

Pharmi Track

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Abstract: A mobile application is a computer program designed to run on mobile devices such as tablets and smart phones. The development of Mobile applications and Internet has increased the easiness of Information Communication. The Global Positioning System (GPS) is incorporated in these devices to obtain location and time information in all weather conditions, anywhere on the earth or near the earth where there is an unobstructed line of sight to four or more satellites.

Recorded location data can be stored within the tracking unit, it may be transmitted to a central location database. It can also be transmitted to Internet-connected computer, using a cellular (GPRS or SMS), radio, or satellite modem embedded in the unit. This allows the asset's location to be displayed against a map backdrop either in the real time or when analyzing the track later, using GPS tracking software. Recommendation or Recommender systems are a sub class of information filtering. Recommendation System seek information to predict the 'rating' or 'preference' that a user would give to an item. Recommender Systems have become extremely common in recent years, and are applied in a variety of applications. The most popular ones are recommender Systems for experts, restaurants, financial services, life insurance and twitter followers etc...

I. Introduction

Pharmacy deals with the technique of manufacturing of drugs. Pharmacists, known as chemists are professionals who practice in pharmacy, focusing on safe and effective medication use.

A pharmacist is directly involved with patient care. Pharmacy is a reservoir of all types of medicines. Common man can buy these medicines from the pharmacy directly. The purchase of medicines requires personal interaction of the user with the Chemist. The user is not aware of similar medicines available in the pharmacy. Tracking and locating of doctors and Pharmacy in their locality and their available timings in a particular area is a hectic task.

II. Related Work

Applications Similar to the proposed System is available for download, with some drawbacks.

One of the Applications referred is : **Practo**

Practois healthcare app which enables you to find the best doctors, and book instant appointments, and do online consultations with them. You can read details about the doctor such as qualifications, consultation fees, see feedback from other patients and instantly book appointments right from your smartphone.

With Practo Consult, you can post medical questions, and get expert answers from qualified doctors. You can also read, search, and share the Questions posted by other people on similar problems and the answers from doctors.

The drawbacks include

- i. The application enables the user to just find only the doctors nearby and the user cant track the nearby pharmacies and can't read the details about pharmacy.
- ii. The user cant order the required medicines from this application.

III. Proposed System

Pharmi track is an Android application that enables the user with an easy tracking of pharmacy and Doctors in his locality. The admin is responsible for the authentication and verification of the registered users, doctors and chemists. He also manages the cities, areas and also the pharmacies located in those cities. Each user is required to register to the application. Once registered, the user can login to the system, through which he can track pharmacy, locate Doctors, place orders and post queries. Once a user requests for a particular pharmacy, recommendations of alternate pharmacy are provided based on the composition the searched one and also based on his previous orders. The user can post queries to the Doctors through a discussion forum.

The Chemist is provided with a web application where he registers himself to the Pharmi Track System. Once registered, the chemists can update his information and also the available medicines in his pharmacy. The Chemist can verify and approve the order placed by user. The doctor is required to register to the

application. Once registered, the Doctor can update his/her profile and also the consultation timings in a particular area. The Doctor can view and respond to the queries posted by different users and can also enlighten users about newer and better drugs, indications and their usage.

IV. Design

System Design defines the Components, interfaces, architecture, modules and data for the system specified. During this phase, the system engineers understand and analyze the business of the system proposed, with the aid of requirements documented by the users.

The stake holders for the Pharmi track System includes:

- i) Admin
- ii) User
- iii) Doctor
- iv) Chemist

Functional requirements of the system include

1. **Registration:** Each user, chemists and doctor are required to register under the application which is authenticated by admin.
 2. **Login:** After registration user, chemists and doctors are given with unique ID through which they can login to application.
 3. **Search:** The user can search the required medicines, track pharmacy and locate doctors in particular area.
 4. **Update:** Each user can update his profile information such as address, phone number and can change passwords.
- Each chemists can update his profile which includes his/her basic information and available medicines and their quantities.
- Each doctor can update the availability of his/her timings in particular area.
5. **Order:** Once the requirement is available user can place the orders.
 6. **Query:** Each user can post queries to the chemists and doctors and can obtain solutions to their queries.
 7. **Send Message:** In case of emergency, the user can intimate all nearby doctors for immediate assistance.

Non-Functional Requirements include

1. **Portability:** Portability specifies the ease with which the software can be installed on all necessary platforms, and the platforms on which it is expected to run. In our Application since we are using cloud service provider for data storage, hence data can be accessed by the user from anywhere at any time.
2. **Performance:** The performance constraints specify the timing characteristics of the software. Certain tasks or features are more time-sensitive than others; the nonfunctional requirements should identify those software functions that have constraints on their performance. In our project since we are reducing the computation process done by the mobile device, which in turn helps it to perform fast and accurately
3. **Reliability:** Reliability specifies the capability of the software to maintain its performance over time. Unreliable software fails frequently, and certain tasks are more sensitive to failure (for example, because they cannot be restarted, or because they must be run at a certain time). In our application data will be stored on one cloud in encrypted format thus avoiding any unauthorized access to data, giving us a reliable source to store data.
4. **Reusability:** Many systems are developed with the ability to leverage common components across multiple products. Reusability indicates the extent to which software components should be designed in such a way that they can be used in applications other than the ones for which they were initially developed. Since data will be available through cloud hence no need of making a duplication of same data by the same user on multiple devices.

4.1. Architecture

“Pharmi-Track” is a three-tier architecture based on client-server architecture in which the functional process logic, data access, computer data storage and user interface are developed and maintained as independent modules on separate platforms.

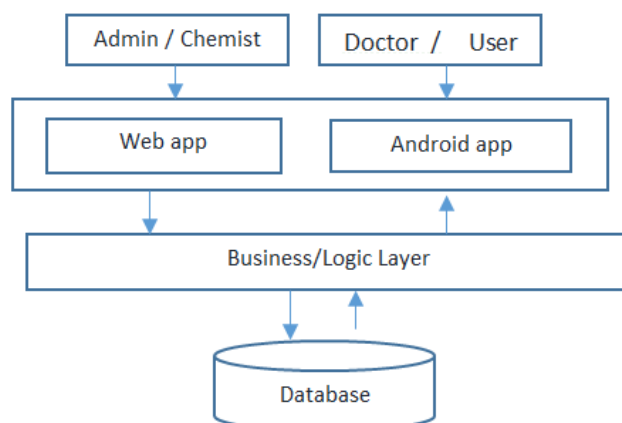


Fig 4.1: System Architecture

V. Conclusion

The “Pharmi-Track” provides user with a friendly interface where he can reduce his efforts of finding and purchasing of pharmacies and also locating of Doctors. The facility of ordering the pharmacy online reduces the physical effort the user has to put in to purchase the required pharmacy. The user can also get in Contact with the nearby Doctors through the forum where he can interact withthem, post Queries and also obtain responses from doctors for the queries posted. Similarly, thedoctors can get in touch with the users providing them useful updates regarding the newermedicines and tips. Thus the application provides an overall medical assistance to the user.

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