

# Project Report

## **=>Project Title**

Grocery Android App

## **=>Objective**

Make a Grocery App that can help you in managing your Grocery list.

## **=>Problem Statement**

As we can't remember everything, users frequently forget to buy the things they want to buy. However, with the assistance of this app, you can make a list of the groceries you intend to buy so that you don't forget anything.

## **=>Problem's Primary Goals**

Our Primary Goal is to give the user the functionality of adding items in a cart like interface and give him the ability to add or remove items from this list to better manage his groceries.

## **=>Introduction**

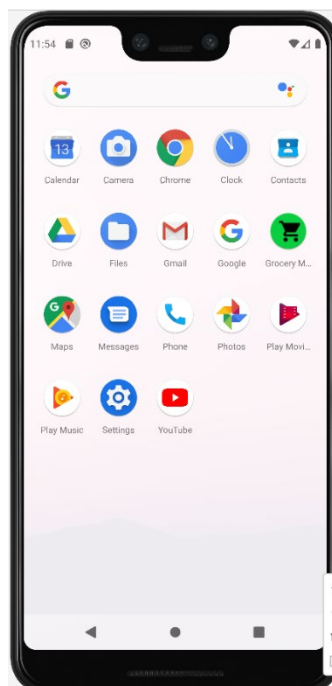
We will be making a simple cart like layout where an add button will give you a popup to add the items and a delete button will remove the selected item from the list resulting in recalculation of the total expenditure of the remaining items in the cart!

## =>Procedure

- Create the project from a template
- Examine the project structure.
- Run your application to see everything is working or not.
- Start from creating the base layout.
- Create the item interface.
- Add the button.
- Create the popup interface.
- Write the logic to add items to the cart.
- Write the logic to remove items from the cart.
- Write the logic to calculate the total expenditure incurred by grocery items.
- Test your code for bugs.
- Deploy!

## =>Expected Outcome

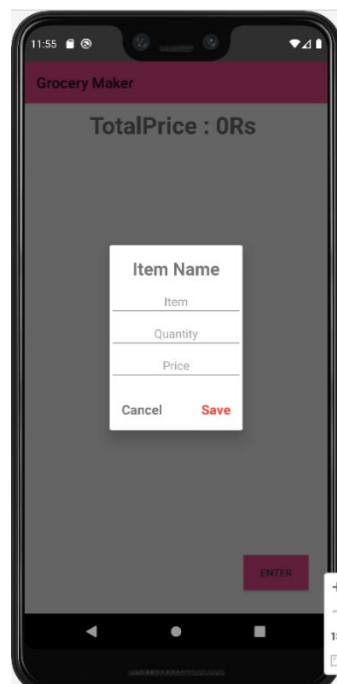
- Open the Grocery Maker App with Green icon



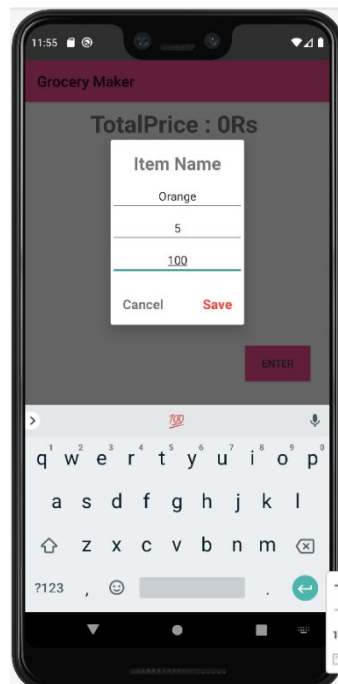
- The cart is empty! Let's add few groceries here.



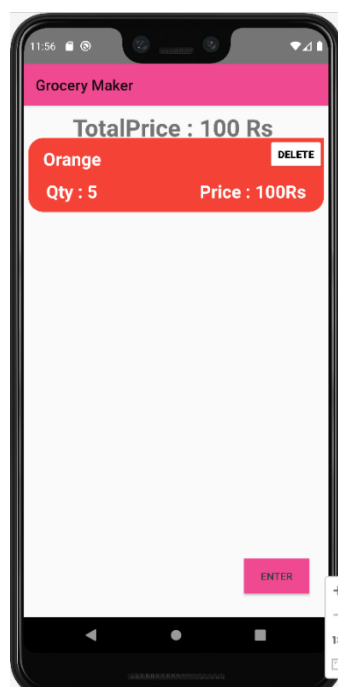
- A popup box appears after clicking on Enter button in corner.



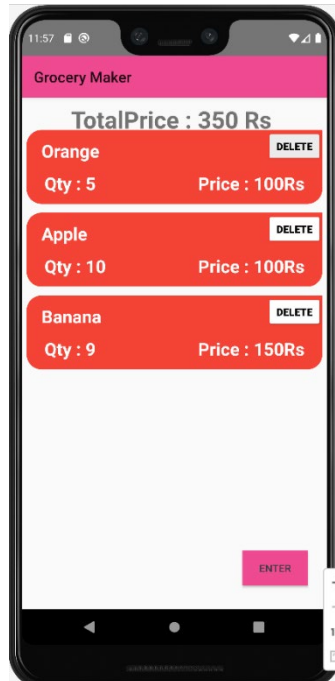
- Fill the Grocery item, their Quantity and total price in the field.



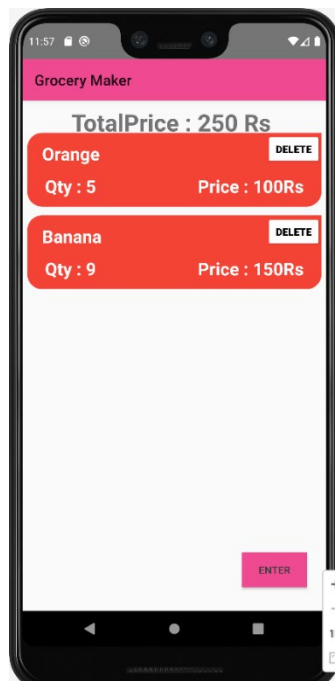
- Your first Grocery item is in the list!



- Add few more Grocery items to the List & see the Total Price change.



- Check the subtraction logic by clicking on DELETE button.



- Removing everything brings our Total Price back to 0



## =>Technologies Used

- MVVM (Model View ViewModel)  
MVVM architecture in android is used to give structure to the project's code and understand code easily. MVVM is an architectural design pattern in android. MVVM treat Activity classes and XML files as View. This design pattern separates UI from its logic. Here is an image to quickly understand MVVM.
- ROOM Database  
Room persistence library is a database management library and it is used to store the data of apps like grocery item name, grocery item quantity, and grocery item price. Room is a cover layer on SQLite which helps to perform the operation on the database easily.

- RecyclerView

RecyclerView is a container and it is used to display the collection of data in a large amount of data set that can be scrolled very effectively by maintaining a limited number of views.

## =>URLs

### 1)GitHub URL

- <https://github.com/smartinternz02/SPSGP-73358-Virtual-Internship---Android-Application-Development-Using-Kotlin>

### 2)Video Demo URL

- [https://www.youtube.com/watch?v=rPZPAe-Cc\\_s](https://www.youtube.com/watch?v=rPZPAe-Cc_s)

## =>Account IDs

### 1)GitHub ID

- <https://github.com/souvksamanta007>

### 2)SmartInternz ID

- Username: <https://smartinternz.com/student-profile/feed/U0IyMDIyMDIyMDc0Nw==>

## =>Bibliography

- <https://www.geeksforgeeks.org/guide-to-install-and-set-up-android-studio/>
- [https://www.youtube.com/watch?v=vdcLb\\_Y71lc](https://www.youtube.com/watch?v=vdcLb_Y71lc)
- <https://www.youtube.com/watch?v=p2oHD-06YcM>
- <https://www.youtube.com/watch?v=LgRRmgfrFQM>
- <https://developer.android.com/>
- <https://devlibrary.withgoogle.com/products/android>
- <https://kotlinlang.org/>

- <https://developers.google.com/certification/associate-android-developer>
- <https://developers.google.com/community/gdsc>
- <https://developers.google.com/community/gdg>
- <https://developers.google.com/community/experts>
- <https://developer.android.com/samples>

## **=>Acknowledgement**

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Souvik Samanta