**PROJECT REPORT**

**BUILD A GROCERY ANDROID APP – PROJECT**

***Submitted by***

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**Problem Statement :**

Giving individuals the ability to keep track of the groceries they purchase at markets is the goal of this initiative. For the majority of people, buying groceries is a daily or weekly activity. The issue is that individuals frequently forget or lose track of what they are purchasing, so they utilise old-fashioned methods like writing down their shopping lists on paper. I have addressed the issue by giving them access to a digital inventory of goods from which to select before visiting a store and by enabling them to keep track of prior purchases while on the go via an Android smartphone. People will be more productive as a result and save time.

**Introduction :**

  Grocery shopping is a regular chore that must be done on a daily, weekly. For that i create a user-friendly interface that allows users to build shopping lists and keep track of their purchases inside of an Android app, our project aids in making these tasks easier. Used MVVM (Model View View Model) architectural patterns, room database , coroutines, and Recycler View for the list of objects to be displayed.

**Technologies-Used :**

1. 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.

2) 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.

3)Recycler View

Recycler View 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.

4)Coroutines

Coroutines are a lightweight thread, we use a coroutine to perform an operation on other threads, by this our main thread doesn’t block and our app doesn’t crash.

URL’s

* **GitHub URL**

<https://github.com/smartinternz02/SPSGP-104032-Virtual-Internship---Android-Application-Development-Using-Kotlin>

* Google Developer Profile:

<https://g.dev/mskavi>

ACCOUNT ID’s

GitHub id:

<https://github.com/kavi3210>

SmartInternz id:

<https://smartinternz.com/student-profile/feed/U0IyMDIxMDE0NzIyOQ==>

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Kaviarasan.