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Receipt Box

Description

The app is a private box for storing receipts. I

Create and Archive Receipts.

Store your receipts locally or sign in to back up to servers.

Fast and Easy SMS authentication.

One-tap widget to create new receipts

Intended User

The app is aimed at individuals who want to maintain a record of their expenses.

Features

- Create new receipts.
- Phone Authentication.
- Storing in the cloud.
- Change the currency in the Settings.
- Sorting by tapping on category or date.

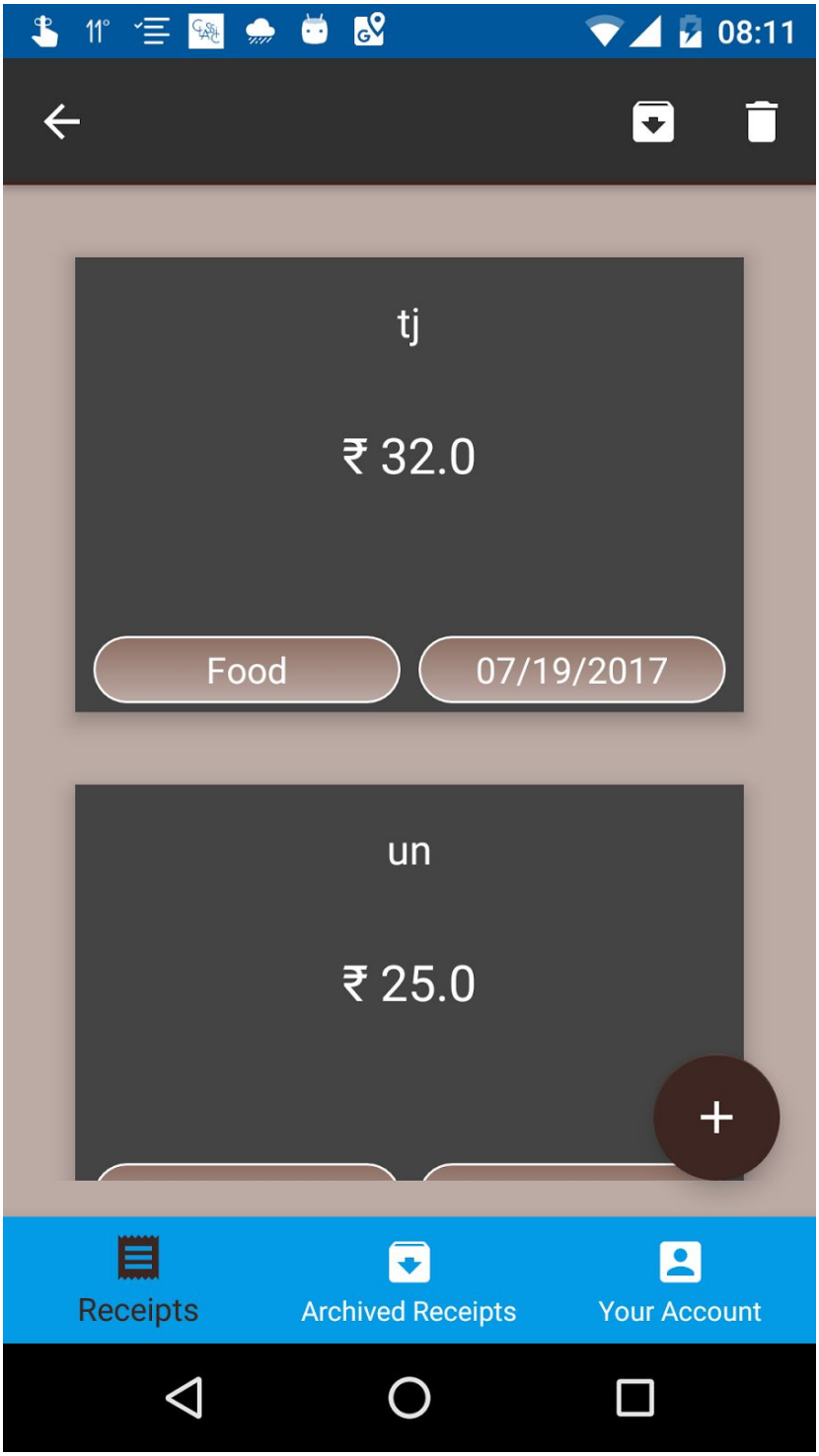
User Interface Mocks

These can be created by hand (take a photo of your drawings and insert them in this flow), or using a program like Photoshop or Balsamiq.

Screen 1

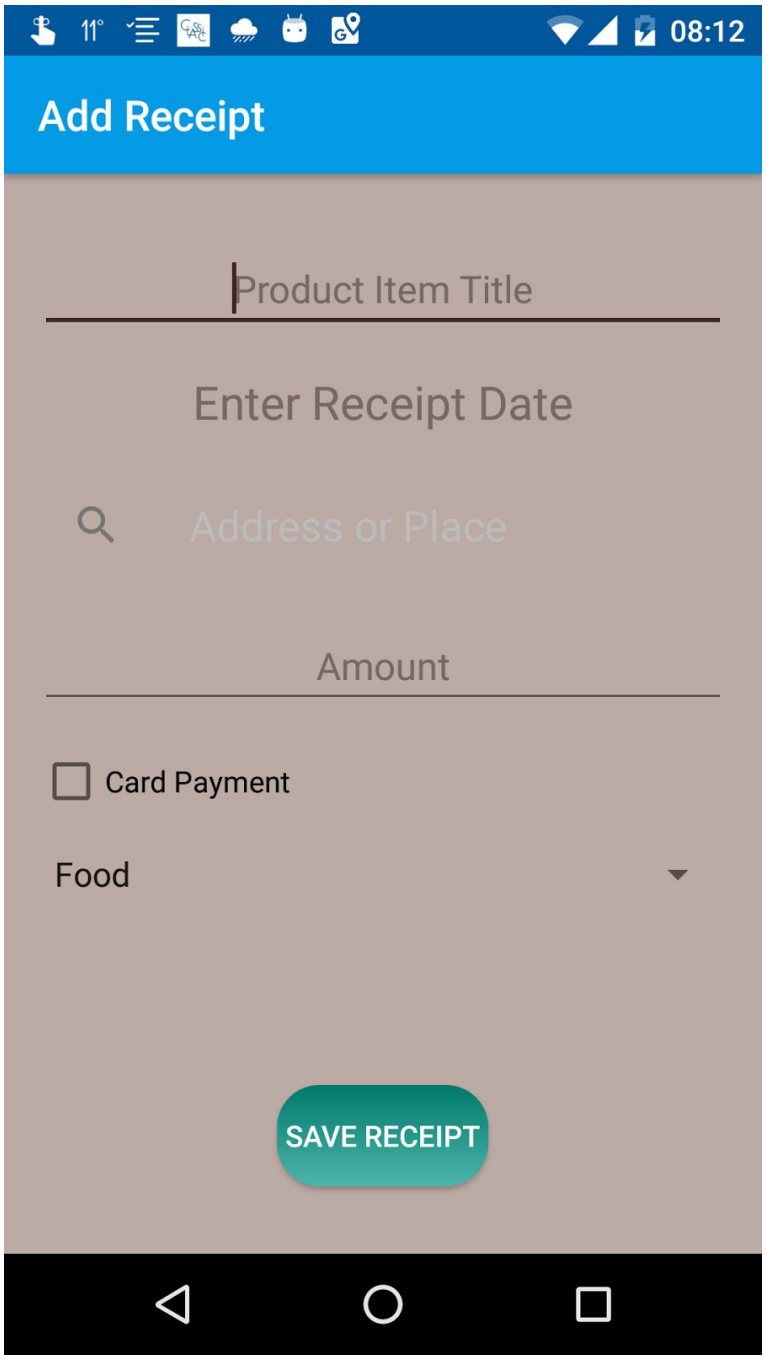
The main screen of the App, showing the list of receipts and 3 different app sections.

Screen 2



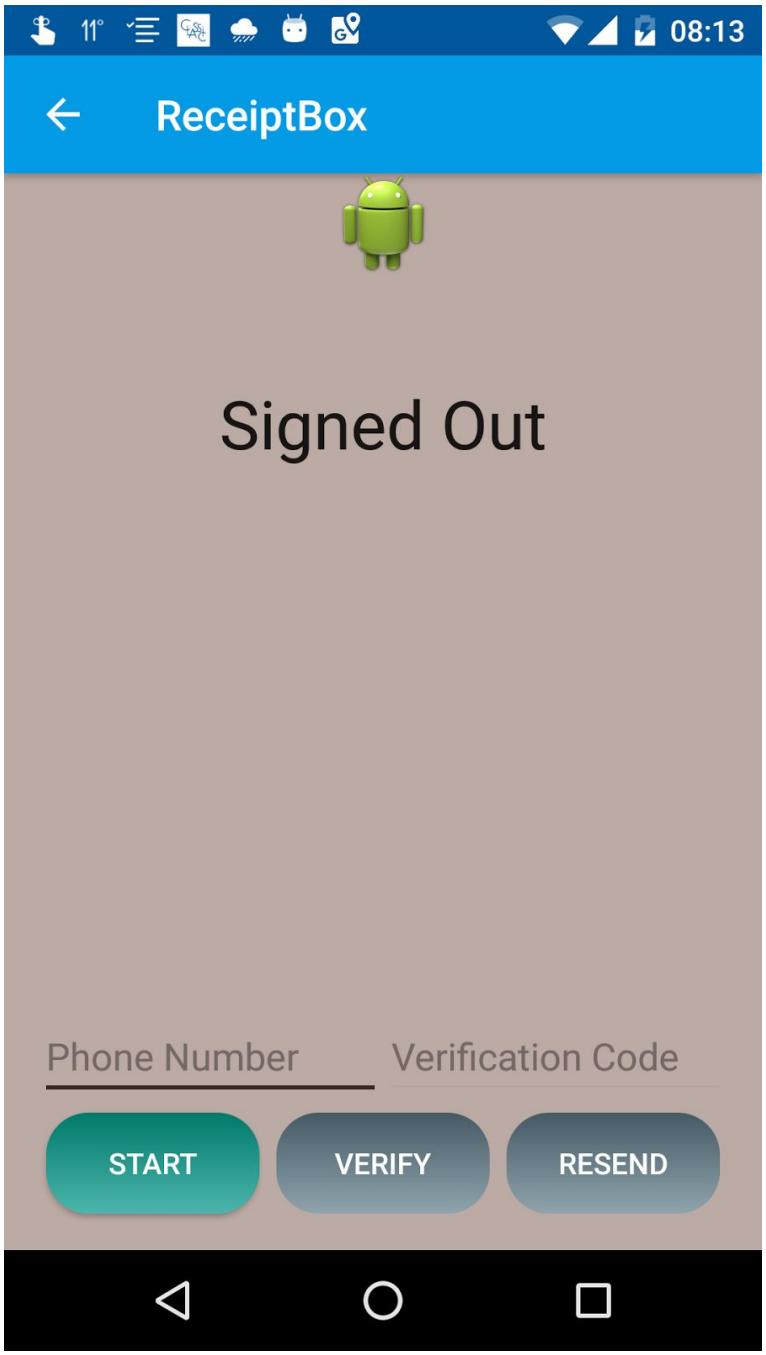
Screenshot shows the functionality for selecting receipts to archive or delete.

Screen 3:



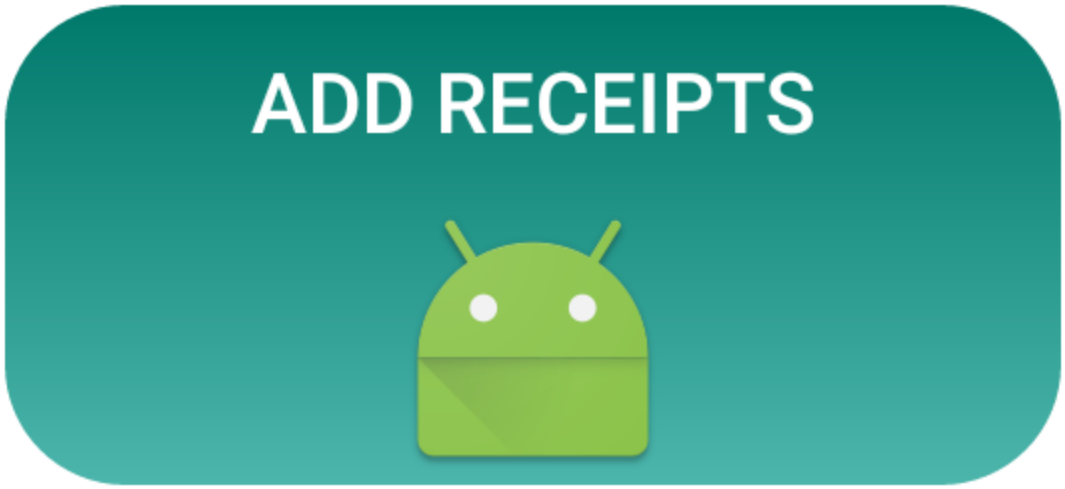
Screenshot shows the UI for creating a new receipt.

Screen 4:



Screenshot shows the UI for Phone Authentication.

Screen 5:



A widget to add receipts the, launcher icon helps to identify the app.

Key Considerations

How will your app handle data persistence?

Describe how your app with handle data. (For example, will you build a Content Provider or connect to an existing one?)

- ★ A content provider for syncing and storing receipts locally.
- ★ If a user authenticates themself, then data is stored using Firebase Database. The local database and the Firebase Database are kept in sync.

Describe any corner cases in the UX.

- ★ The ‘Receipts’ tab of the main screen displays all the receipts sorted by date. The category and date labels can be tapped to sort and display the relevant receipts. In order to show all the receipts again, tapping on the ‘Receipts’ tab will be implemented. This would be explained to the user by a ‘Snackbar’ or ‘Dialog’ at the top.

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

- ★ Butterknife for code annotation linking XML and Java code.
- ★ Firebase for reading and writing data.
- ★ Phone Number Library to format phone number in international format.

★ EventBus library to trigger events when new receipts are created.

Describe how you will implement Google Play Services.

★ Google Play services places api is used to provide place suggestions to users creating receipts.
★ Firebase Auth library is used to implement sms authentication flow.

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

Write out the steps you will take to setup and/or configure this project. See previous implementation guides for an example.

You may want to list the subtasks. For example:

- Update Android Studio to latest and Stable gradle version.
- Download and update Android Support Repositories and Google Play Services libraries
- Update Google Play Services in phones for testing.
- Add AppCompatSuport, Eventbus and Firebase libraries.

Task 2: Implement UI for Each Activity and Fragment

- Build UI for CentralActivity.(Main Screen of the App)
- Build UI for each receipt.(ReceiptItem)
- Build UI for SMS Authentication(PhoneAuthenticationActivity).

Task 3: Authentication

- Implement SMS Authentication using Firebase.

Task 4: Database Design and Syncing.

- Create a content provider that syncs receipts that are created.
- Create a mechanism to read & write data to Firebase Real-time Database, if a user is authenticated.

- The data is synced from Firebase Real-time database using Firebase ValueEventListener, that write & read data, as any values are added or removed from the database.
- An AsyncTask is implemented to sort data according to category, say ‘Food’, when a taps a Receipt category to search for all Receipts in this category. This is only done if a user is Authenticated.

Task 5: Creating a widget.

- A simple home screen widget to add receipts.
- The widget will be simple button that on tapping will open the activity to add receipts.

Add as many tasks as you need to complete your app.

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