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GitHub Username: sachins1211

Expense Manager

Description

Expense Manager is an app which lets user to manage their expenses directly on their smartphones. User can easily record daily expenses with a brief information about them. User can set up a monthly budget and then can keep track of their savings and expenses. User can also check out how much they have spent in previous months.

Intended User

This app in mainly for the people who want to have a control over their finances and want to know where they have spent money and how much they have spent.

Features

- Google Sign in is required for accessing the app.
- User can search for an expense from the search bar.
- User can add, delete or update an expense.
- Graph displays the expenses from previous month.
- Collection widget on the home screen keeps user updated about the expenses.
- Content Provider is implemented to save user's expense data.

User Interface Mocks

Screen 1
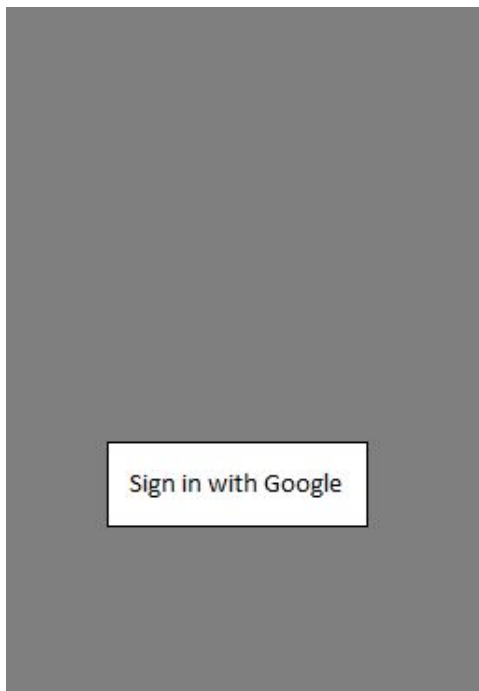
LoginActivity- User needs to sign in before accessing the Expenses Activity.

Screen 2

Search Expenses	
Total Budget-	Rs. xxxxxxx
Spent-	Rs. xxxxxxx
Remaining-	Rs. xxxxxxx

Expenses....

....
....
....
....
....
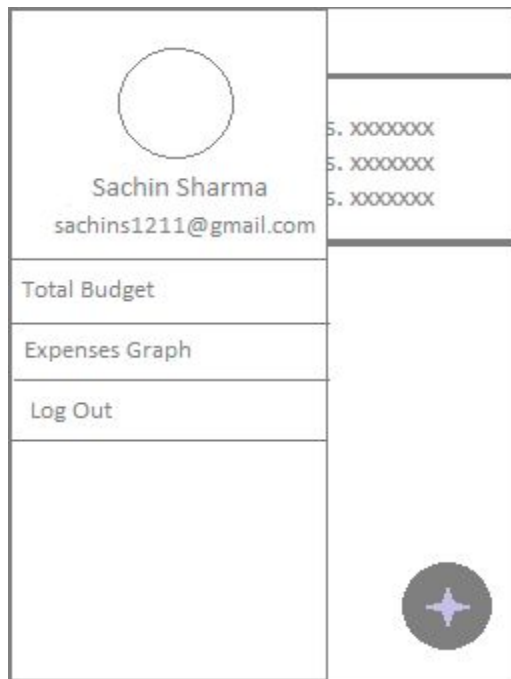....................
....
....

ExpenseActivity- This is the main activity. In this activity the user can add an expense with a brief description. User can search for an expense which was already added. User can see Total budget of the month and can keep track of how much he/she has spent and how much more is remaining.

Screen 3

This screen is of the navigation drawer in which the name of the user, email address used by user to log in are displayed above. It also contains option from where a user can edit total budget of a month, can look for a summary graph and also a logout button is present.

Key Considerations

How will your app handle data persistence?

I will build a Content Provider and store data in sqlite.

Describe any corner cases in the UX.

If the user is already logged in, the app directly shows the expenses screen rather than the login screen.
But if no user is logged in, login screen is shown.

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

MPAndroidChart- used for displaying expenses of previous months.
ButterKnife- used for binding android views.

Describe how you will implement Google Play Services.

User need to sign in using a Google account.
Google Analytics will be used for measuring user's activity.

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 a new project.
- Add necessary dependencies.
- Add various permissions required to the AndroidManifest.xml file.

Task 2: Implement UI for Each Activity, Fragment and Widget

- Build UI for LoginActivity
- Build UI for MainActivity
- Build UI for ExpenseActivity
- Build UI for Expenses fragment
- Build UI for Widget

Task 3: Create Login Activity

- Create layout
- Add Google Sign in to the app
- If the user is already logged in display ExpenseActivity rather than LoginActivity on start.

Task 4: Implement Data Persistence

- Create Content Provider which will be used for storing all the expenses data of the user.
- Implement data filter on main UI
- Use AsyncTask to perform expenses search operation.

Task 5: Implement Graphs

MPAndroidChart library is used for displaying the summary of previous month's expenses of the user.
Graphs give a clean idea of how much money has been spent by the user.

Task 6: Implement Widget

- Create an AppWidgetProvider class.
- Configure widget for showing the expenses of the user on the home screen.

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

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