Virtual Internship - Android Application Development Using Kotlin

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TITLE : Grocery Android Application

Project Report

INDEX

1. INTRODUCTION

1.1 Overview:

As we cannot remember everything, we frequently forget the things that we need to buy. However, with the guidance of this app, we can make a list of the groceries items that we need to buy so that we do not forget anything. This app performs in such a way that it ask us to enter the item name, item price and item quantity. So that it calculates the total pricefor that item and displays to us. After purchasing we can delete the particular item.

1.2 Purpose:

So This app is created for the purpose that it remembers grocery items whichwe need to purchase even we fail to remember. We can add grocery items ,quantity of that grocery item and a price of that item. After that whenever we open the app we can able to access the items names that we need to purchase.

2. LITERATURE SURVEY

2.1 Existing problem:

The main existing problem is that we cannot remember the items that we needto purchase. The existing method was people generally write the name of the things that they need to purchase in a paper and carry that paper everytime when they going to purchase.

2.2 Proposed solution:

To overcome that Drawback this system is made in such a way that carraying of paper can be avoided. This app asks for item name, item Quantity and item price so that with the help of this app we can even refer the item name, item Quantity also even after longer periodof time.

3. THEORITICAL ANALYSIS
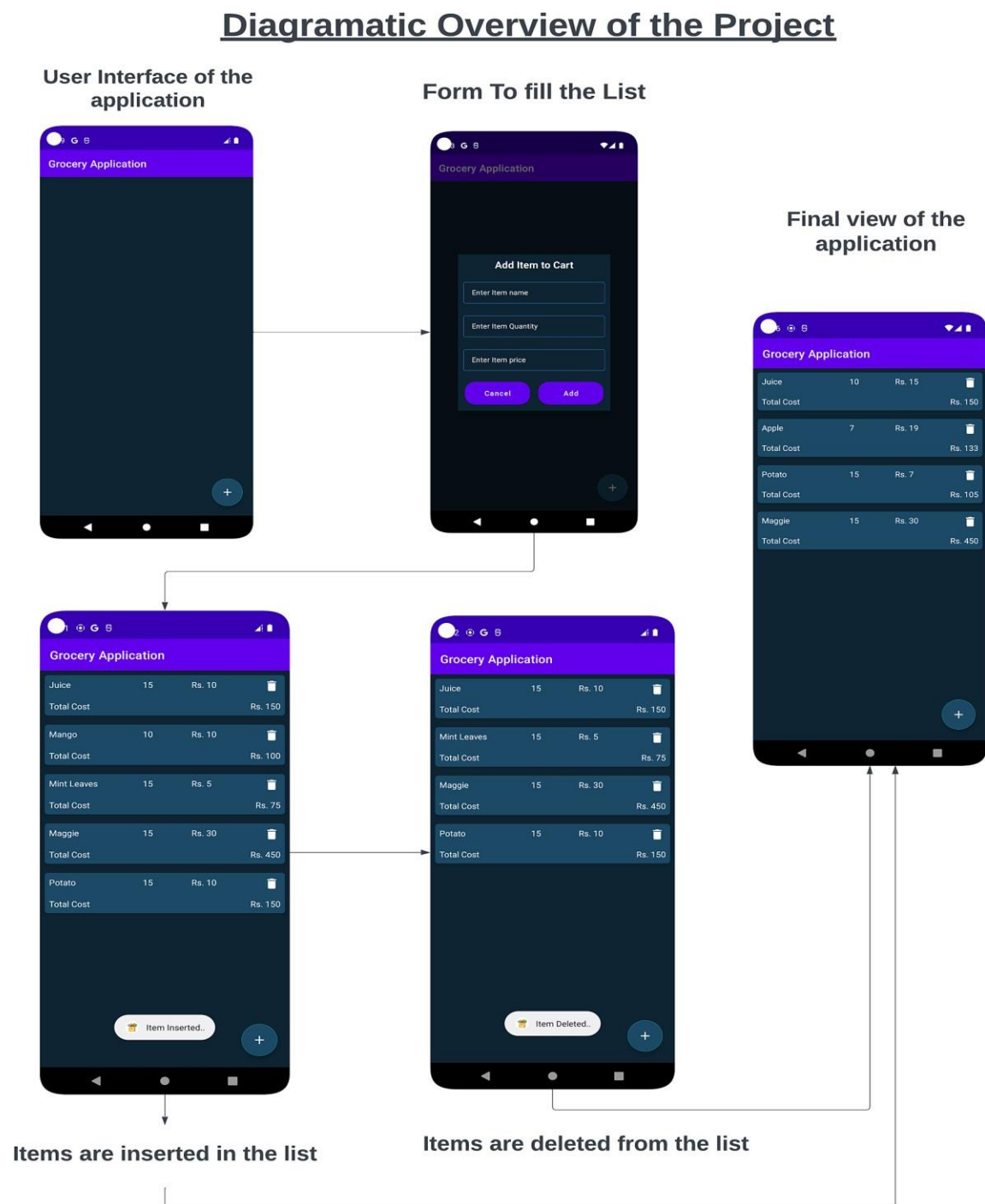### 3.1 Block diagram:

Fig 1. Block Diagram

3.2 Hardware / Software designing:

The requirement for the project is a Mobile device irrespective of the Android versions torun this project.

The requirement for this project to built is a Laptop with Android studio installed with itand the programming language used is Kotlin for building this application. This project is developed using MVVM (Model View ViewModel) for architectural patterns, Room for database,Coroutines and RecyclerView to display the list of items.

4. **EXPERIMENTAL INVESTIGATIONS**

This project is developed with the use of MVVM (Model View ViewModel) for architectural patterns, Room for database, Coroutines and RecyclerView to display the list ofitems which are analyzed while developing this project.
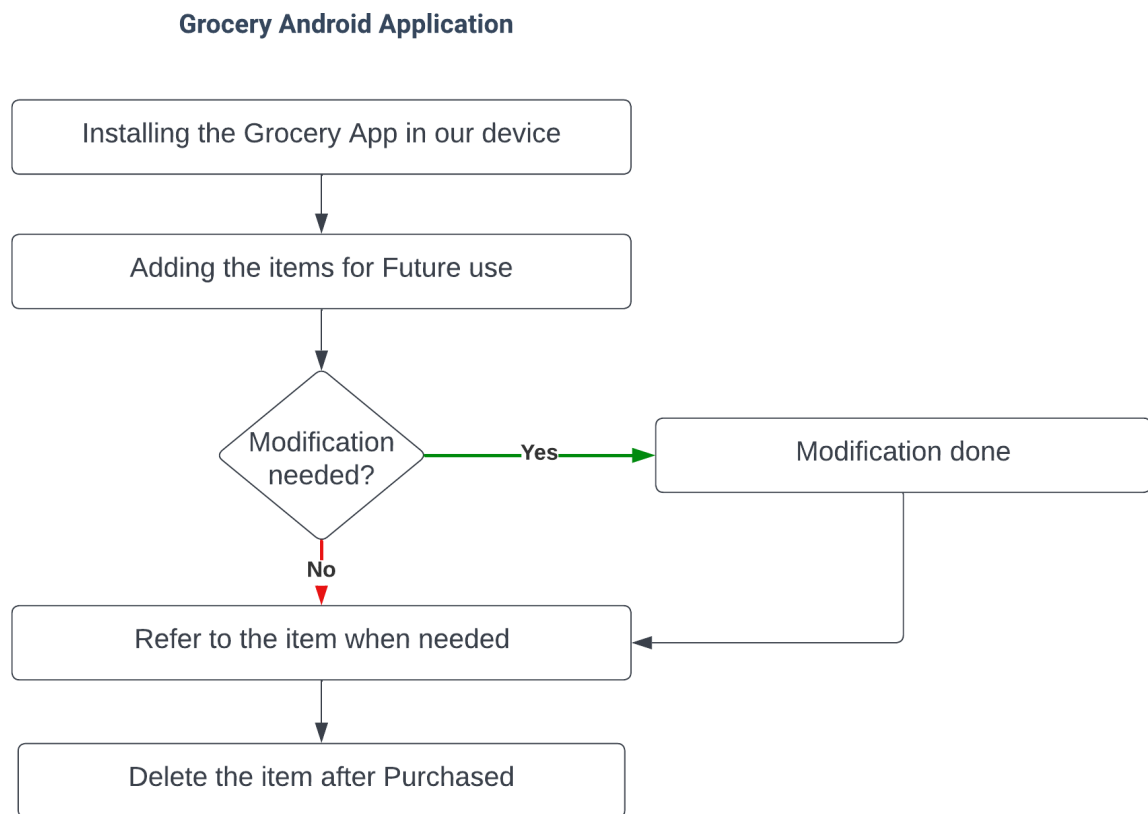
5. **FLOWCHART**

Grocery Android Application

Fig 2. Flowchart of Grocery Android Application

6. **RESULT**

Output Screenshots:

1. **This is the basic user interface where, user can see the icon of Grocery app in theirscreen.**
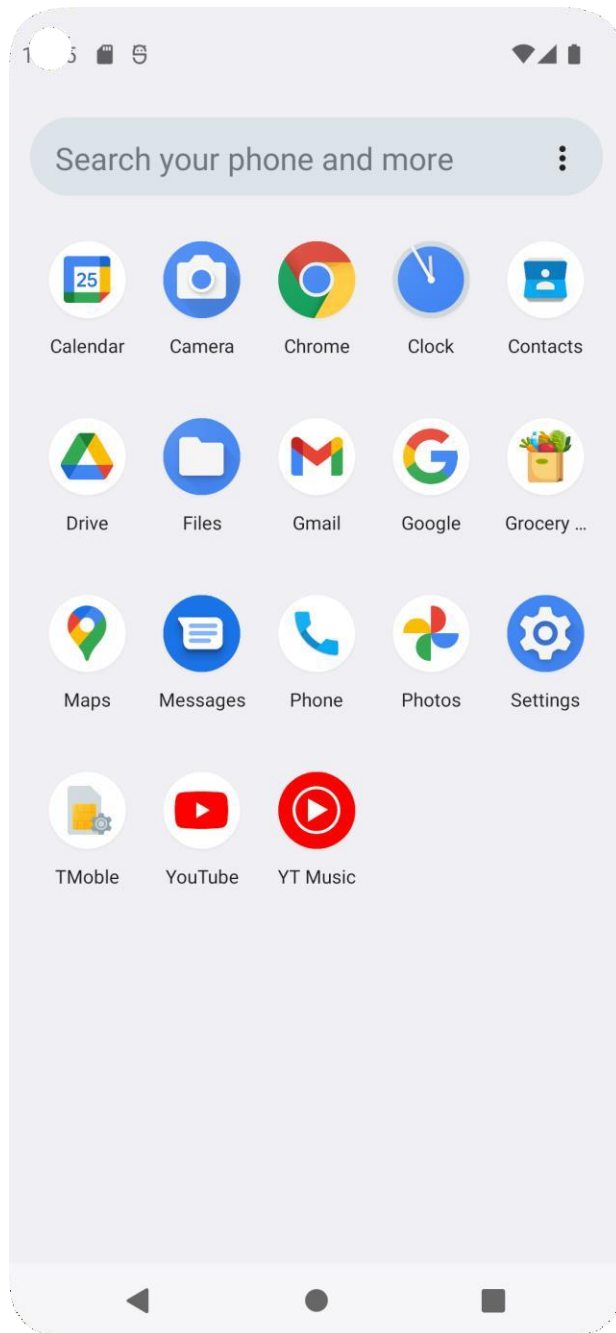
Fig 3. Basic UI Screen

2. **After User clicks the Grocery App icon, the application will be opened.**

Fig 4. Application Interface

3. He can insert the Grocery item whatever he want. It will ask the item name, item quantity,item price and it will calculate the total amount and display it to the user. While adding the item user can notice "Item Inserted.." text.
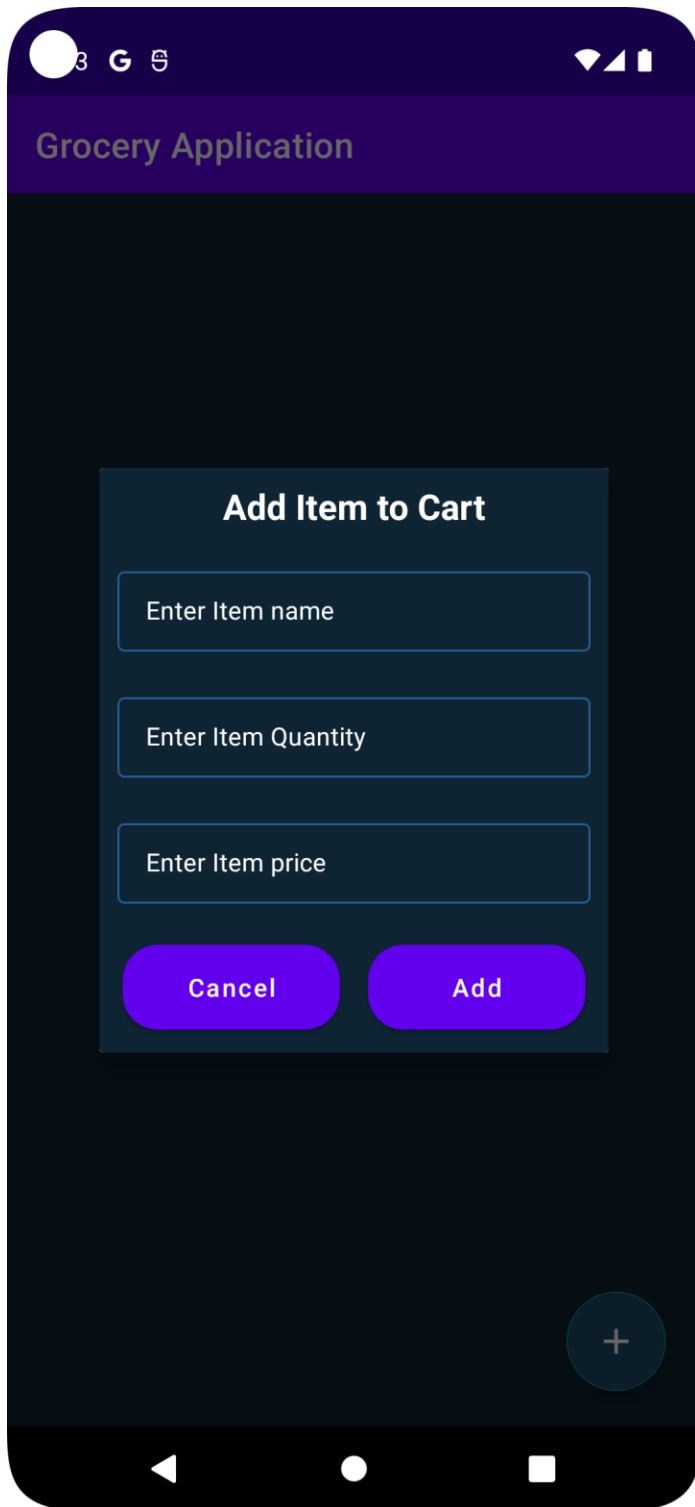
Fig 5. Text box for entering items.

Fig 6. Inserted item in application

4. **After user enters all the items it will show the items in the app whenever he opens theapp, until he deletes.**
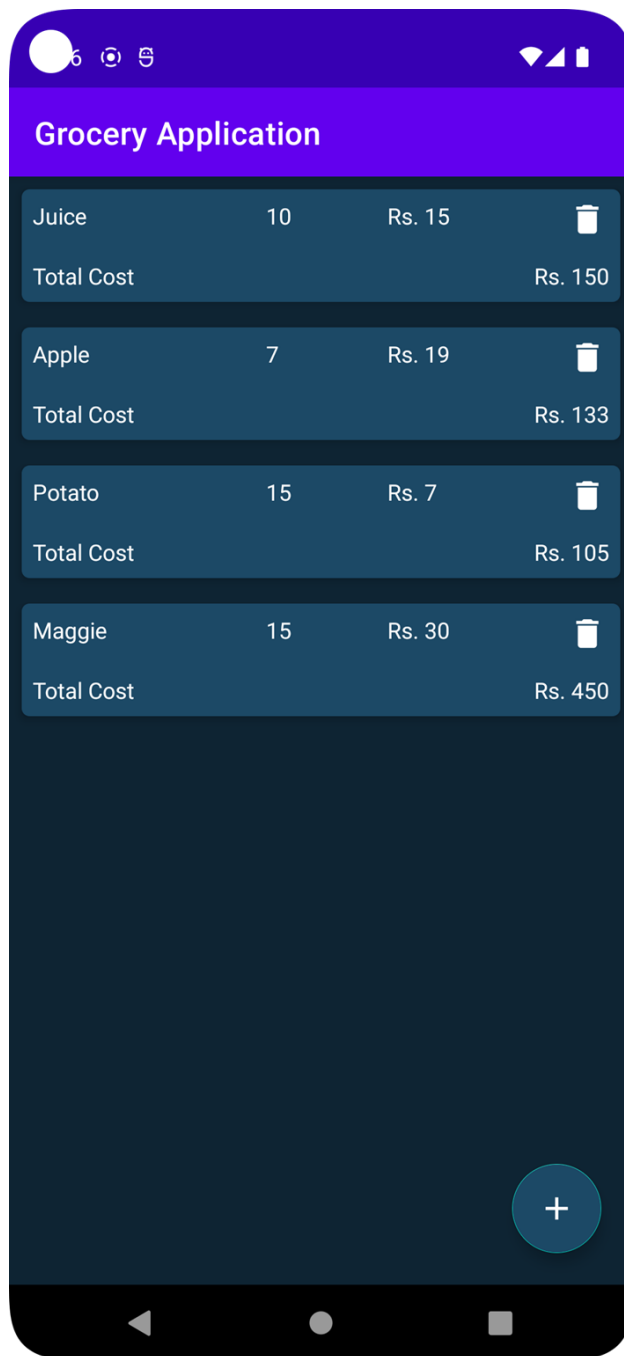
Fig 7. Items in application

5. **After Purchasing the item he can delete the item as it won't be useful anymore.Whiledeleting the item user can notice "Item Deleted.." text.**

Fig 8. Items can be deleted.

7. **ADVANTAGES &**
DISADVANTAGESADVANTAGES:
- **The main advantage of this application is we can remember the things name and itemquantity anytime and anywhere even it displays with the price quantiy also.**

- **Since most of the people are busy with their work, for them this application will beuseful.**

DISADVANTAGE:
- **The main drawback for this application is there is need of carrying mobile phones everytime. Nowadays most of them having mobile phones with them daily in that casethis disadvantage will not be that much effective.**

8. APPLICATIONS

      This application will be helpful in real time basis itself. Since the people are workingtoday, and in their work tension there may be chances of forgetting the items they need to buy.In that case this application is helpful for them.

9. CONCLUSION

      As we frequently forget the things that we need to buy, this application helps us in thatcase by taking the item name, item price and quantity and displays them to the user with theitem name, quantity and total price needed for purchase. This application is surely helpful for the people who are working.

10. FUTURE SCOPE

      The future scope of this application is to built a voice assitant inside that application which will read the item name typed in that list which will be very helpul for a people who maynot able to read or people who cannot able to see.

11. BIBILOGRAPHY
      APPENDIX
      A. Source code:

      Since my source code contains many files, I'll attach my github repository link and I haveposted my coding files there.

https://github.com/smartinternz02/SPSGP-82256-Virtual-Internship---Android-Application-Development-Using-Kotlin

THANK YOU.