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PillBox

Description

The App is a medicine reminder app. It helps the user to keep a track of all the medicines one has to take at certain times in a day.

Intended User

The app is intended for elderly people or anyone who takes multiple medicines in a day. It is also for any normal user who forgets about their medicines and thus can keep a track of it through the widgets.

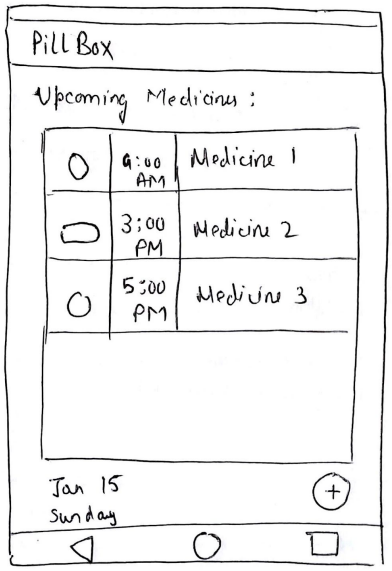
Features

In PillBox, the user can :

- Save Medication along with its several other details
- Keep a track of upcoming medicines for the day on main screen and in a widget
- Add/delete medications with ease

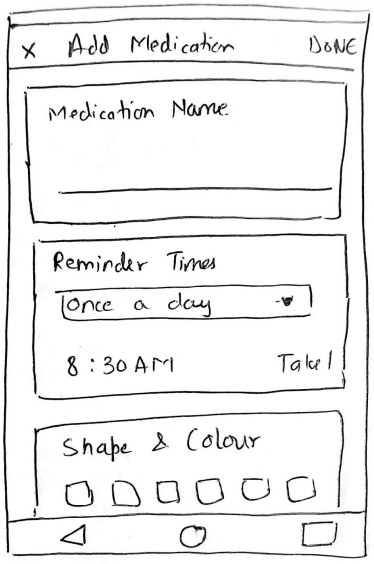
User Interface Mocks

Main activity



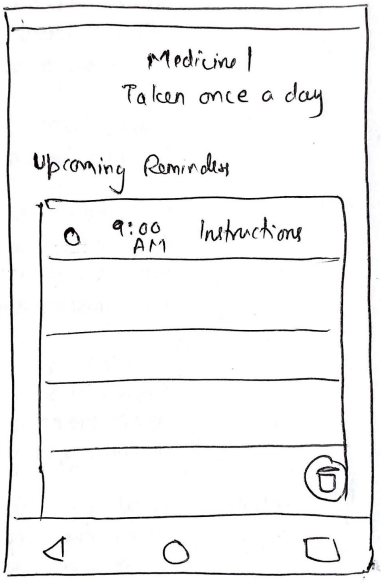
Shows upcoming medicines for day

Add medication activity



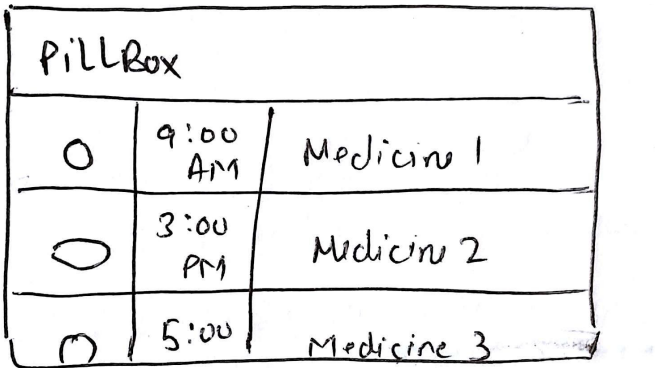
Screen to add medicine

Details Activity



Shows all the details about the medicine and a delete button to delete the medicine

Widget



Collection widget which is resizable

Key Considerations

How will your app handle data persistence?

The app will save the medicine information along with all its attributes in sqlite database by implementing a content provider.

Describe any corner cases in the UX.

An alert dialog is diplayed to confirm if a user wants to delete a medicine.
Also a snackbar is displayed if user tries to save a medicine without a name

Describe any libraries you'll be using and share your reasoning for including them.

ButterKnife will be used for binding views and Schematic to implement Content Provider

Describe how you will implement Google Play Services.

Firebase Analytics will be used to keep a track of the number of times a user takes certain medicine in a day. The frequency of medicine by most users will help add more features in the app in future.

Firebase Admob will be added in the add medicine activity

Next Steps: Required Tasks

Task 1: Project Setup

Create a new project in Android Studio and add the required compile dependencies in gradle. Also delete any auto generated code by the Android Studio if not necessary. Create Stub views for main activity and add a FAB to launch add medication activity.

Task 2: Implement Add medication activity and content provider

- This is the only activity where user will input any data.
- Make various card views, each for taking an input of a certain characteristic of the medicine
- Implement Content Provider with all the required columns
- Bind these card views to the code and verify/save user's input in the database

Task 3: Implement Main activity and Details activity

- Show the upcoming medicines for the day in list format on the main screen
- Clicking each item will take the user to a details screen and from here the particular medicine can be deleted

Task 4: Implement widgets and add google services

- Implement a collection widget
- Add Firebase analytics and Firebase admob to the app

Task 5: Final touch

- Make sure of all the guidelines followed
- Add standard transitions to the app
- Test the app for various use cases

Use of AsyncTask in the app :

The app needs to perform various tasks like :

- Adding a new medicine info to the database, which may include several entries as a medicine may be taken several times a day and their respective timings need to be stored in the database
- Deleting the medicines instances which were scheduled to be taken before the current time
- Deleting all the instances of a particular medicine (from the Details Activity)

All these tasks need to be done on background thread and may require some parameters like a bundle containing medicine info and context to call getContextResolver() etc. All these tasks will be performed in **AsyncTask**
