PROJECT REPORT

1. INTRODUCTION

1.1 OVERVIEW

The “Groceria” Application is an android application developed using the kotlin programming language and android studio IDE. This application helps the user to create a new list of grocery items which will be of help while shopping. Through this application, the user will be able to add a new item, update the quantity of an item and delete an existing item from the list.

1.2 PURPOSE

The conventional process of creating a shopping list requires usage of paper and once after the shopping is completed, that paper with the shopping list goes to waste. To overcome this unnecessary wastage of paper, “Groceria” application is developed which helps in creating a grocery list on the go. In addition to this, the application does not require internet connection to create the grocery list.

2. LITERATURE SURVEY

2.1 EXISTING PROBLEM

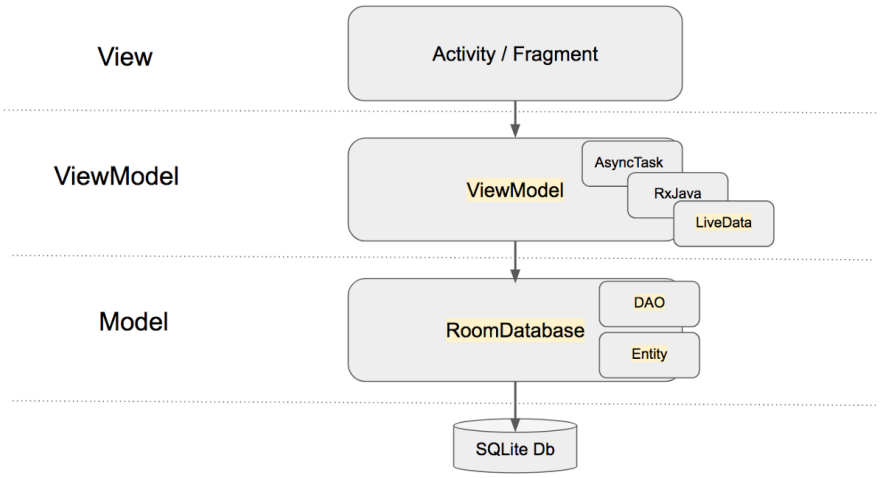
Creating a grocery list conventionally requires a new sheet of paper which goes into waste once after being used. This leads to usage of a new sheet of paper, every time a new list is created which inturn leads to deforestation which will have adverse consequences in the future.

2.2 PROPOSED SOLUTION

The Proposed “Groceria” application addresses the above mentioned problem by enabling the user to create a grocery list on their mobile phones without the necessity of the internet connection.

3. THEORETICAL ANALYSIS

3.1 BLOCK DIAGRAM



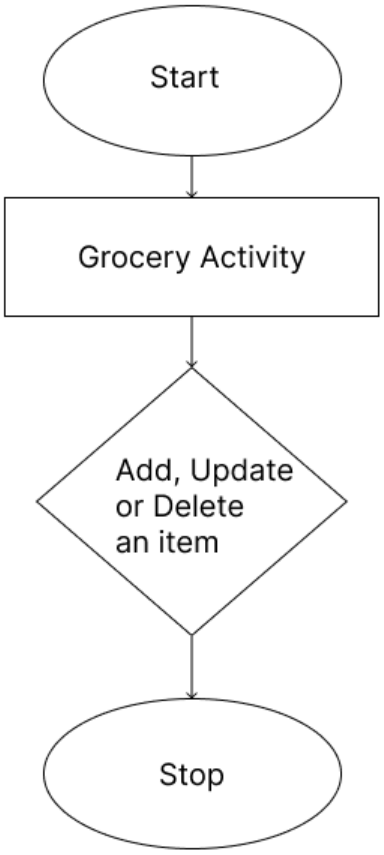
3.2 HARDWARE / SOFTWARE DESIGNING

- 64-bit Microsoft® Windows® 8/10/11
- x86_64 CPU architecture; 2nd generation Intel Core or newer, or AMD CPU with support for a Windows Hypervisor
- 8 GB RAM or more
- 8 GB of available disk space minimum (IDE + Android SDK + Android Emulator)
- 1280 x 800 minimum screen resolution

4. EXPERIMENTAL INVESTIGATIONS

The “Groceria” application allows the user to add items to the list which the user wishes to take for shopping. Users can easily update the quantity of any item in the list and can also delete the item if required. User has to completely provide both the name and quantity of the item in order to insert it into the grocery list.

5. FLOWCHART



6. RESULT

SNAPSHOTS OF THE APPLICATION

Fig 6.1 Homepage

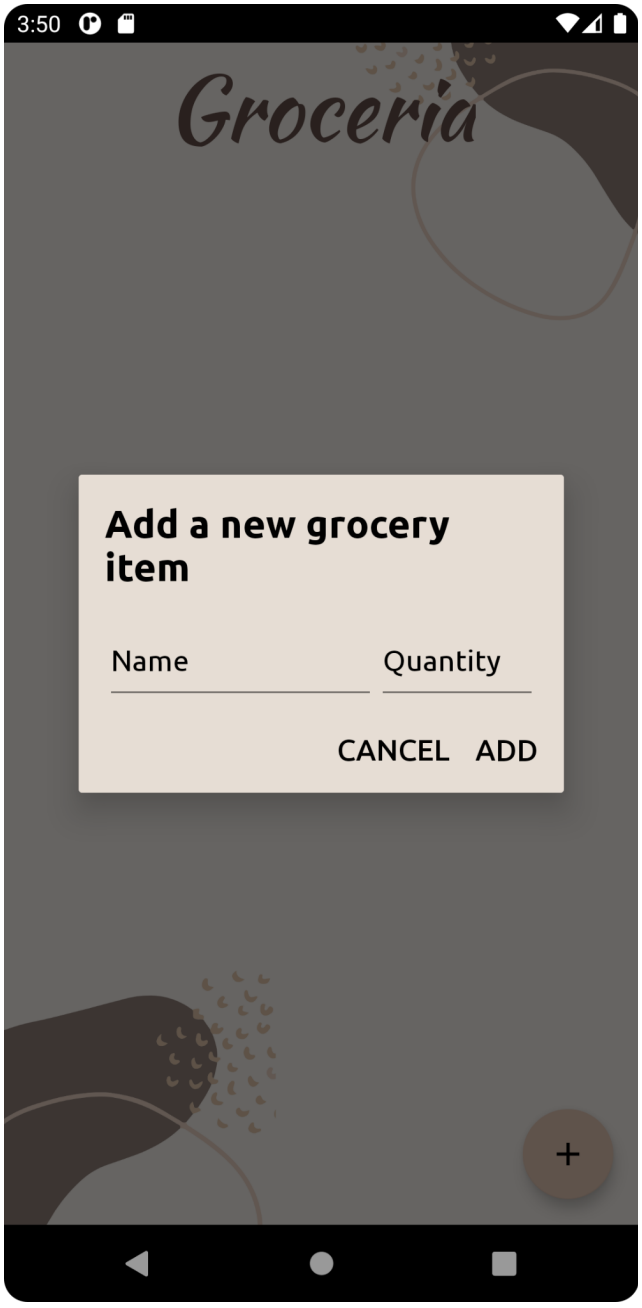


Fig 6.2 Adding a new item

Fig 6.3 List with a new item

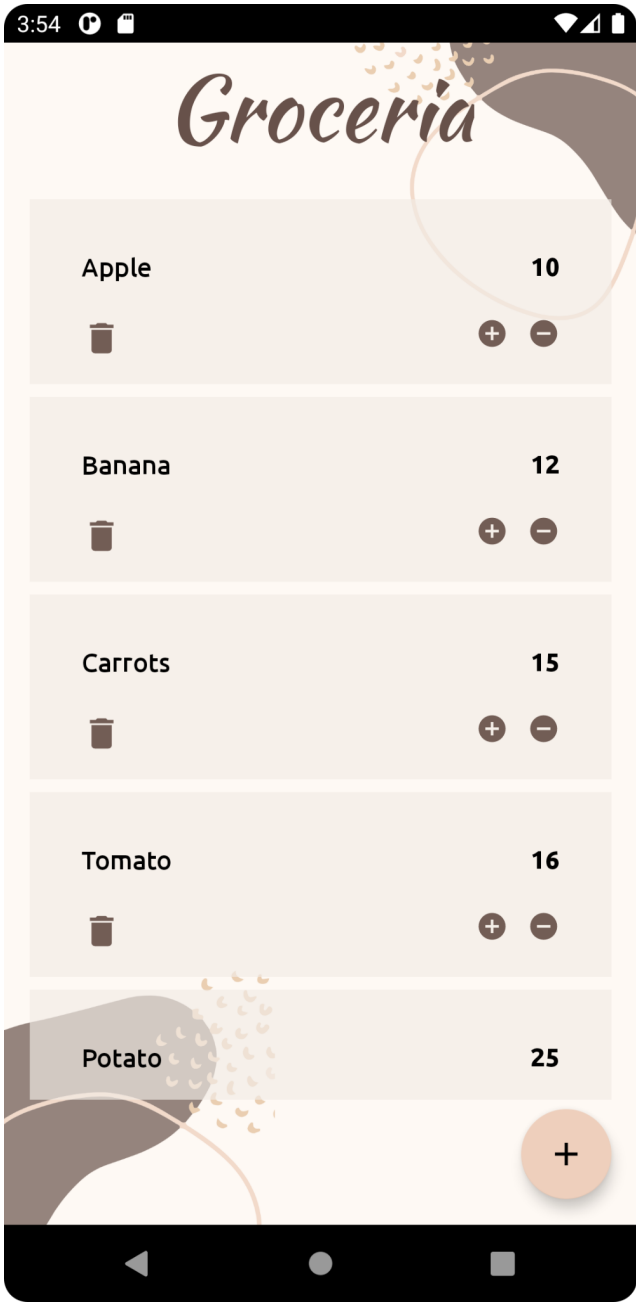


Fig 6.4 List with many items

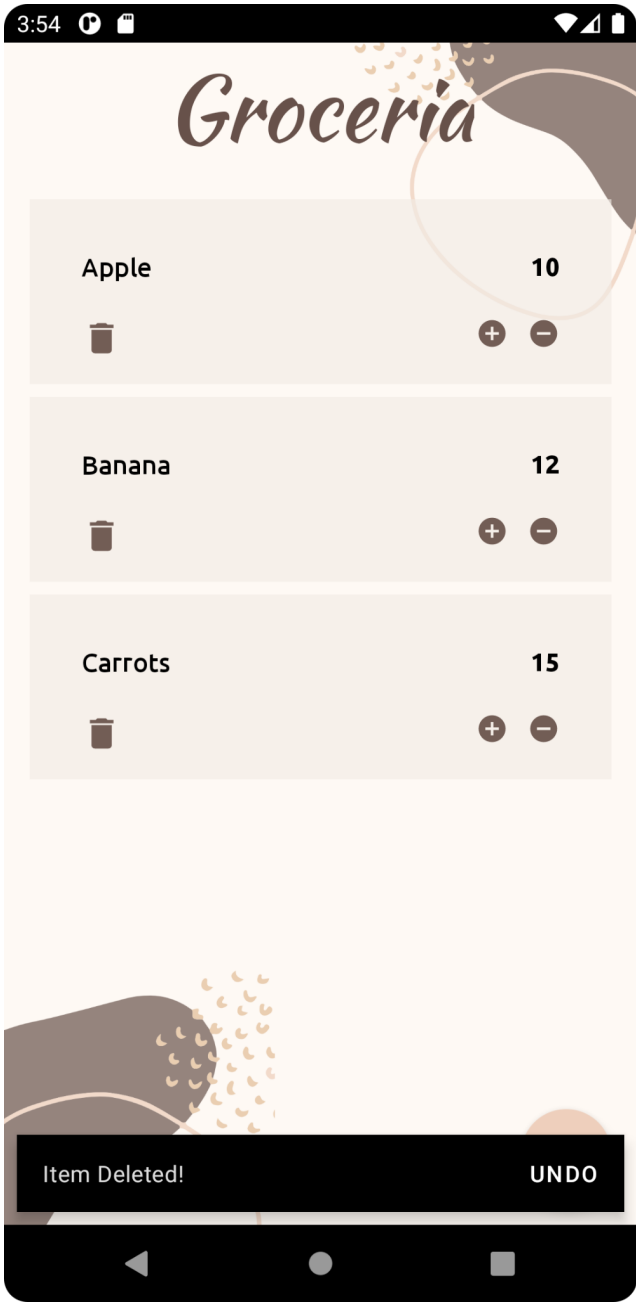


Fig 6.5 Deleting an item from the list

7. ADVANTAGES AND DISADVANTAGES

ADVANTAGES

- Easy to use
- Does not require Internet connection
- Data Privacy
- Environment friendly
- Easy updation and deletion of grocery items
- Useful for shopping

DISADVANTAGES

- Does not show the total price of all items
- Does not delete all the items at once

8. APPLICATIONS

- Useful for shopping
- Useful while going to Medical store
- Useful for buying vegetables

9. CONCLUSION

In the present scenario, environment protection is of utmost importance. In the traditional approach used to create grocery lists, paper is used which goes to waste once after being used. This method is time consuming and not efficient. To overcome the above mentioned liabilities, “Groceria” application is developed which stores the grocery list created by the user locally without the necessity of internet connection thereby reducing paper usage and providing a better user experience.

10. FUTURE SCOPE

The app has some enhancements which can be implemented in the future. This includes

- Adding a dedicated view of total price of the items
- Adding a button to delete all the grocery items at once
- To add image of the respective grocery item
- To add additional transitional changes to the User Interface and to implement more attractive UI
- To add a start-up animation to the app

11. BIBLIOGRAPHY

- Build basic Android apps with the Kotlin programming language.
  https://developer.android.com/courses/android-basics-kotlin/unit-1

- Improve the user interface of your app by learning about layouts, Material Design guidelines, and best practices for UI development.
  https://developer.android.com/courses/android-basics-kotlin/unit-1

- Enhance your users' ability to navigate across, into and back out from the various screens within your app for a consistent and predictable user experience.
  https://developer.android.com/courses/android-basics-kotlin/unit-3

- Data Persistence
  https://developer.android.com/courses/android-basics-kotlin/unit-5

APPENDIX

A. SOURCE CODE