODELING AND ANALYSIS

This section presents the model and methodologies used in developing the system.

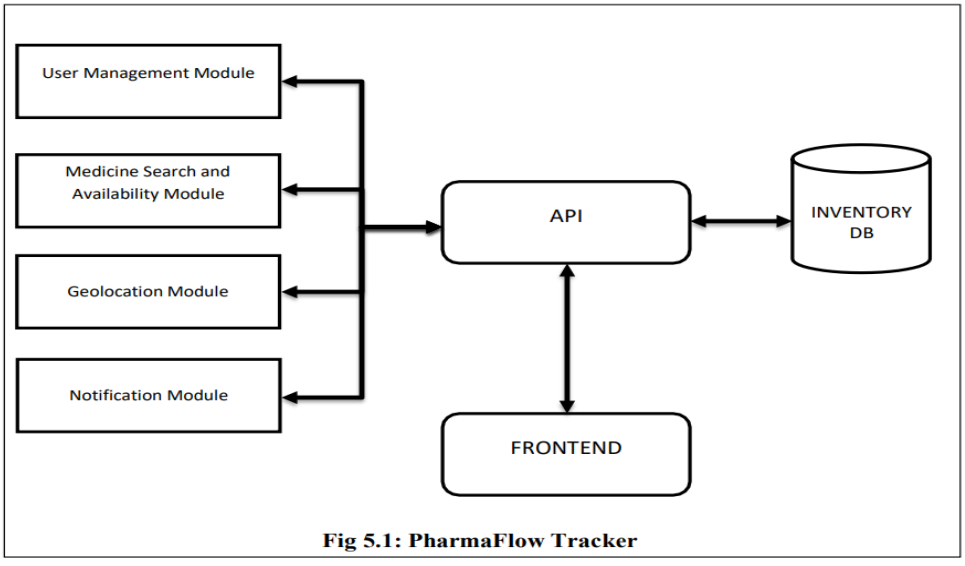

Figure 1: PharmaFlow Tracker

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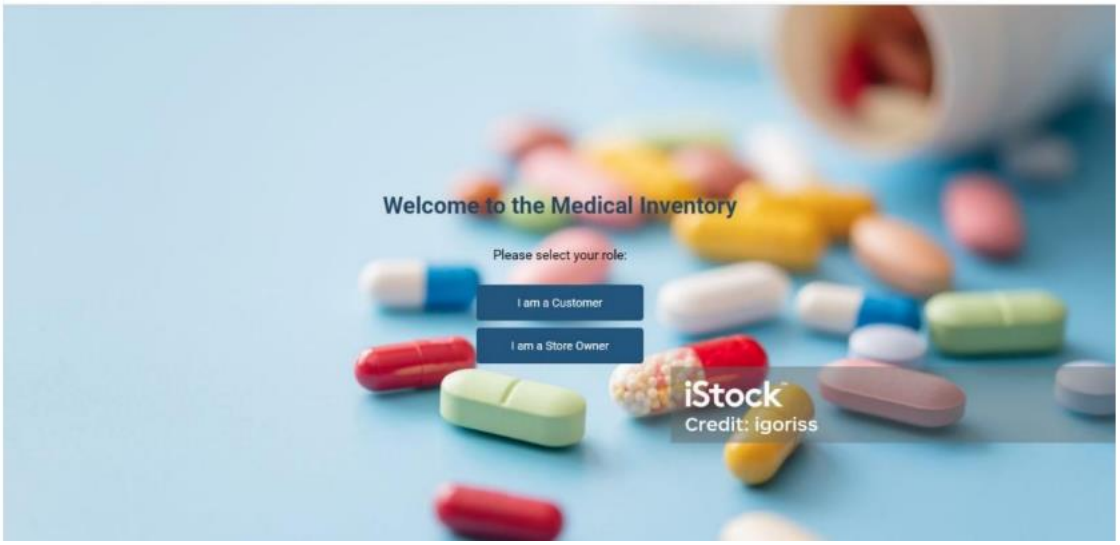
The architecture diagram outlines a pharmaceutical system consisting of two primary roles: User and Admin. Users interact with the system to register, search for medicines, check availability, and locate nearby pharmacies. Admins manage backend operations like order processing, stock updates, and maintaining medicine details.

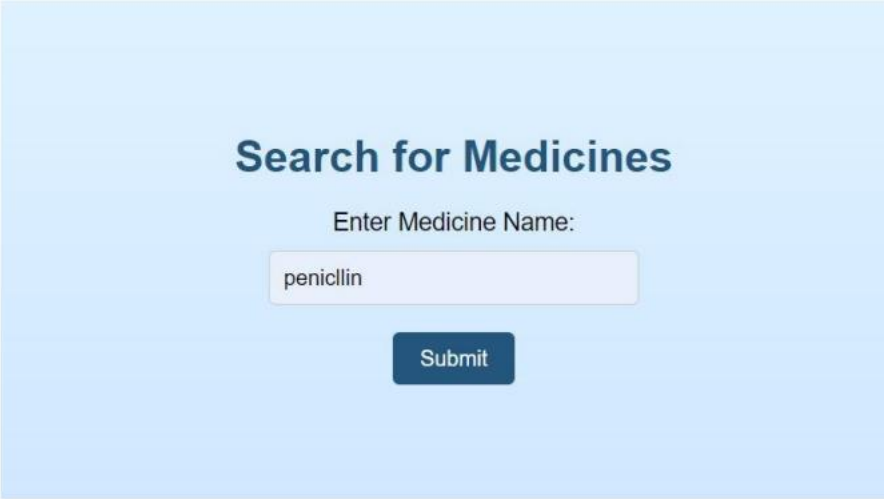
IV. RESULTS AND DISCUSSION

Login page:



Here on the login page user is asked whether he is a customer or a normal user. The page is generated using HTML and CSS language which becomes more appealing for the users.

Search page:



Then after logging in there is a search menu where the user needs to input the medicine he/she wants. This will automatically go through the database and search for the appropriate medicine.

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Available Madicine Page:

The User gets the available stores location after checking for the medicine name in the search menu and appropriate store names (which have that particular medicine) are displayed at the user side.

V. CONCLUSION

The development and implementation of a Medical Inventory Tracker offer a transformative solution to the complex challenges faced by healthcare institutions, pharmacies, and medical stores in managing their medical supplies and medications. This technology-driven approach has the potential to significantly enhance patient care, streamline operations, and ensure the responsible use of resources. In conclusion: A Medical Inventory Tracker can effectively address stockouts and overstockingissues, promoting uninterrupted patient care and reducing wastage, thereby improving the overall quality of healthcare services.

VI. REFERENCES

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