# Title: Grocery Android App

## **OBJECTIVE**

The purpose of this project is to give the convenience of having all the product prices available on hand before buying something from the market. Thus creating a list of items with updated prices of products, and also calculating the expenses. It will give more productivity to its users in return and save a lot of time for the users.

## **Acknowledgments**

I express my warm gratitude to my parents who were and are always with me in thick and thin and my class fellows and friends who encouraged me not to give up on hard jiffs. I am thankful to all family members for their prayers, moral support, and sincere wishes for the completion of my work

#### **Problem Statement:**

- Allow users to make a checklist of items they wish to buy
- Organize into categories based on the type of item such as groceries.
- The user should be able to choose a priority High, Medium, or Low for each item
- Ask for the permission of the user before switching on GPS

## **Problem Description:**

Some apps help you organize your shopping list but generally lack a "reminder" capability. If they have a reminder capability, the user has to set the reminder manually for a particular time. Whereas our app will automatically use the location data and remind the user in form of an alert about the items to buy from various stores within a radius around the user. Some of the existing apps such as "Shopping List" on the Google Play Store are limited to groceries

#### Introduction

Buying groceries is a periodic task that has to be done on a daily, weekly, or monthly basis. This project helps in assisting these tasks by providing a user-friendly interface to create a list of items they want to buy and keep track of their purchases all within the android app. This app provides the latest prices on the market. This will give users the convenience to know the prices of the products while at home or on the go.

## Why Android?

Android is the most widely used mobile operating system in the market, there are thousands of devices made by different vendors which are supported by different versions of Android OS, and there are millions of users around the globe who uses the android platform. Other than that Android provides a lot of features through different smartphones which attract a lot of users. Android also provides a good API (Application Programming Interface) with complete documentation, which assists when developing apps for android. So In conclusion, Android has such a large user base and a lot of features means a lot of people will use this app and get advantages from it, that's why I have used android to develop my application.

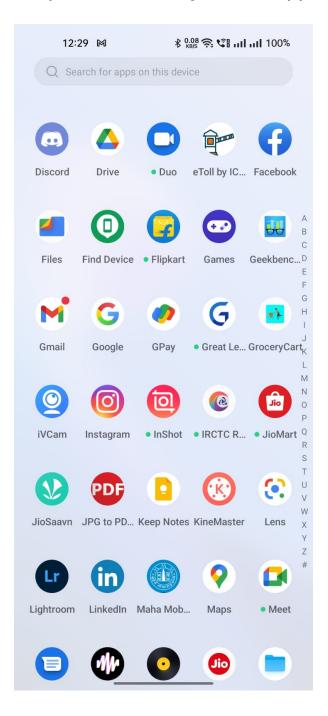
#### **Procedure**

I conducted a theoretical background study relating to this problem before designing the application. I took into account the problem people face while buying their groceries and keeping track of their expenditure on this category of expenses. People often use to forget the items they have to buy; they don't know the prices of products beforehand i.e. without visiting a grocery shop or market. On the other hand, there are a lot of users with android smartphones who use apps like to-do lists, etc. which don't help them in assisting this task but rather give them more overhead to research product prices and insert them into the to-lists app manually. There is the majority of Android users (36.6%) use the android KitKat version, so I have developed my application on this version of android to give support to most users. But the app compatibility is not just limited to the KitKat version, users with older versions or newer versions can use this app without losing any functionality

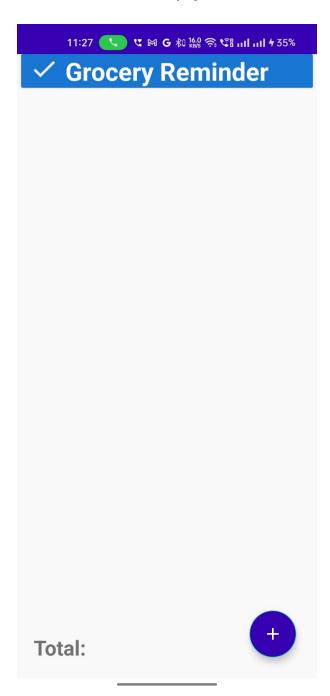
- Create the project from a template
- Examine the project structure.
- Run your application to see if everything is working or not.
- Start by creating the base layout.
- Create the item interface.
- Add the button.
- Create the popup interface.
- Write the logic to add items to the cart.
- Write the 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**

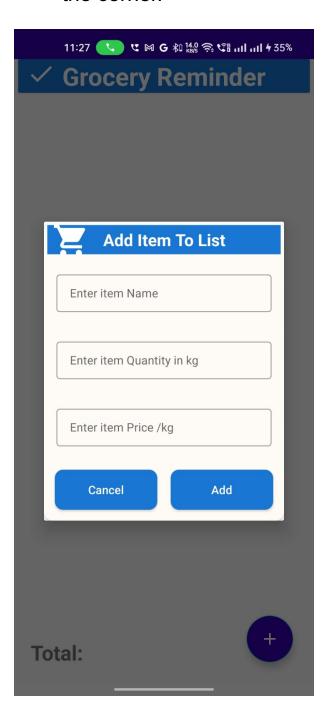
• Open the Grocery Maker App with a Green icon



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

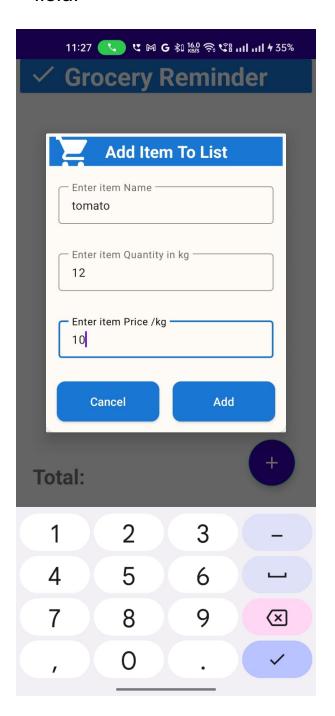


• A popup box appears after clicking on the entering button in the corner.

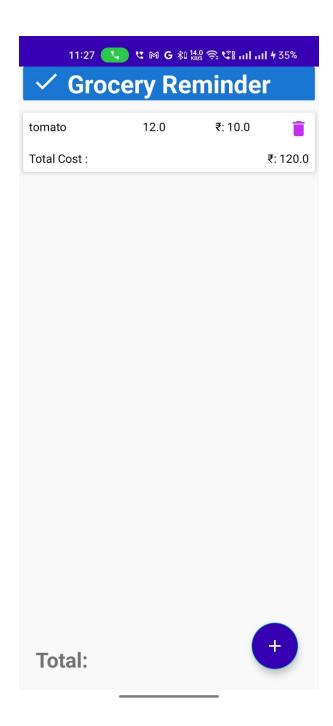


• Fill the Grocery item, their Quantity, and total price in the

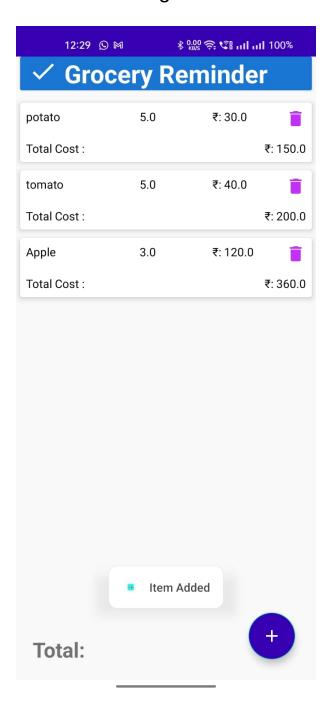
### field.



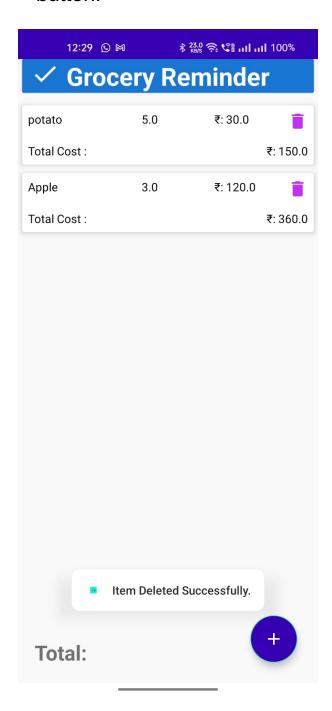
• Your first Grocery item is on the list!



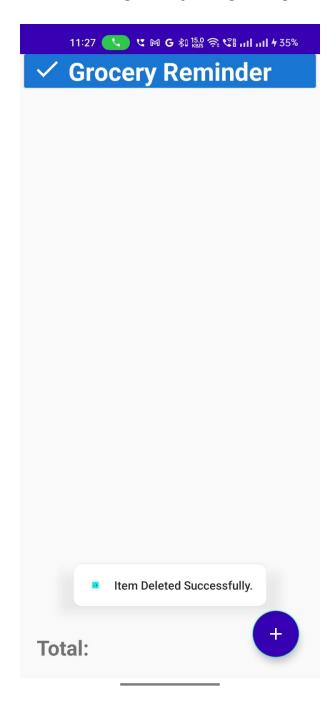
• Add a few more Grocery items to the List & see the Total Price change.



• Check the subtraction logic by clicking on the DELETE button.



• Removing everything brings our Total Price back to 0



#### Reference

- <a href="https://www.geeksforgeeks.org/guide-to-install-and-set-up-android-studio/">https://www.geeksforgeeks.org/guide-to-install-and-set-up-android-studio/</a>
- https://www.youtube.com/watch?v=vdcLb\_Y71Ic
- <a href="https://www.youtube.com/watch?v=p2oHD-06YcM">https://www.youtube.com/watch?v=p2oHD-06YcM</a>
- <a href="https://www.youtube.com/watch?v=LgRRmgfrFQM">https://www.youtube.com/watch?v=LgRRmgfrFQM</a>
- https://developer.android.com/
- https://devlibrary.withgoogle.com/products/android
- https://kotlinlang.org/
- <a href="https://developers.google.com/certification/associate-android-developer">https://developers.google.com/certification/associate-android-developer</a>
- https://developers.google.com/community/gdsc
- <a href="https://developers.google.com/community/gdg">https://developers.google.com/community/gdg</a>
- https://developers.google.com/community/experts