GitHub Username: AmyCui

MedsMinder

Description

The MedsMinder app allows user to input their prescription data, use the app to track their prescription history, and set reminders for taking their medication. With the help of the reminder system with medication images and description, MedsMinder makes patients' medication scheduling easier.

Intended User

Anyone who has medical prescriptions.

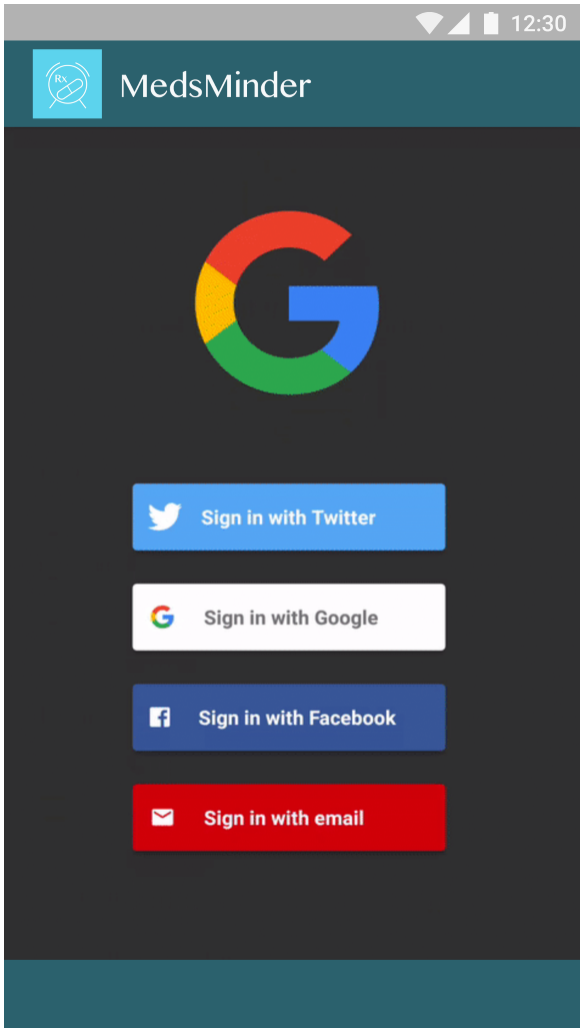
Features

- Allows user to have a login account to keep their information safe
- Saves past prescription data in pictures and text format

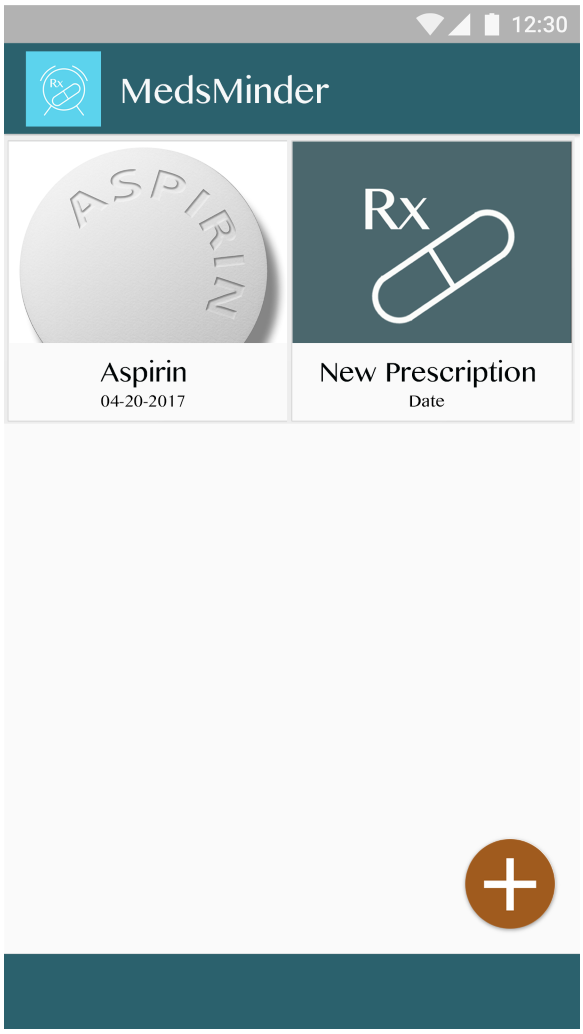
- Customized reminder type and frequency

User Interface Mocks

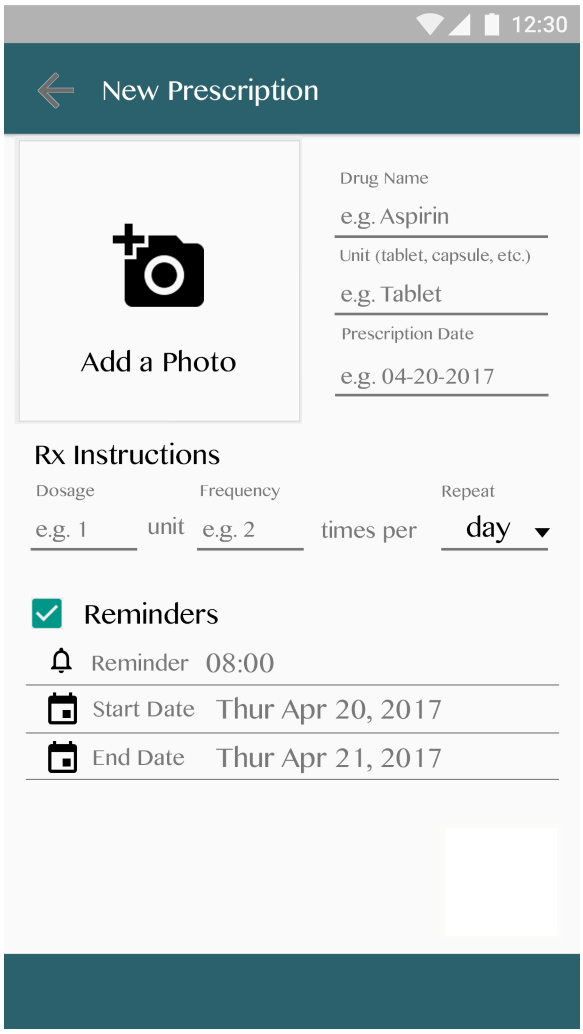
a. Login Screen. Screenshot captured from FirebaseUi-Android. Link here: link. App will use FirebaseUi-Android for this login screen for all device family. This is the first screen user see when they open app. This screen allows them to choose/create an account to login with the app.

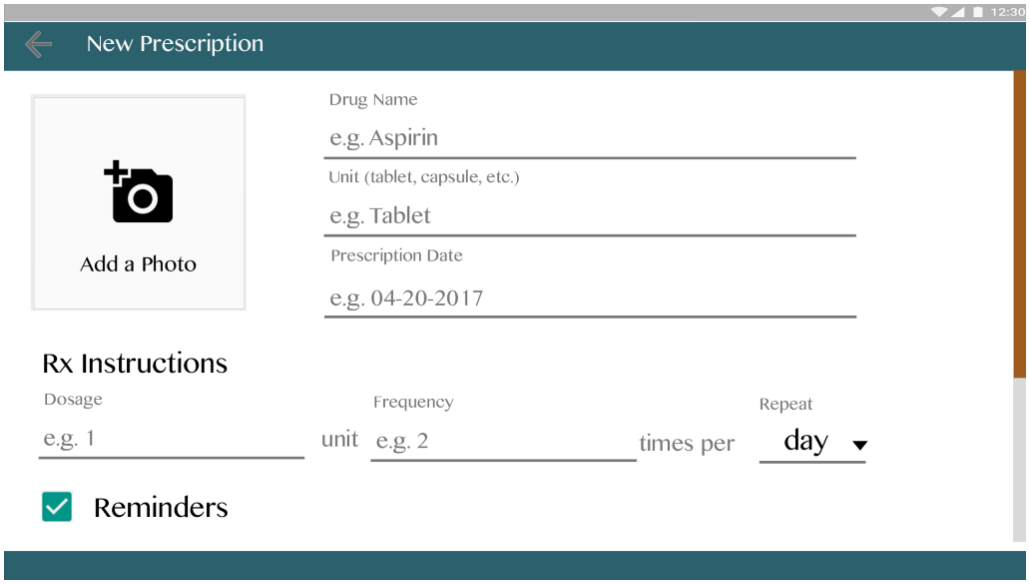


b. **Prescription Grid Page.** After login, user will be taken to this page. If no prescription data exits yet, a new prescription card will be displayed. Tapping on the new prescription card or the floating action button can take user to the next screen for editing prescription. Tapping on the existing prescription data takes user to the editing page for the prescription. The layout will look the same on phone/tablet, landscape/portrait, except for on tablet landscape, change to 3 cards per row.

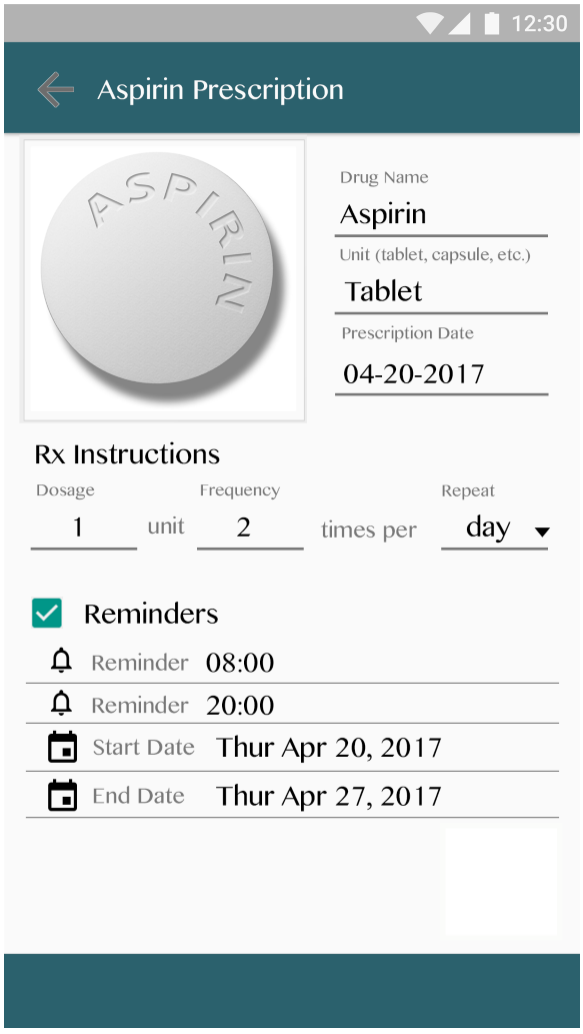


c. New Prescription Editing Page. This page allows user to create a new prescription card by filling in necessary prescription data, including medication image, name, unit, date, and instructions. Reminders can be set for this prescription as well in this screen. Landscape layout looks the same as portrait, just adjust the input field length to fill up space on screen.


12:30
New Prescription
Add a Photo
Drug Name
e.g. Aspirin
Unit (tablet, capsule, etc.)
e.g. Tablet
Prescription Date
e.g. 04-20-2017
Rx Instructions
Dosage
Frequency
Repeat
e.g. 1
unit
e.g. 2
times per
day
Reminders
Reminder 08:00
Start Date Thur Apr 20, 2017
End Date Thur Apr 21, 2017


12:30
New Prescription
Add a Photo
Drug Name
e.g. Aspirin
Unit (tablet, capsule, etc.)
e.g. Tablet
Prescription Date
e.g. 04-20-2017
Rx Instructions
Dosage
Frequency
Repeat
e.g. 1
unit
e.g. 2
times per
day
Reminders

d. Existing Prescription Editing Page. This is an example page of the editing page for an existing prescription. Landscape view same as new prescription view above.



e. Notification. This is an example notification for the reminder

Key Considerations

How will your app handle data persistence?

A new local database will be created with ContentProvider for prescription information. Images will be saved into local file system.

Describe any corner cases in the UX.

There is no corner cases for this app.

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

1. Firebase Authentication: provide a way to associate user data with user id and also a way to protect user data. Moreover, this provides potential for future app expansion such as cloud database integration.

2. FirebaseUI-Android: login UI for firebase authentication. Log in UI is quite standard. Use this library to bring user a familiar user experience. At the same time reduce repetitive development.

3. Picasso image: manage image loading and sizing from local file system

4. Firebase Analytics: provide a way to observe market response such as which groups of users are more interested in using such app.

Describe how you will implement Google Play Services.

1. App will use the firebase authentication to provide user a way to login to app.

2. App will use firebase analytics: provide a way to observe market response.

Next Steps: Required Tasks

This is the section where you can take the main features of your app (declared above) and decompose them into tangible technical tasks that you can complete incrementally until you have a finished app.

Task 1: Project Setup

Create Project and import all necessary libraries

Task 2: Data Implementation

Design database structure and build database contract

Task 3: Create UI Activities

1. Build MainActivity with GridView and FloatingActionButton
2. Build PrescriptionDetailActivity
3. Use ContentProvider to populate data to MainActivity and PrescriptionDetailActivity

Task 4: Create Reminder Notification

1. Build Notification view
2. Setup alarms with AlarmManager to show notification

Task 5: Integrate Firebase Analytics