PATIENT MEDICATION TRACKER

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**ABSTRACT**

In today's fast-paced world, managing medication schedules can be challenging. Our solution is a user-friendly and efficient Patient Medication Tracker app designed to simplify the process of medication management.

This user-friendly and efficient application serves as a digital assistant, revolutionizing medication management for individuals and their caregivers.

Our app empowers patients and caregivers by simplifying the process of medication management. Users can effortlessly input medication details, dosages, and schedules, allowing them to take control of their health journey. The app acts as a vigilant companion, sending timely reminders that function as virtual alarm clocks for medications, ensuring that no dose is ever missed. It also sends reminders to patients and caregivers when it's time to refill their medications based on their prescribed duration, ensuring uninterrupted treatment.

The proposed system consist of 3 Modules :

* ADMIN
* PATIENTS
* CAREGIVERS
* DOCTORS

**Admin Module**

This is for administrators who oversee the app's operations and user management. It includes functionalities like:

* User Management: Admins verify accounts and manage user registrations for patients and doctors. Ability to suspend or reactivate user accounts if necessary.
* Medication Database: Admins maintain a comprehensive database of medications, including details such as names, dosages, interactions, and side effects. This information ensures accuracy in medication-related interactions within the app.
* Notification Management: Ability to send important announcements or notifications to users (patients and doctors)
* Inquiry Management: Admins handle user inquiries, feedback, and technical issues. They provide assistance and troubleshoot any challenges users may encounter.

**Patients And Caregivers Mobile Application Modules:**

This module is designed to serve the needs of individual users who are taking medications as prescribed by their healthcare providers. Here's an overview of what the Patient Module might include:

* User Registration and Login : Patients start by opening the app and choosing the option to register as a patient. They provide essential information such as their name, date of birth, gender, and contact details. Patients create a unique username and a strong password for their account. These credentials will be used to log in to the app in the future.
* Medication Input: Users can input their medications by adding details such as the medicine name, dosage, frequency, and any specific instructions.
* Reminder Alerts: The app sends reminders to users at scheduled times to take their medications. These reminders can be customized based on user preferences.
* Notification : Implementing notifications for medication reminders. When users set their medication schedules in the app, schedule push notifications
* Medication History : Provide history log that shows patients their medication doses. This include timestamp and dosage details.
* Refill Remainders : Send notification to patients when its time to refill their medication based on their prescribed duration.
* Account Settings: Update personal information, change passwords, and manage notification preferences
* Feedback Submission: Users can submit feedback by selecting the feedback section and writing their thoughts in a text box or a feedback form. They can choose the type of feedback they're providing, such as suggestions, issues, user experience, or positive experiences.

**Doctors Web Application**

The Doctor Module is a web-based application used by healthcare professionals to interact with their patients and manage medication-related information. It offers functionalities such as:

* Registration and Login : Doctors register using their professional credentials and relevant information. Doctors create a unique username and a strong password for their account. These credentials will be used to log in to the web in the future.
* Doctors Prescription : When doctors create a prescription in the web application, along with medication details, dosage, and instructions, the system can also calculate the appropriate schedule for taking the medication.
* Automatic Medication Schedule Generation: Once the prescription is saved by the doctor, the system generates an automatic medication schedule for the patient. This schedule takes into account the dosage instructions and creates reminders for each dose.
* Medication History: Doctors can view their patients' medication details, medication history, adherence patterns, and any recorded side effects.
* Account Settings: Update personal information, change passwords, and manage notification preferences.
* Feedback Submission: Users can submit feedback by selecting the feedback section and writing their thoughts in a text box or a feedback form. They can choose the type of feedback they're providing, such as suggestions, issues, user experience, or positive experiences

**TECHNOLOGIES :**

**Mobile Application :**

Front End – Flutter

Back End – Firebase

**Web Application :**

Front End – HTML/CSS/JavaScript

Back End – Firebase