

GOOGLE SUPPORTED VIRTUAL INTERNSHIP PROGRAM

ANDROID BASICS IN KOTLIN



GROCERY ANDROID APPLICATION

A PROJECT REPORT BY

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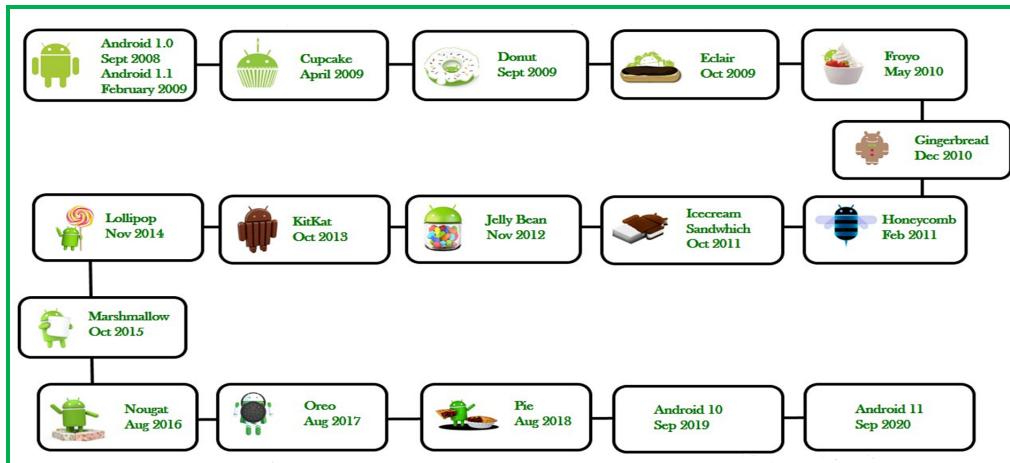
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INTRODUCTION



Android is an open source and Linux-based Operating System for mobile devices such as smartphones and tablet computers. Android was developed by the *Open Handset Alliance*, led by Google, and other companies. Android offers a unified approach to application development for mobile devices which means developers need only develop for Android, and their applications should be able to run on different devices powered by Android. The first beta version of the Android Software Development Kit (SDK) was released by Google in 2007 where as the first commercial version, Android 1.0, was released in September 2008. On June 27, 2012, at the Google I/O conference, Google announced the next Android version, 4.1 Jelly Bean. Jelly Bean is an incremental update, with the primary aim of improving the user interface, both in terms of functionality and performance. Google publishes most of the code under the Apache License version 2.0 and the rest, Linux kernel changes, under the GNU General Public License version 2.



PROJECT OVERVIEW

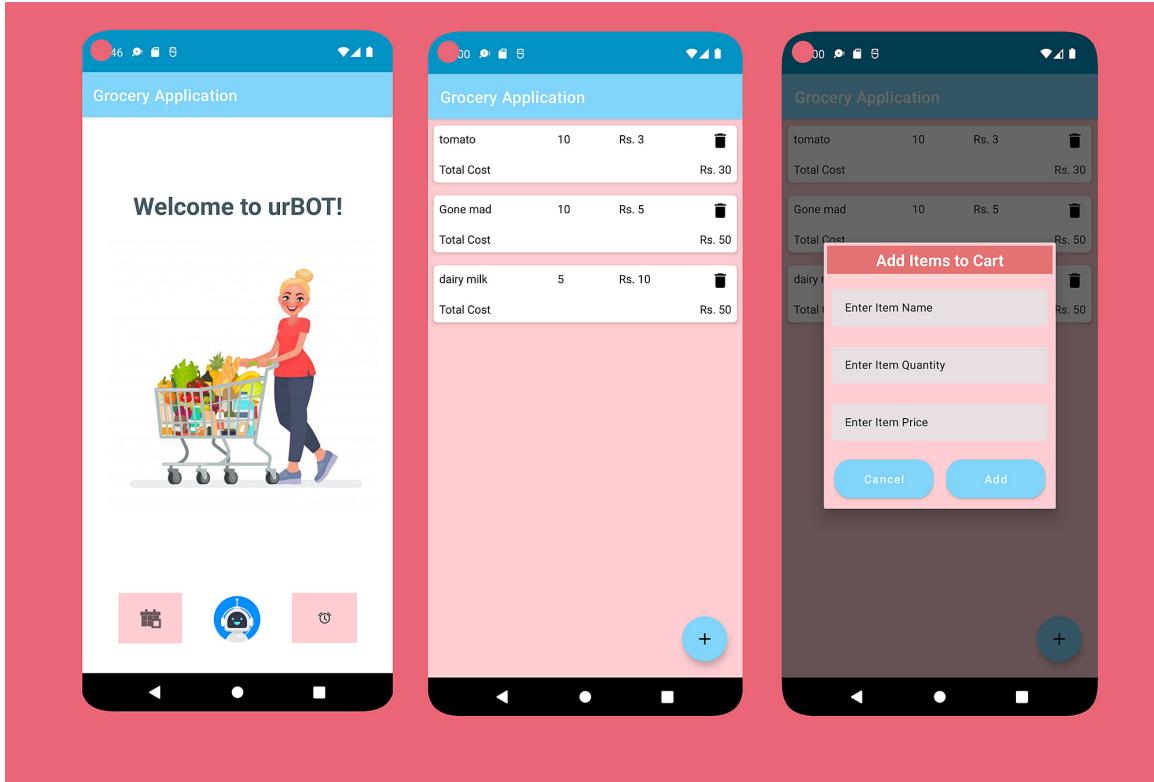
In this busy world and a fast growing world, shopping has become a most important one for all age groups. At the same time it has become difficult to remember all the things which we want to buy. We will reach any shop and we will buy the things required for us but we might forget some one or two items from the list. In our busy schedule it has become impossible to always jot down all the things which we want to buy in a paper and take it during our shopping.

My application URBOT will let people to note down the important things they want to buy and there is also a feature of mentioning the quantity and cost of each thing. If they want they can add the things, if not they can also delete the things which is not required.

Another feature embedded in my app is to contact our closest ones who is going for shopping via sms. Usually in every home father or mother will be going for shopping, if we forget to tell them anything most important which we want to buy, we can inform them via sms easily just by entering their mobile numbers. My app will provide as a guide while going for shopping and that's behind giving its name as URBOT which says my app is a bot for the users. My app will be very useful for everyone where it has a user friendly environment and each one can access it very easily.

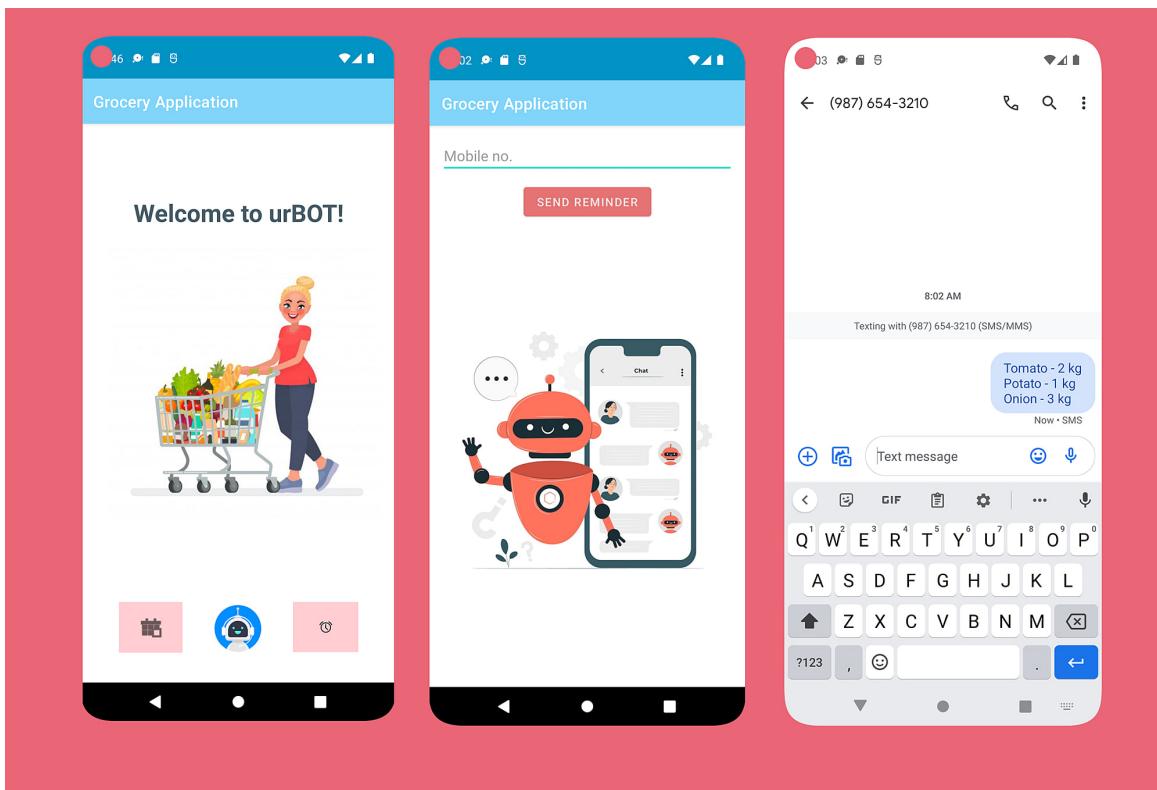


OVERVIEW OF URBOT



Description:

- ★ The first image is the home page and it has two buttons, the left button will navigate to the reminder page.
- ★ The reminder page has a plus(+) button where we can insert all the items which we want to insert,a pop up message will be displayed saying that the item is inserted successfully.
- ★ After clicking the plus button,a dialog box will be displayed where we can enter the details like Item Name, Item Quantity and Item Price.
- ★ After entering all the required details, we should click the add button in order to add the element in our reminder list.
- ★ When we want to delete any item from the list, click the bin icon so that item will be deleted.
- ★ After deleting the item, a popup message will be displayed stating that the item is deleted.



Description:

- ★ When we click the right button of the home page, it will navigate to another page where a text field will be provided for the user to enter the mobile number and a button will also be provided.
- ★ The user must enter the mobile number and must click the send reminder button.
- ★ After clicking the send reminder button, it will take us to another page where we can send the sms to the person we want.
- ★ Enter the things which you want to send as a message in the textbox, then click send. The items will be sent to the respective person.

PURPOSE



- ❖ The purpose of this project is to list the items so that whenever users go to grocery stores, users will not be able to forget their items and this grocery application helps the users to tackle their day to day chaos more effortlessly.
- ❖ It's not easy for the users to remember every item in this hectic lifestyle, they frequently can't recall their required necessity so we decided to build an app to store the items in the database for their future use.
- ❖ After buying the items users can delete the added items in the database
- ❖ The traditional way of noting down all the items which the users want to buy actually consumes more time and if the script is lost anywhere means it will be too difficult for the user to manage that situation.
- ❖ . My application URBOT will let people to note down the important things they want to buy and there is also a feature of mentioning the quantity and cost of each thing. If they want they can add the things, if not they can also delete the things which is not required.
- ❖ From my app the user can also contact the person to whom they want to send the reminder.
- ❖ URBOT provides a better UI for the users and it will purely be an user-friendly application. Users are much more benefited from URBOT.
- ❖ Time can be saved and the users can buy all the things they want to buy by using my app.

LITERATURE SURVEY

EXISTING SOLUTION

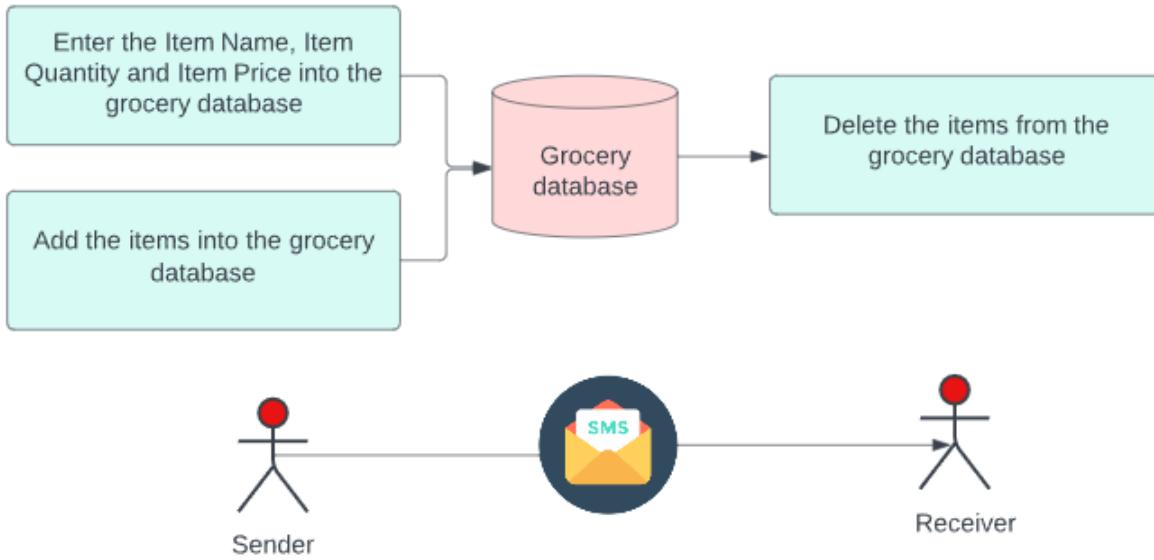
- ☞ Jotting down the items which we want to buy traditionally in a paper and then taking the script with us while shopping.
- ☞ Making a phone call to our mom or dad or someone who is going to buy the items for us and reminding the things which we want to buy.
- ☞ Keeping all the names of the items which is to be bought in our memory.
- ☞ Telling someone to remember the item list who will accompany us during shopping.

PROPOSED SOLUTION



- ☞ URBOT will allow the users to create the grocery list which they want to buy and they can use it during shopping.
- ☞ Once when they are done with shopping, they can delete the things which is no more needed.
- ☞ Users can also contact the people and remind us the things which is to be bought by messaging them.
- ☞ This actually saves more time and all the items can be bought accurately.

THEORETICAL ANALYSIS



TOOL REQUIREMENTS

Software:

- ⇒ The app is developed by using Android Studio app by using Kotlin programming language and SQL commands are used to store the datas into the database.
- ⇒ Operating system: Windows 8 or 10 or 11
- ⇒ Programming languages: Kotlin,Java
- ⇒ Emulator : Pixel 5 API 30

Hardware:

- ⇒ 64-bit environment is required for Android 2.3.x
- ⇒ At least 250GB of free disk space to check out the code and an extra 150 GB to build it
- ⇒ At least 16 GB of available RAM is required

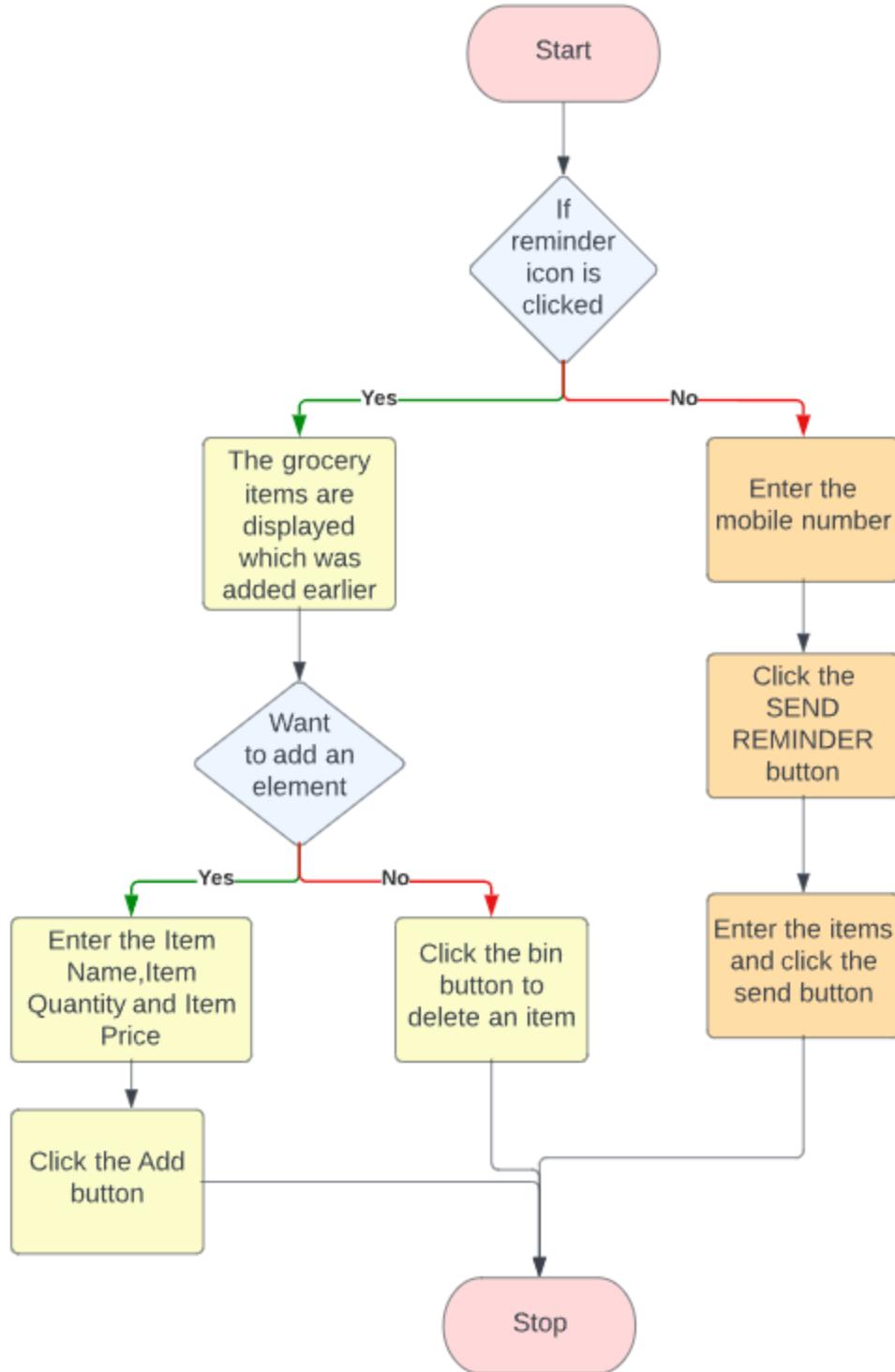


EXPERIMENTAL INVESTIGATIONS

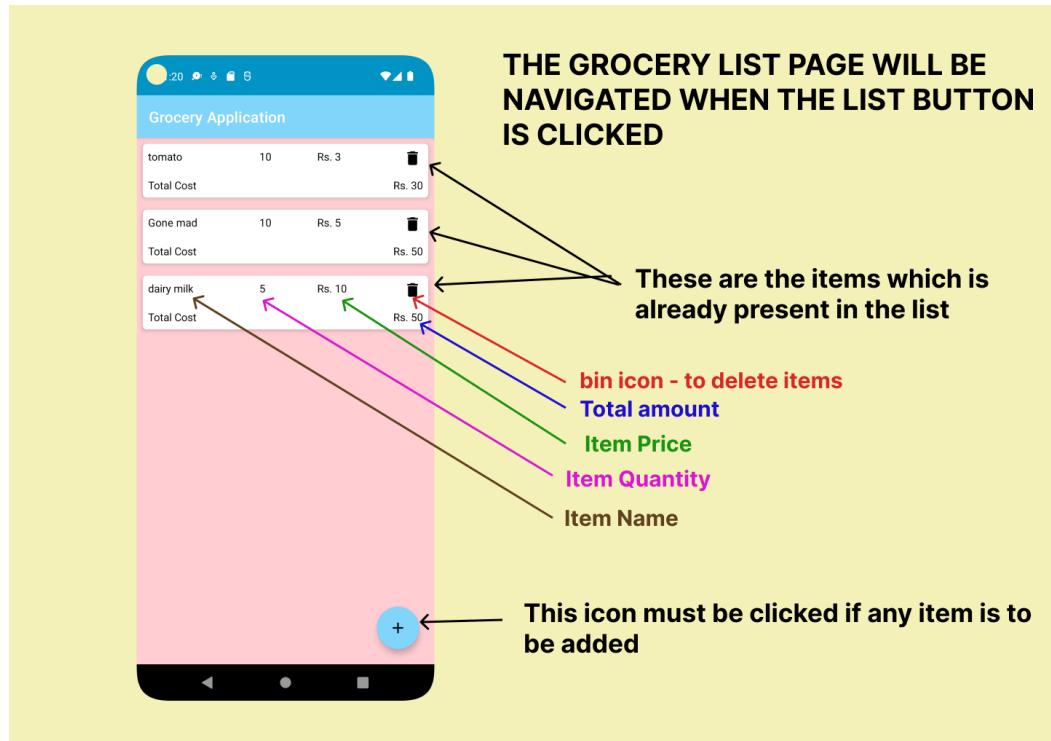
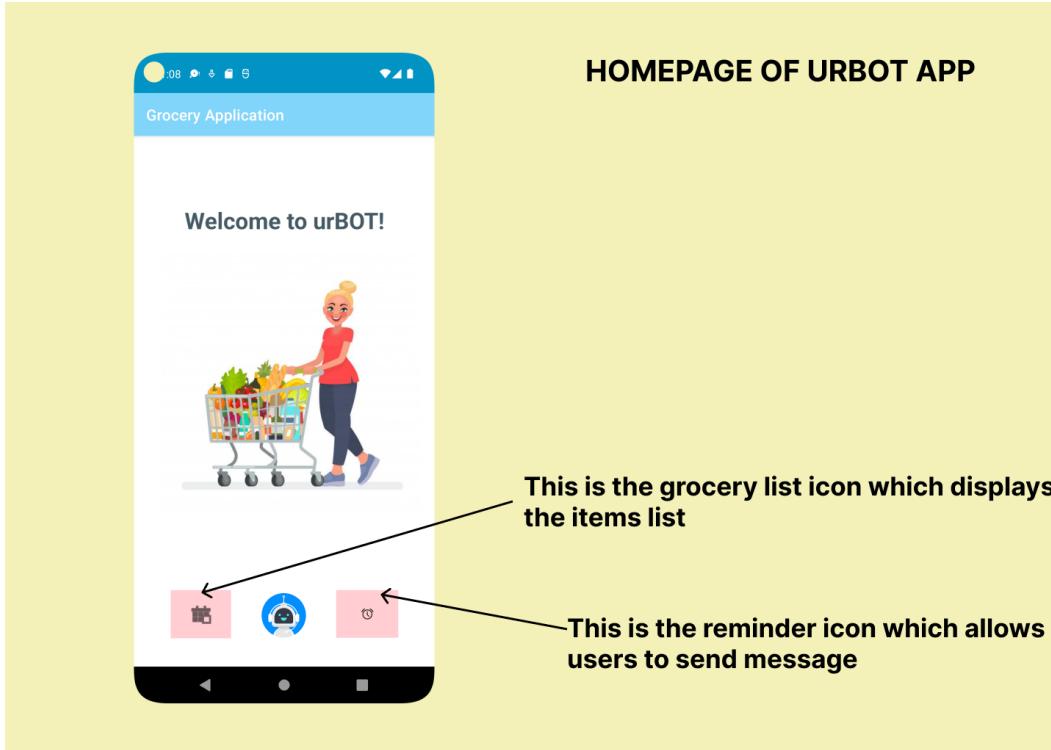


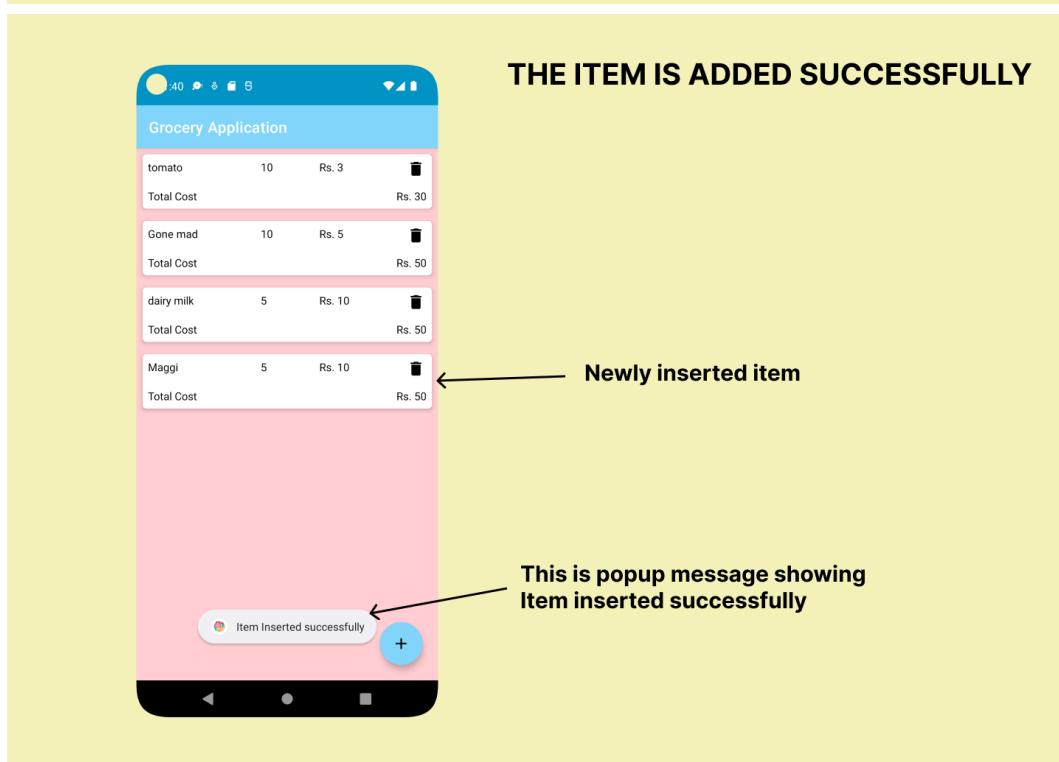
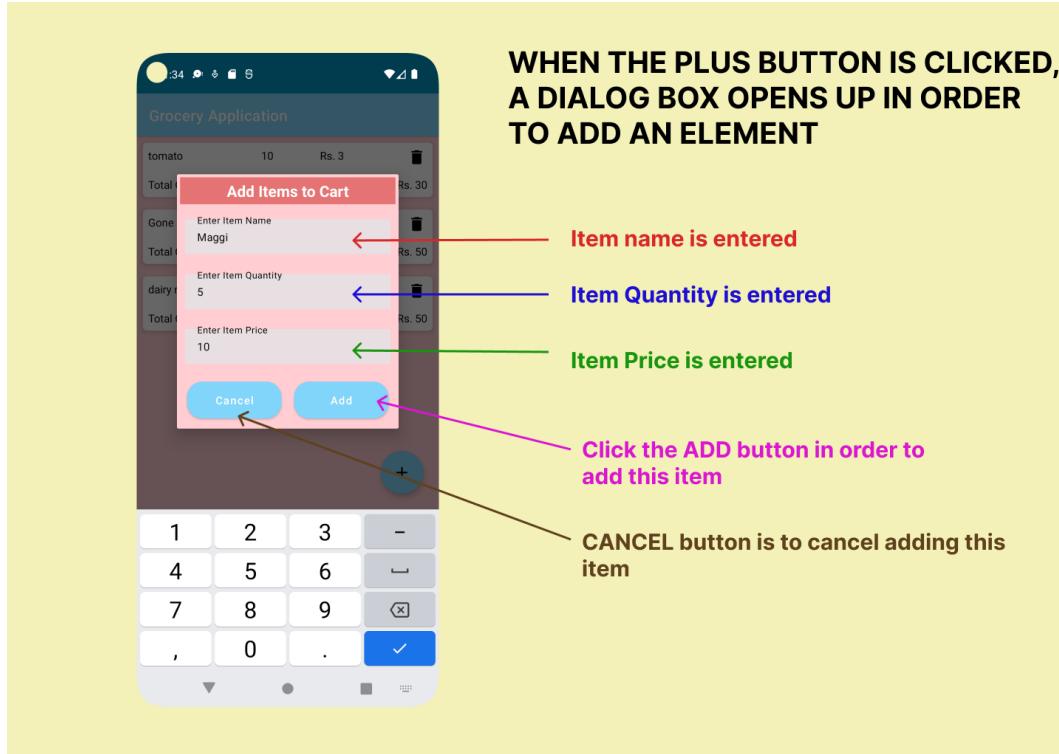
- ↳ Various analysis was done during the working of URBOT
- ↳ Asked many household workers of how they used to remember all the items while going for shopping.
- ↳ Investigated whether they have forgotten to buy anything very important during any occasion.
- ↳ What enhancement in the Technologies might help them to get a better solution to this problem
- ↳ Said them about URBOT and made them to experience this wonderful user friendly app.

FLOWCHART

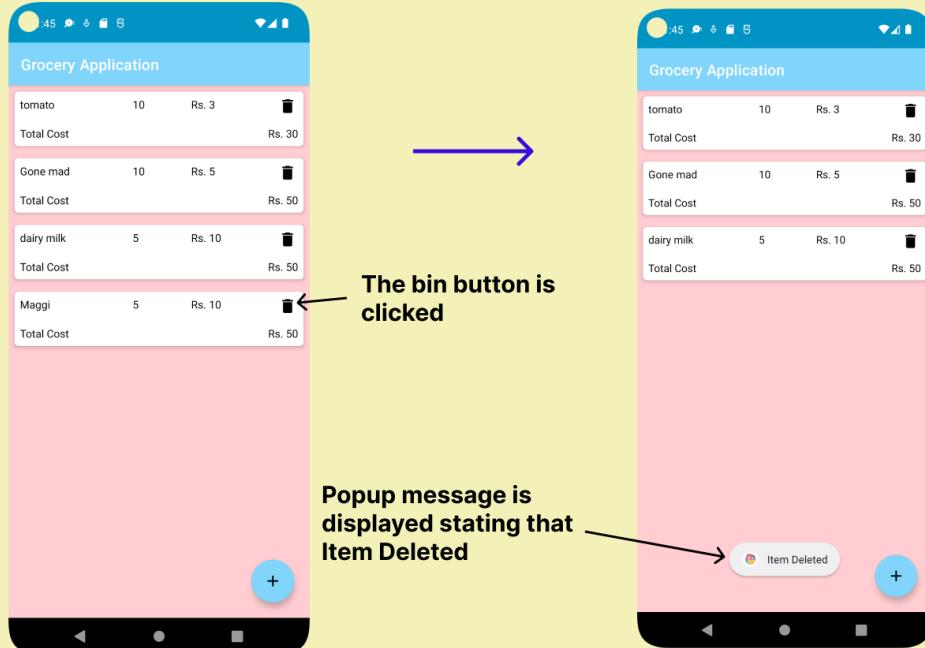


RESULT

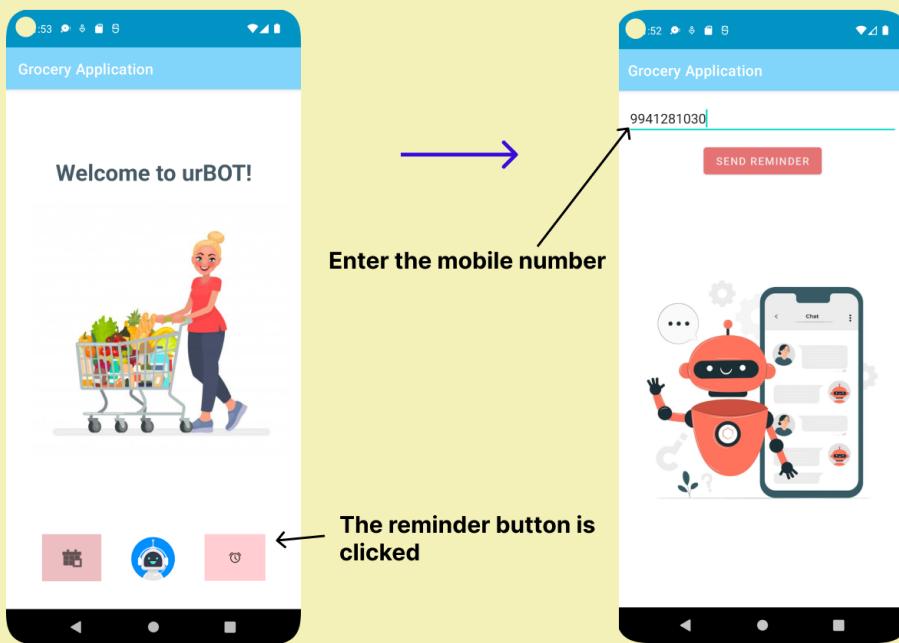




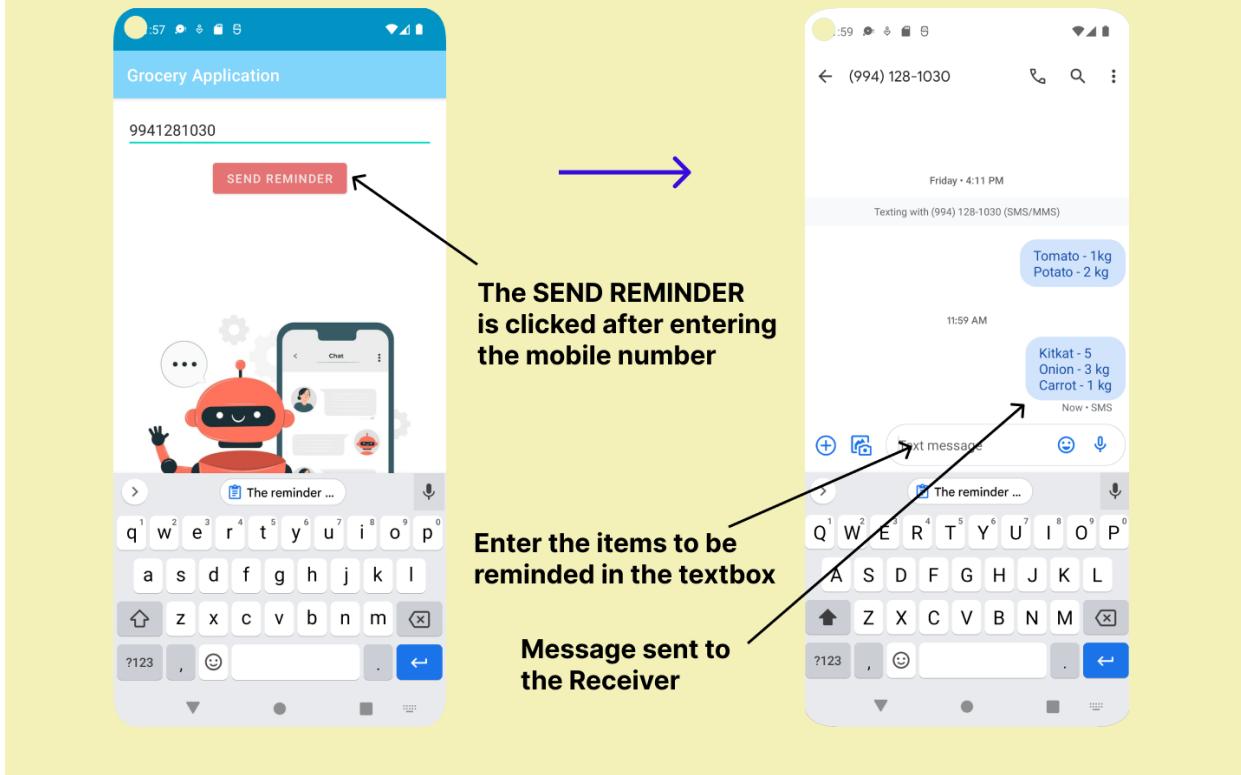
THE ITEM MAGGI IS DELETED AFTER CLICKING THE BIN ICON



AFTER CLICKING THE REMINDER ICON



AFTER CLICKING THE “SEND REMINDER” BUTTON



ADVANTAGES

- » The user can save time i.e, while jotting down each item in a paper it consumes more time whereas with the help of URBOT they can make their grocery list in a less time.
- » Accuracy is achieved. None of items will be left while shopping as all the items will be noted correctly by using URBOT.

DISADVANTAGES

- » One of the disadvantage is that the user is supposed to input the mobile number while sending the message.
- » For this they have to keep the person's mobile no. to which they have to contact in memory.

APPLICATIONS

- The main application of this app is during shopping.
 - The Grocery Items list can be generated easily and can be used when we are going to stores.
 - The user has a good User Interface and a friendly environment which leads to a wider application of URBOT in shopping.



FUTURE SCOPE

- The enhancements which can be carried out with URBOT is it can be connected with phone calls where the user can contact the person and remind him/her.
 - The app can be connected with social medias like Whatsapp, Telegram etc.
 - The app can also be connected with the nearby grocery shops where the users can call the shops and ask them to keep the things ready which they want to buy.
 - This helps them in getting the items from the store readily.

CONCLUSION



It can be concluded that URBOT will let people to store the list of grocery items they want to buy. That is whenever users go to grocery stores, users will not be able to forget their items and this grocery application helps the users to tackle their day to day chaos more effortlessly. It's not easy for the users to remember every item in this hectic lifestyle, they frequently can't recall their required necessity, URBOT can be used to store the items in the database for their future use.

People can use this app for storing the grocery list just by entering some details of the item like Item name, Item quantity and Item Price. If they want they can add the things, if not they can also delete the things which is not required or if the item has been purchased. The users can also message the grocery list to someone just by entering their mobile number.

URBOT proves to provide a good User Interface to the users and it is a user friendly app. This also has a lot of benefits for the users which makes their things done very simple. It saves time and improves the efficiency. Users can use URBOT whenever they want to jot down the grocery list during shopping.

BIBLIOGRAPHY

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- ★ https://lucid.app/lucidchart/23533c44-6a3d-47ef-9ade-4b97d4fbfa63/edit?invitationId=inv_42eec882-2b03-4b18-8a4a-42d5f7e95635&page=0_0#
- ★ <https://www.geeksforgeeks.org/introduction-to-android-development/>
- ★ <https://material.io/resources/color/#!/?view.left=0&view.right=0>
- ★ <https://www.youtube.com/watch?v=XIHNxES2hbQ>

APPENDIX

A. Google Developer Profile

https://developers.google.com/profile/u/keerthana_jothirameshkumar

B. Source Code

<https://github.com/smartinternz02/SPSGP-83639-Virtual-Internship---Android-Application-Development-Using-Kotlin>

C. Project Demonstration

<https://drive.google.com/file/d/1FrO7bgvdYfx1bpZMdQH2GDWmgvms1ezC/view?usp=sharing>

