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House Bill Splitter

Description

Makes the task of splitting house bills easier.

People who study or work far from their hometowns often share rooms or apartments with friends, relatives and acquaintances to achieve a lower housing expense. With just a few steps, this app can help determine how much each person needs to pay for each item and disseminate the information quickly. There are a lot of bill splitting apps in the market with superb flexibilities. But sometimes, flexibility makes simple tasks complex. Thus, this app addresses your most basic need to split house bills.

Intended User

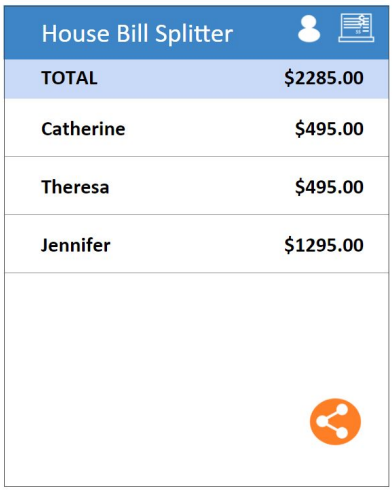
People living together in rental properties

Features

- Add or Remove Housemates
- Create, Edit and Delete Bill Items
- Share Bill to Housemates

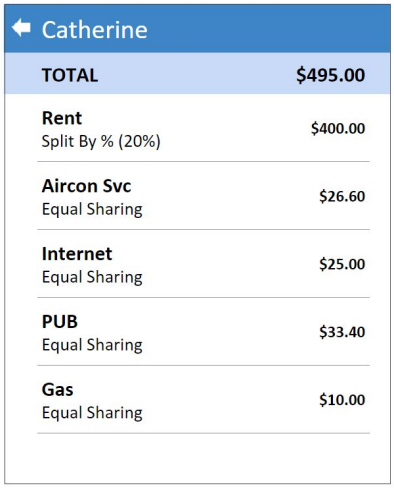
User Interface Mocks

Screen 1



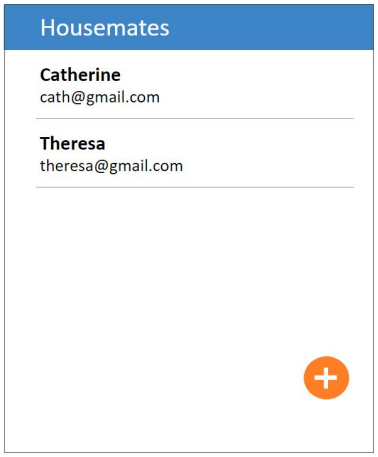
This is the home screen where the user can see the summary of bills for each housemate.

Screen 2



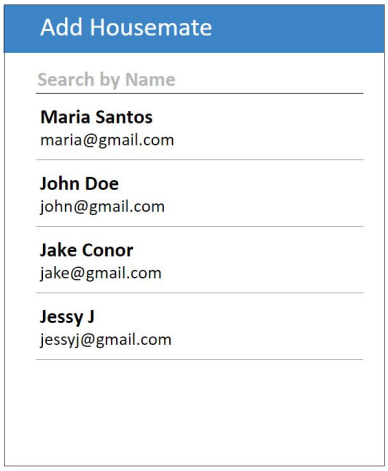
This screen will show the bill details for the selected housemate.

Screen 3



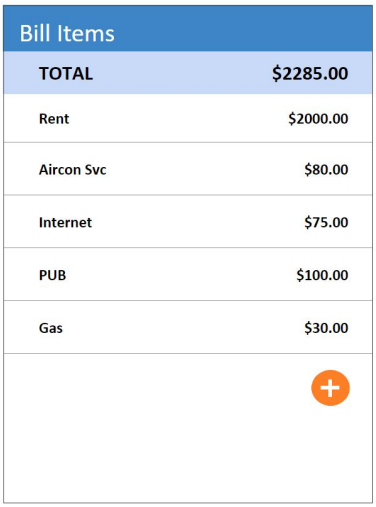
This is the Housemates screen which shows the list of housemates.

Screen 4



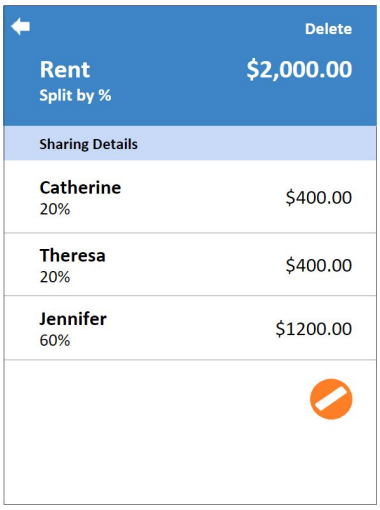
This is where the user can add more housemates from his/her contacts.

Screen 5



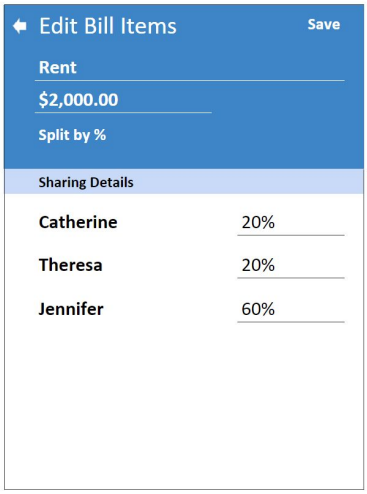
This is the Bill Items screen which shows the list of bill items.

Screen 6



This screen will show the details of the selected bill item.

Screen 7



This is where the user can enter or update bill items.

Key Considerations

How will your app handle data persistence?

App will implement a ContentProvider to access locally stored data.

Describe any corner cases in the UX.

Updating the Bill Item will automatically reflect the changes to other screens after being saved.

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

- Android Design Support Library- material design (e.g. layout, toolbar)
- Google Play Services - for AdMob and Google SignIn
- Circle Image View (https://github.com/hdodenhof/CircleImageView) - for Circular Avatars

Next Steps: Required Tasks

Task 1: Project Setup

- Update Android Studio to the latest version
- Update SDK
- Configure libraries
- Setup gradle dependencies

Task 2: Implement UI for Each Activity and Fragment

- Build UI for Viewing Summary
- Build UI for Viewing, Adding or Removing Housemates
- Build UI for Viewing, Updating or Deleting Bill Items

Task 3: Implement Content Provider

- Create Database Helper
- Create Contract
- Create Content Provider

Task 4: Implement Google Services

Subtasks for AdMob

- Declare the permissions, version number, and AdActivity in the App Manifest
- Define the Ad Unit ID in the string resource file
- Place an AdView into the MainActivity layout
- Load the ad in the MainActivity class

Subtasks for Google Sign-In

- Configure Google Sign-In and the GoogleApiClient object
- Add the Google Sign-In button
- Implement the handling of Sign-In button taps and results
- Display the profile information

Task 5: Implement Widget, Accessibility and RTL Layout Switching

Subtasks for Widget:

- Declare the widget in the App Manifest
- Add the AppWidgetProviderInfo Metadata
- Define the layout for the widget
- Create the RemoteViewService
- Create the AppWidgetProvider

Subtasks for Accessibility:

- Add Content Description to all visual UI elements

Subtasks for RTL Layout Switching:

- Declare RTL support in the App Manifest
- Update all occurrences of "left/right" layout properties to "start/end"

Task 6: Implement Sharing Functionality

- Integrate ShareActionProvider
- Create the ShareIntent