

## **PillEasy**

An app which keeps track of time when a patient needs to have medicine and alerts him/her regarding the same, along with other add-on features.

### **About the Project:**

An app which keeps track of time when a patient needs to have medicine and alerts him/her regarding the same, along with other add-on features like he can track the blood pressure, sugar and weight. User can click photo of the medicine and the medicine name can be read. This can help the user.

### **Motivation:**

The motivation to build this product came from observing the elderly people in the family having to suffer through the stress of missing out pills in absence of regular supervision.

Many times hospitals also display lack of supervision. People sometimes take incorrect medicines due to lack of information or misjudgement. Neither do they have a proper listing of the medicines they are taking and when to consume them. All these happenings motivated us to come up with an easy solution for the aged and the ailing.

### **Related Work:**

There are many apps in this domain and the main players are MyTherapy Pill Reminder and Medisafe Pill Reminder and Medication Tracker both of them have more than 10 lakhs + downloads but they all lack one main functionality which is showing the photo of a medicine also while taking or shopping for the same medicine as many people have different pronunciation for the same medicine.

### **Our Work:**

After installing the application:

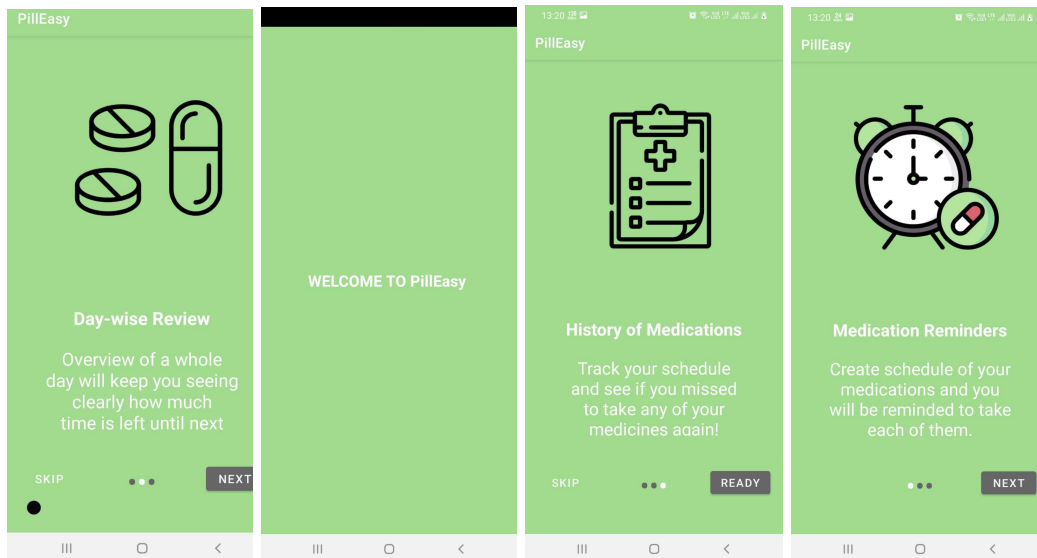
- A Welcome walkthrough screen will appear (this disappears after user re-opens the app )
- The User can SignUp and Login
- The user can add and delete medicines with different functionalities
- The user can keep a record of their BP, Sugar and weight daywise.

## Functionalities Added:

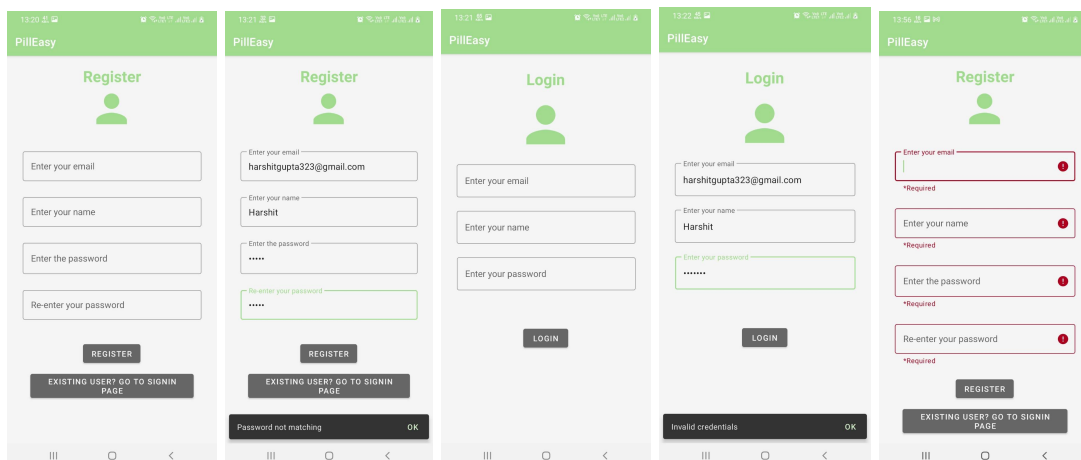
Features offered by the App:

➤ Welcome Walkthrough Screen:

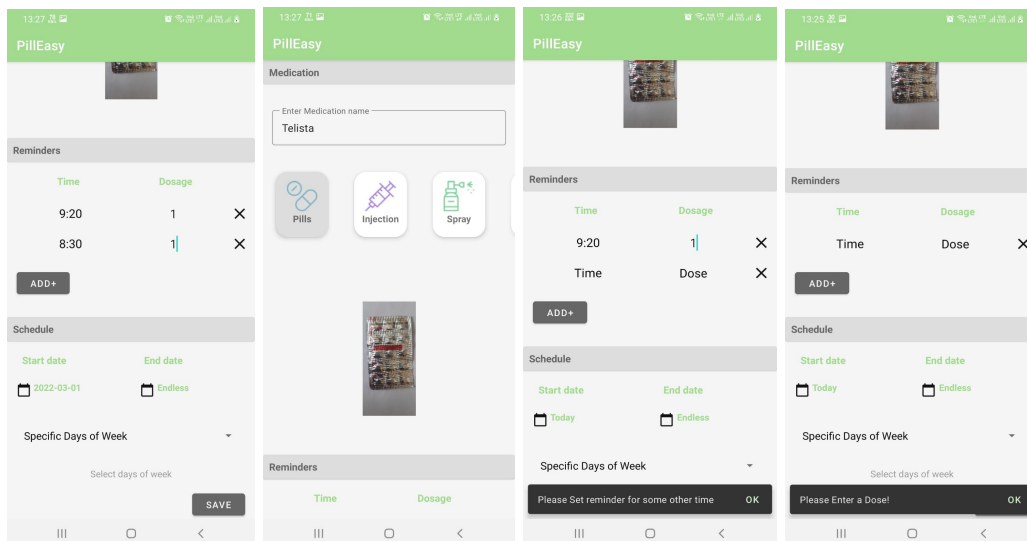
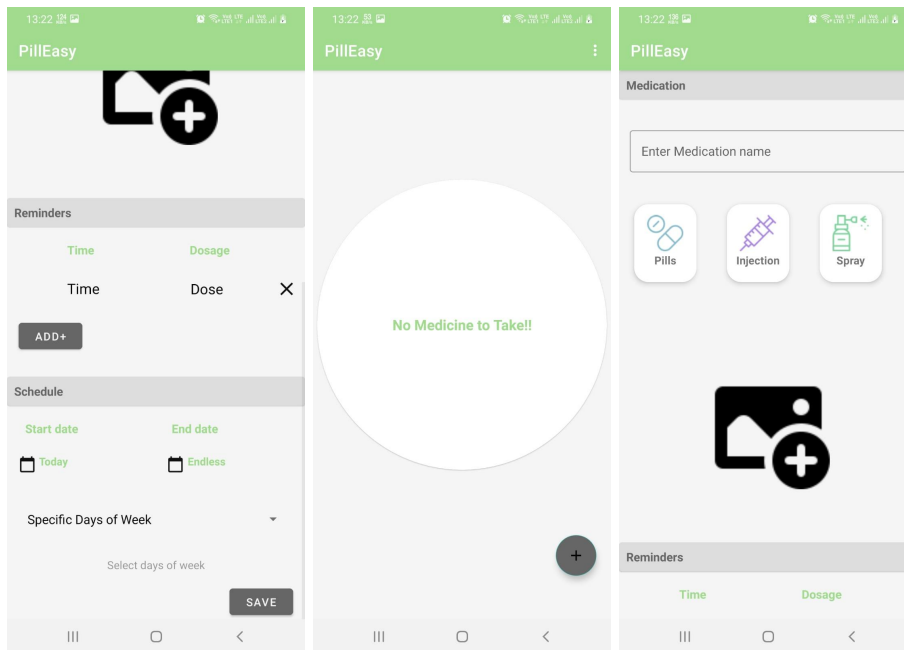
This page aims to welcome new users and get them excited to take that next step on their way to loving your product. The Welcome pages are even more crucial as the First-time user experiences significantly affect long-term revenue.

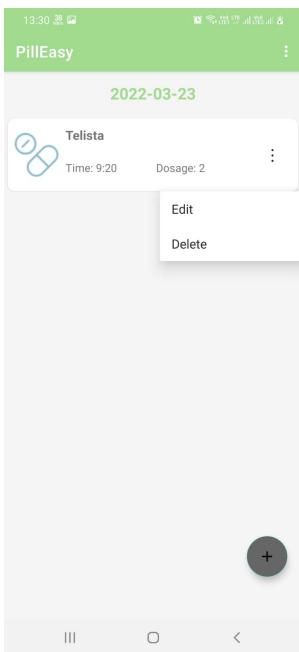
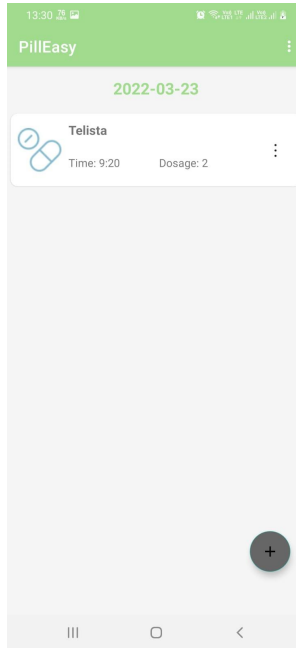
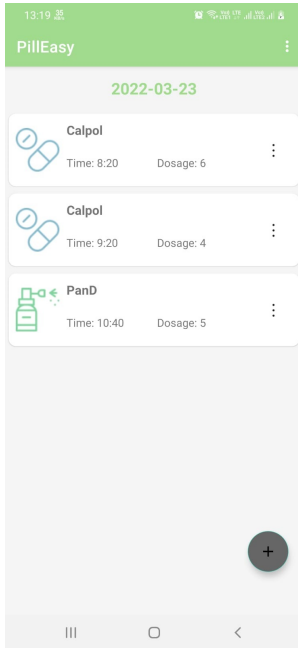
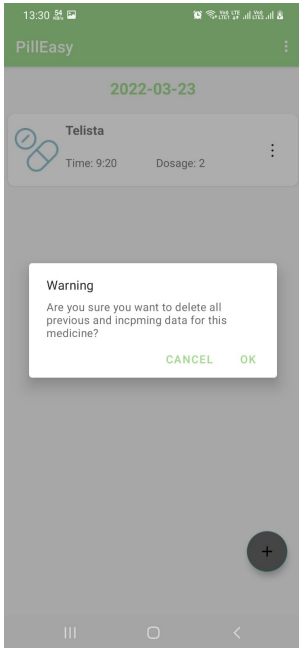


➤ Register and Login

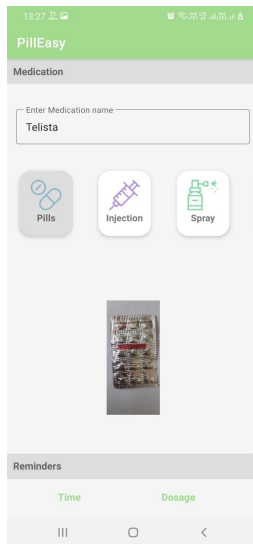


- The medicines can be added or deleted by the user





- Add Medicine name and Highlight the category (as Pill/ Spray/ Injection/Capsule/ Inhaler etc.)



- Add the image of the medicine strips with each medicine type:
  - Sometimes, it is difficult to see and read the medicine names by elderly people, so this feature will help them identify the medicine they are supposed to consume.
- Add Multiple reminders for every medicine:
  - If a medicine is to be taken even twice/thrice a day, multiple reminders can be added for the same at different times.
- Schedule the medicines from some particular day to the other along with intervals of particular days of week:
  - If some medicine is to be taken only for say 7 continuous days, then we can add it from a particular date to its end date.
  - Or, if any medicine is taken one weekly, that can also be added with respect to days of week.
  - Also, if some medicine is to be taken after 2 or any alternate days

The screenshot shows the PillEasy app interface. At the top, there's a green header with the time 13:27 and battery status. Below the header, there's a profile picture placeholder. The main content is divided into two sections: 'Reminders' and 'Schedule'. The 'Reminders' section has a table with columns 'Time' and 'Dosage'. It lists two reminders: one at 9:20 with a dosage of 1, and another at 8:30 with a dosage of 1. There are 'X' icons next to each reminder. Below the table is an 'ADD+' button. The 'Schedule' section has fields for 'Start date' (2022-03-01) and 'End date' (Endless). There's a dropdown for 'Specific Days of Week' and a 'SAVE' button at the bottom.

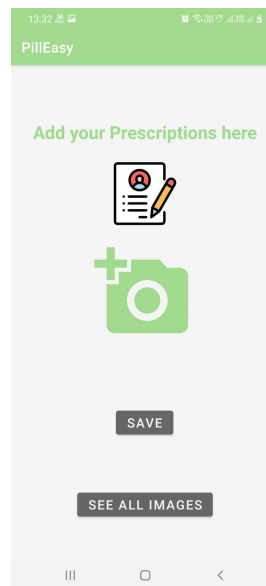
Keep a track of daily Weight, BP, Sugar of the Patient using forms and displaying it datewise:

- To update details, a form is attached that takes the values of different health parameters along with the current date and stores it in the SQLite Database and the data is stored in the device in the form of RecyclerView that makes it easy to see the previous day health fluctuations as well.

The three screenshots show the 'Daily Health Updates' form in the PillEasy app. The first screenshot shows the form with pre-filled data: Date 2022-03-23, Weight 70, BP(sys/dys) 120/80, and Sugar 120. The second screenshot shows the form with input fields for Weight in kg (70), BP (sys/dys) (120/80), and Sugar (120). The third screenshot shows the form with red error messages indicating that the Weight, BP, and Sugar fields are required. The date is 2022-03-23. At the bottom of each form are 'SAVE DETAILS' and 'SHOW PREVIOUS DETAILS' buttons.

### **Functionalities Yet to be added:**

- ☐ The monthly report of Health updates to be sent to the login Email in a pdf format.
- ☐ Users can edit the Medicine doses, alarm times etc.
- ☐ Reminder to Refill the medicine stock when some(particular number) medicines are left.
- ☐ Add and save images of Prescriptions:
  - The user had an advantage to save all their Prescriptions at one place in the application



- ☐ With the reminder there is a pop-up that has options as (Take/Ignore)
  - If you click on 'take', the notification/ alarm will be set to off,otherwise
  - Notification will snooze for some time and again remind you of the medicine with notification sound.

### **TOOLS & Technologies:-**

1. Android Studio
2. SQLite Database
3. Android Programming using Java
4. Google Material Design

### **Contributions:**

1. Madiha Tariq (MT21125): SignUp and Login implementation
2. Harshit Gupta (MT21028) : Landing page (where all medicine with its corresponding dose ,time and date)
3. Niharika (MT21132): Walkthrough Screen, Health Details and Prescriptions Layout form
4. Shrey Rastogi (MT21145):- Medicine name and medicine intake type selection view.
5. Mohnish Basarkar (MT21052) : Added reminders and schedule sections along with taking picture of medicine strip.

### **References:-**

- 1) <https://developer.android.com/docs>
- 2) <https://material.io/design>
- 3) <https://www.sqlite.org/docs.html>