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Ration Management System

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Abstract - *We have created an application which highly versatile and can be cooperated into society multiple ways.*

We can use it to know market values of goods and some substitute for existing one and even plan the shopping as per the needs. We have a scan system to just know info and prices of your product with just 1 click. This can help your buying experience be much smoother and fun as compared to what it is at current situation.

Keywords —*Android application, Management system, Barcode reader , Expense tracker , Grocery list.*

I.   INTRODUCTION

An application that helps to manage an individual's grocery shopping list so that an individual can keep track of his/her groceries.It is an application built to aim mainly for individual usage so that one can keep ration stock in check and can be further modified easily for huge scale industries to manage storage system. This application allows the end user to create multiple grocery list and add items in it. It also has the functionality to calculate the total expenses of a particular grocery list. It is made such a way that a person can track the stock that the individual have without spending long time searching about status of his/her stock

It will also help keep track of his/her expenses and help them keep track of their goods that they use on daily bases.

It can also be further customizes in such a way that we can keep track of all your expenses and help you control them if you want to.At this point we propose a ration management system for daily usage.

II. LITERATURE REVIEW

•Grocery Mate
Grocery Mate is one in every of the additional artistic apps. And it's pretty well-favored as long as you ignore the I pad at very cheap of the screen. It additionally provides price following options.Grocery Mate is that the a lot of additional simplex cost-tracking alternative. The ability to find things in list by the order of the passage they're in at your native grocery.

• Grocery I.Q.
Grocery I.Q. (free) is that the most illustrious and most-utilized grocery-list app, and my high alternative for the most effective all-round app. Grocery I.Q. has been around for a short time and has additional a heap of latest bells and whistles on the approach. It additionally has the largest food-name info, that is frequently changed. A vast info of food names and makes to support list creation, however the image attachment ability is absent.

• Grocery Ease
The app's best feature is that the ability to feature on costs to things within the info and add up total prices for every list. info of food names and drop-down list as you kind for quick grocery list inventive creation. the power to feature new foods, prices, and photos to food info however it didn't continue the previous list that we've got antecedently order

C. Pseudo Code/ Testing

We have been using our application for over a month almost now and till this date, we have figured out a few issues and bugs but they have been fixed now, and mostly our colleagues are also happy using it on their day-to-day bases and as per reviews collected by us from those whom we shared our creation said that they at first found it little typical but they adapted really quick as it has a user-friendly interface and they are just in habit of our application and they have improved their lifestyle already and it also helped them in all different ways some of them were such that we didn't even imagine of and that made us realize about the versatility of our project for anyone if they just start using it.

III.   METHODOLOGY

These are the following stages (Software Development Life Cycle) in which we have approached our project:

- Requirement Analysis
- Product Requirement specification
- Design specification (HLD and LLD)
- Development
- Testing
- Implementation

The interface is developed on the Android platform. All Field level validations would be taken care of at the interface level. Data is stored in SQLite local DB. All Business logic to manage The Ration management system is managed through JAVA classes.

IV. MOTIVATION

There are many times when we forget items that we had to buy and it just slips out of our mind and many times we are just forced to change plans just because we forgot it or we fell short on cash while buying and were forced to change our plans and even though it might look really small issue as per our survey many people come across this problem. Thus we decided to develop a Ration management application which can keep track of all the grocery items that we need to buy in order to maintain our grocery stock.

V. TOOLS AND TECHNOLOGY

We used-

1. Android studio- it is a basic software used to build a mobile application which is further supported by google
2. Sqlite database- it is a serverless database used to store all the master data of the application in the device itself\
3. Java- it is a heavily relied on a language which is used for multiple purposes and the android community also heavily rely upon it for building application
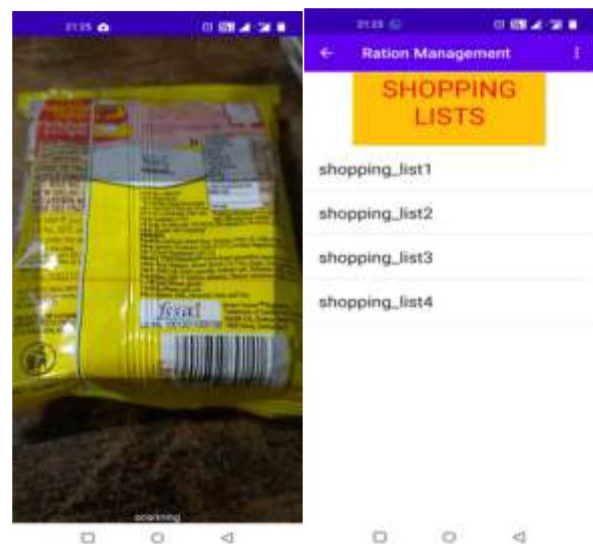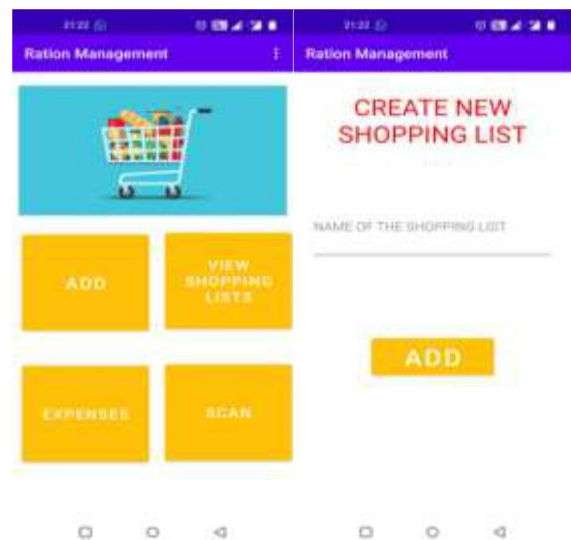
VI. RESULTS AND DISCUSSIONS

After going through all the steps involved in android app development, we were able to implement our ideas and develop a fully functional Ration management application to meet the needs of an individual. The user is able to add a grocery shopping list and save its name accordingly. The user

is able to choose from a list of grocery items and add it to the grocery list. The user has the liberty to rename and delete his list. After adding grocery items in the shopping list, the user can navigate to the button "Expenses" where he can see the total expenses of his shopping list. If the user wants to know the details about a particular item then the user can navigate to the button 'scan' where he can scan the bar code present at the back of every grocery item so that se will be redirected to the web where the user can view all the information about the scanned product.

We tried to meet the expectations of the end-user and make the application user-friendly and simple.

VII. SCREENSHOTS

VIII.   FUTURE SCOPE

This application can be further improved by adding more features related to modifying and updating the shopping lists. The application can be made more user-friendly by improving on the API segment. App Notification can be integrated so that the user receives notifications regarding his/her shopping lists and the last time they went to stock their grocery.

IX.   CONCLUSION

After all of preparation and testing, we have realized that it's a really useful project which can be used in all sorts of ways and can even be used in many futuristic ways for all automation too which is really close as we see our day to day scenario in our society.

X. ACKNOWLEDGMENT

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