Grocery App

Project Report

Introduction

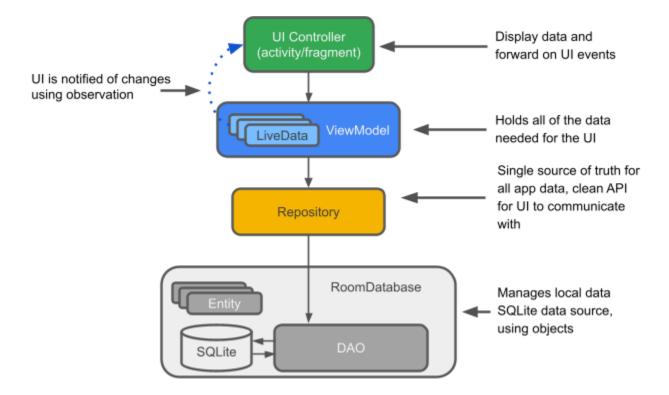
This project is about the developing an android application. Nowadays, the gadgets are rolling the world. Many people cannot imagine even one day without their favorite mobile device. We use them for everything: find information, stay connected with our friends and families, find the way around, decide what to do, and many other things. But very often we come to the point when we would like to have an application for particular situation or for certain need, but there is no such one.

Many times we forget to purchase things that we want to buy, after all we can't remember all the items, so with the help of this app , you can note down your grocery items that you are going to purchase.

Tools and Technology Used:

This app is created in Android Studio and offers easy to use and interact with UI made using **XML**(eXtensible markup Language).

Architectural components used are **VM(View Model)**, **Repository**, **Room for database** and **Recycler View** to display the List Items.



Components

Live Data: A data holder class that can be observed. Always holds/caches the latest version of data, and notifies its observers when data has changed. LiveData is lifecycle aware. UI components just observe relevant data and don't stop or resume observation. LiveData automatically manages all of this since it's aware of the relevant lifecycle status changes while observing.

ViewModel: Acts as a communication center between the Repository (data) and the UI. The UI no longer needs to worry about the origin of the data. ViewModel instances survive Activity/Fragment recreation.

Repository: A class that you create that is primarily used to manage multiple data sources.

Entity: Annotated class that describes a database table when working with Room.

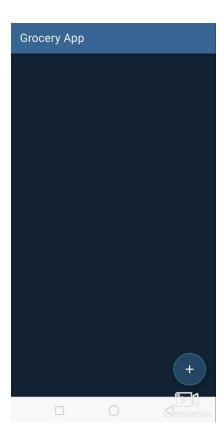
Room database: Simplifies database work and serves as an access point to the underlying SQLite database (hides SQLiteOpenHelper). The Room database uses the DAO to issue queries to the SQLite database.

SQLite database: On device storage. The Room persistence library creates and maintains this database for you.

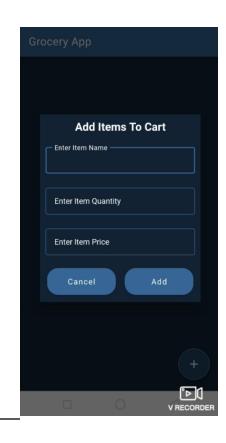
DAO: Data access object. A mapping of SQL queries to functions. When you use a DAO, you call the methods, and Room takes care of the rest.

Project at glance:

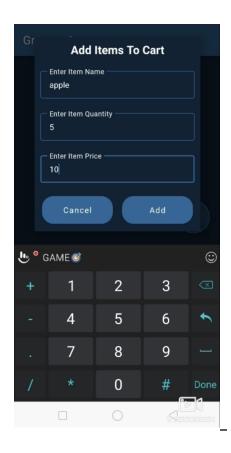
UI Designs



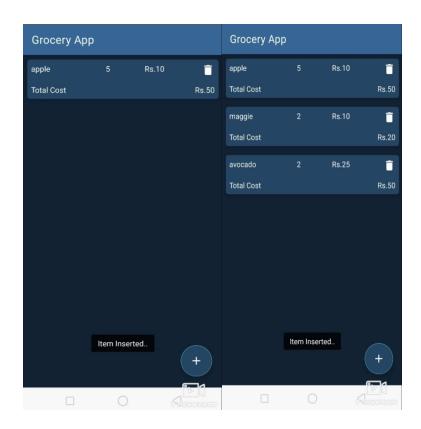
Add Items_



Enter details



Click on Add Button

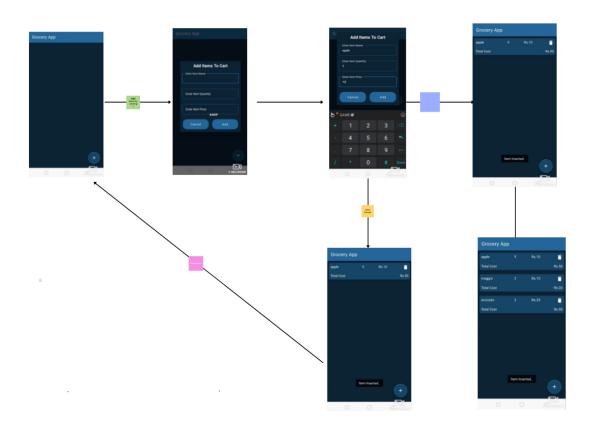


Items Inserted

User Flow

User Flow

Let's map out how our users will experience the platform on mobile.



Future Scope:

In future this application and be upgraded into a full online grocery purchasing application instead of just storing/noting the items people wants to buy. In such way

Users won't be only noting the items but also be ordering them online from the comfort of their home and recieving them at thier doorstep.

Conclusion

I have learned a lot from this project on how to develop Android Application and publishing it in real time.

And this application is gonna help our users to note down thier items they need to purchase so they dont forget to buy them easily and in a seperate app created just for the same purpose.

Links

App Demo Video:

https://drive.google.com/file/d/18ee9znGdioMwIPkYBEhE HSPRhsQKciNC/view?usp=sharing