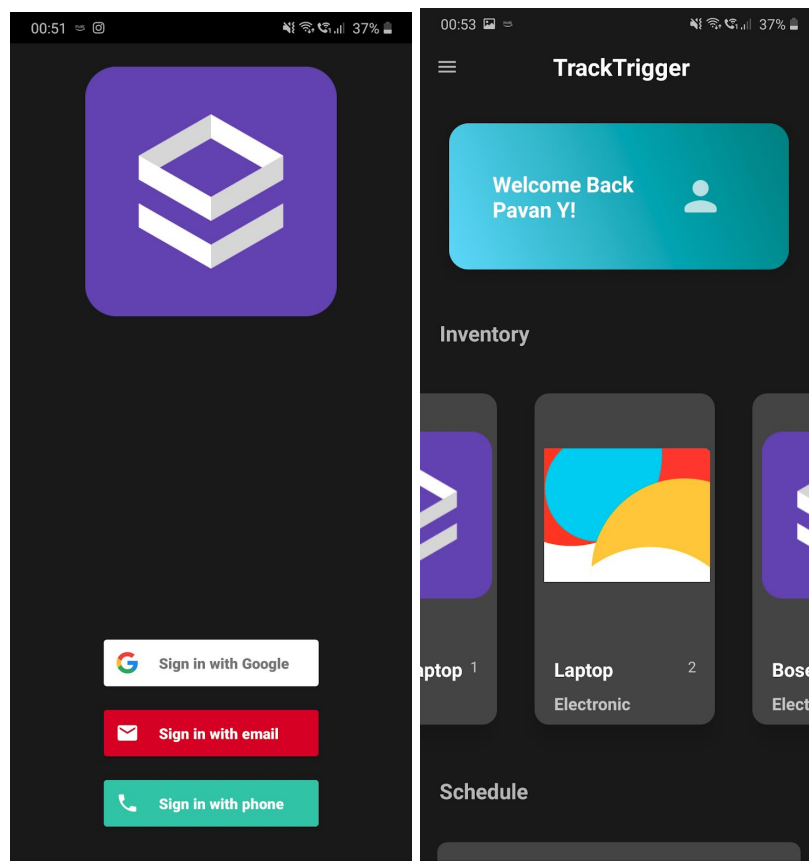# TrackTrigger

Pavan Kumar Reddy Yannam (2019A7PS0038H), Vineet Venkatesh (2019A7PS0043H), BVS Ruthvik (2019A7PS0017H), Ishaan Khushu (2019A7PS0107)

Introduction

Our Track and Trigger Application can be used by homemakers as well as working professionals to make their lives easier. This App was developed on Android Studio requires a minimum SDK version - 23 and target SDK version - 30.

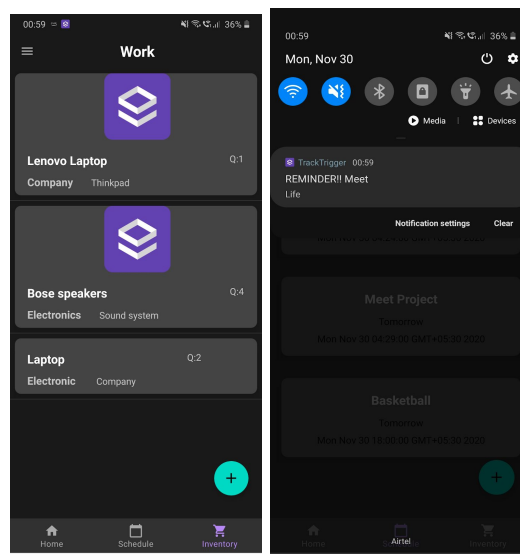Github Repository - https://github.com/PavanReddy28/TrackTrigger32

Platforms

We used the Android Studio Software for the front end of our application. Hence our project is essentially made in Java and xml. We connected our project to Firebase and used the Firebase Authentication UIs as well as Cloud Firestore as our database.

Functionalities
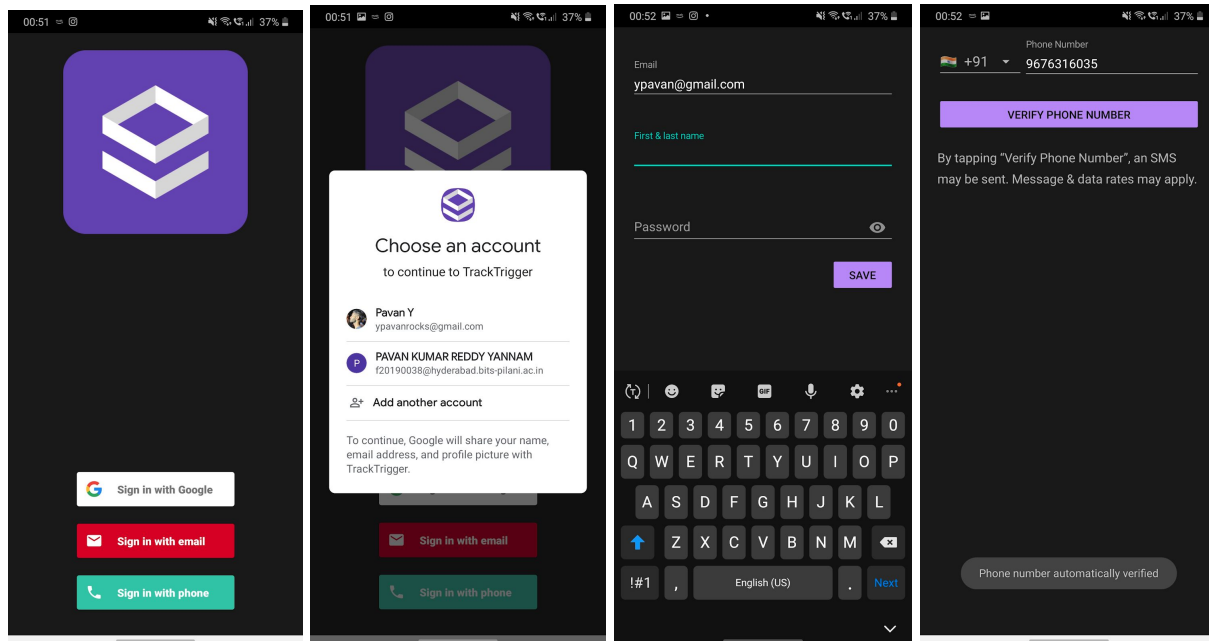
This app provides the following functionalities:

1. Google/email/Phone Sign-In

2. Phone authentication via distinct OTP

3 Choice of Creating or Joining a pre-existing Household

4.Have separate Work and House Inventories/Schedules

5. Notes Section(to store daily notes/lists)

6. Notification to update inventories at a set time(2:45 pm)

7. Reminder Notification(Based on set time)

8. Sharing Inventory Information via Whatsapp and Email

Login Activity

We have used Firebase Authentication services for the login activity. Users can sign in using their Google account, Email ID and Telephone number.

Firebase generates a unique Firebase user ID for each user, which we have used in implementing many other functionalities in our application.
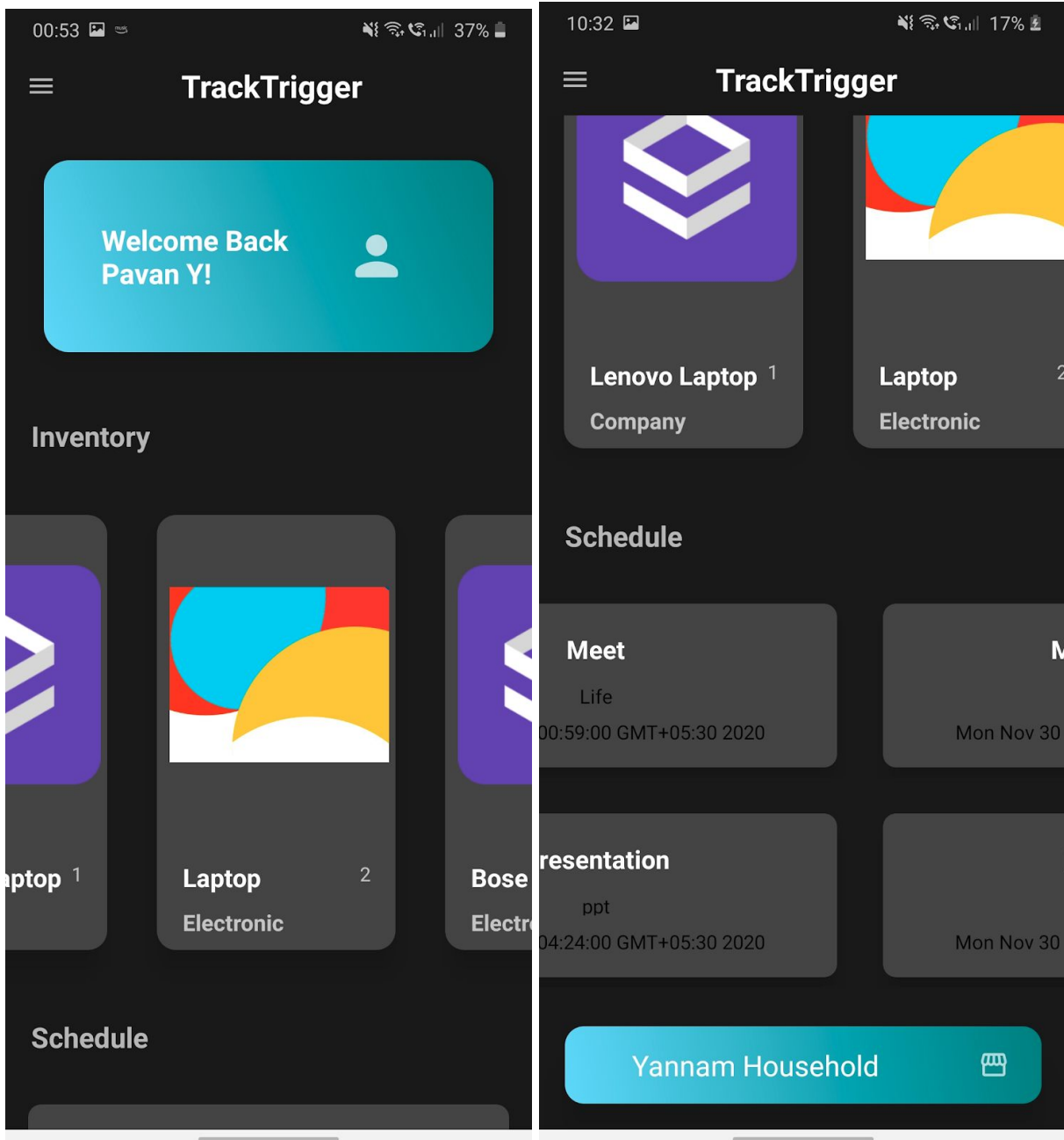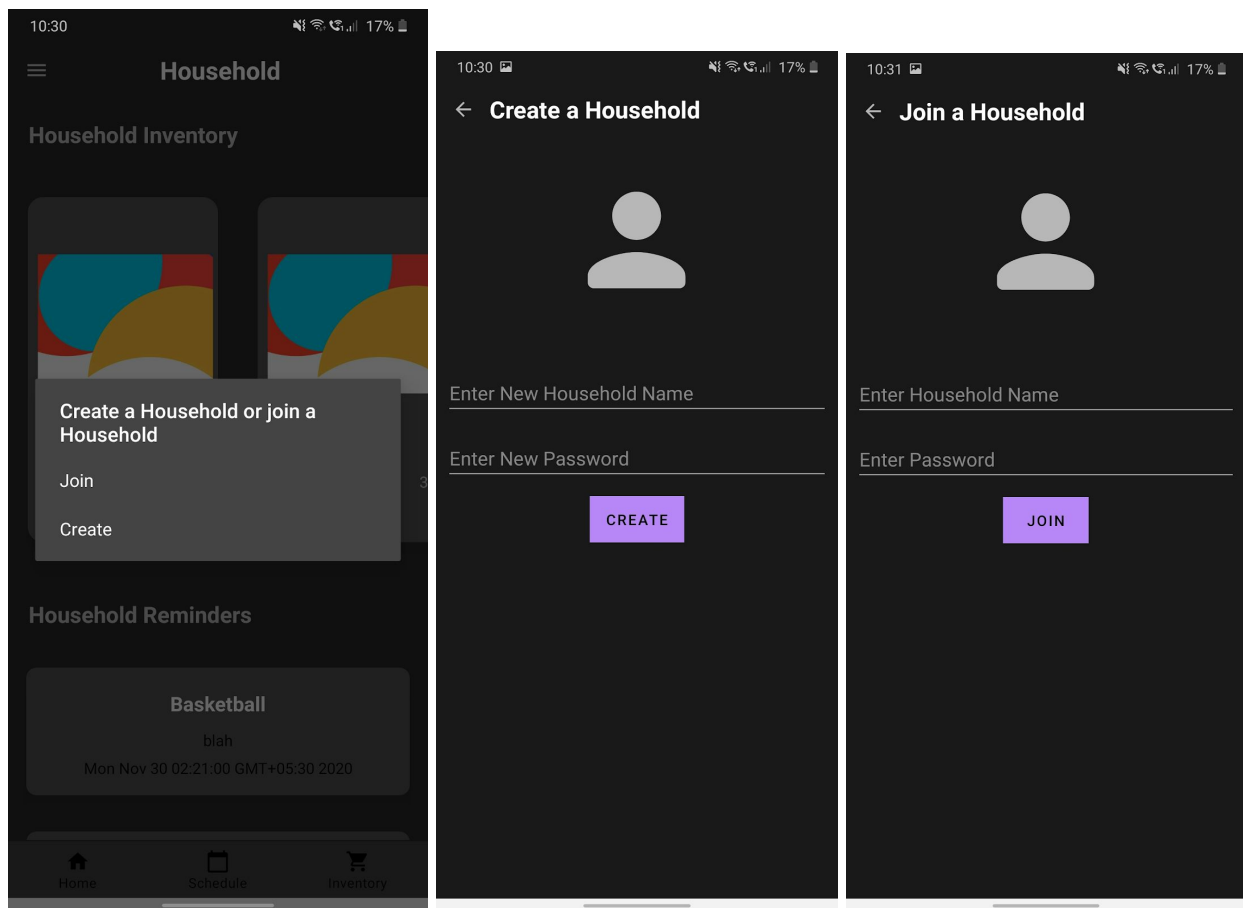
Home Page

Home page displays the summary of the items from your personal (work) schedule and inventory. We have used a Recycler view along with a card view to display items from inventory and to display the schedules. Basic information about your household.
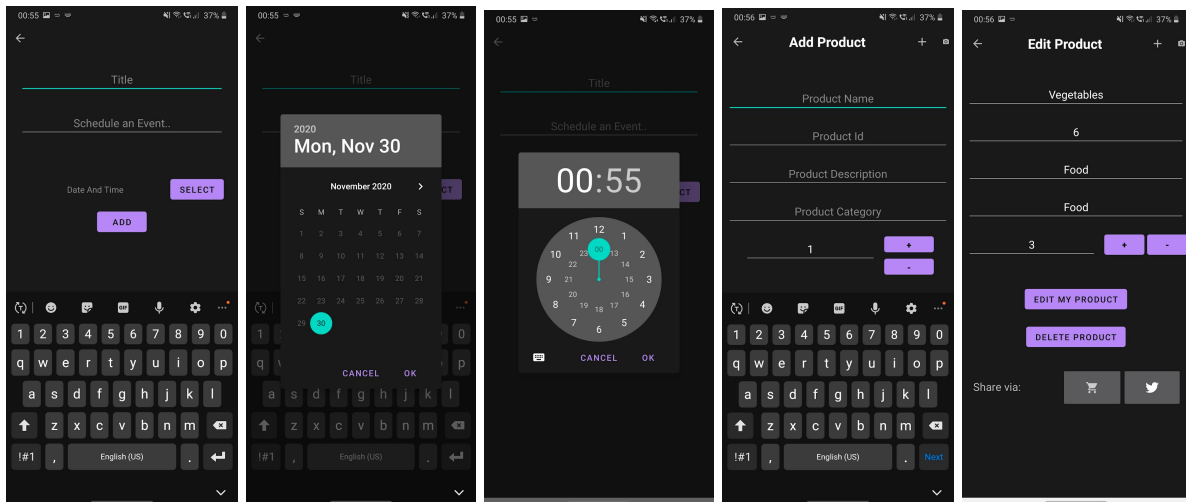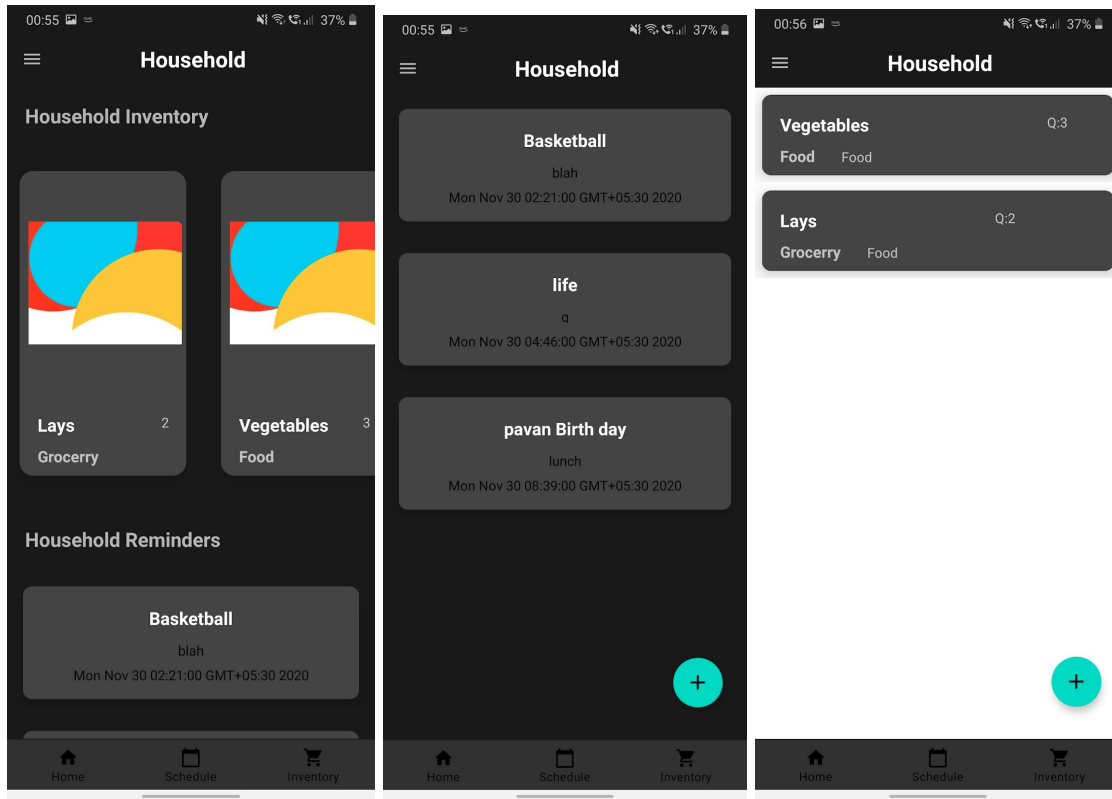
Household

Our household activity provides families with a special feature to form groups, so that all members in the household can access the information about their home storage and schedules. Each household will have a unique name and password which provides access to all members of that household. They can either a create a household or join one as shown below.
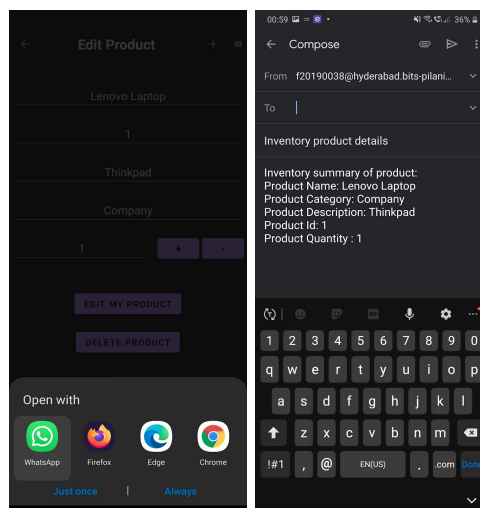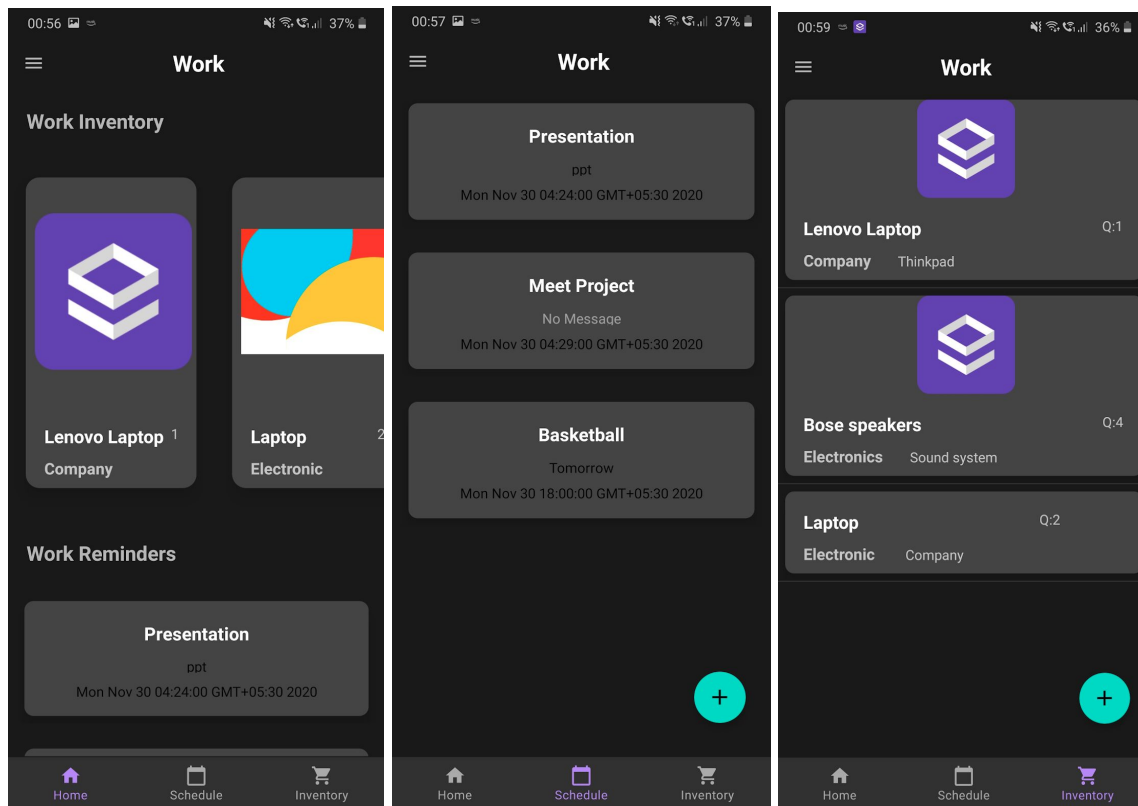
Household page has two main categories inventory and schedule.

We can add and edit all reminders and products. We can share the product information in our inventory via whatsapp or email. We can also add images from the gallery to the products. We also have a swipe to delete option enabled in our app.
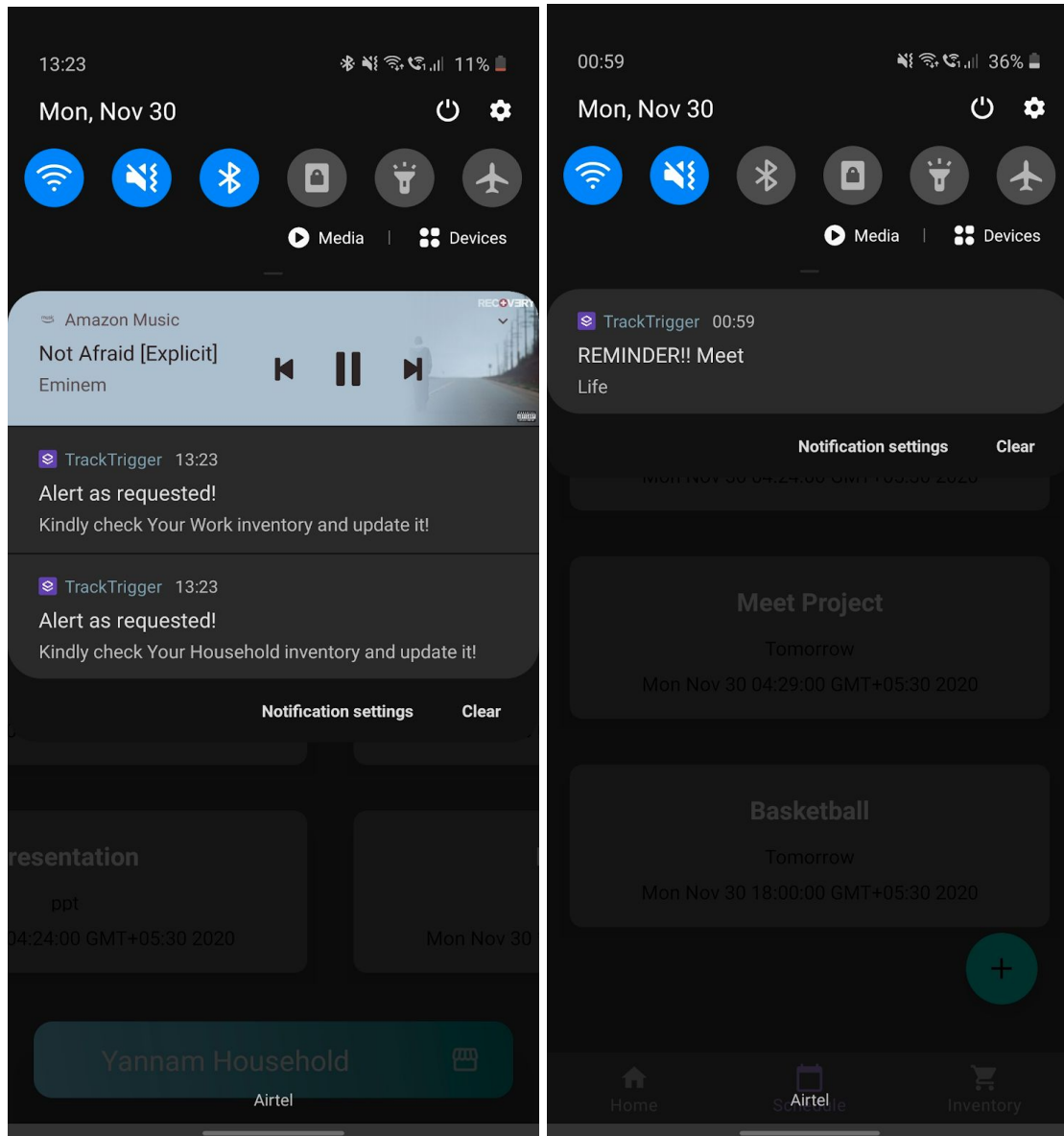
Work

Our work activity has features (inventory and reminders) similar to the household activity, but its a personal page and only he/she can access it. This would help the user separate their personal activities and professional activities.
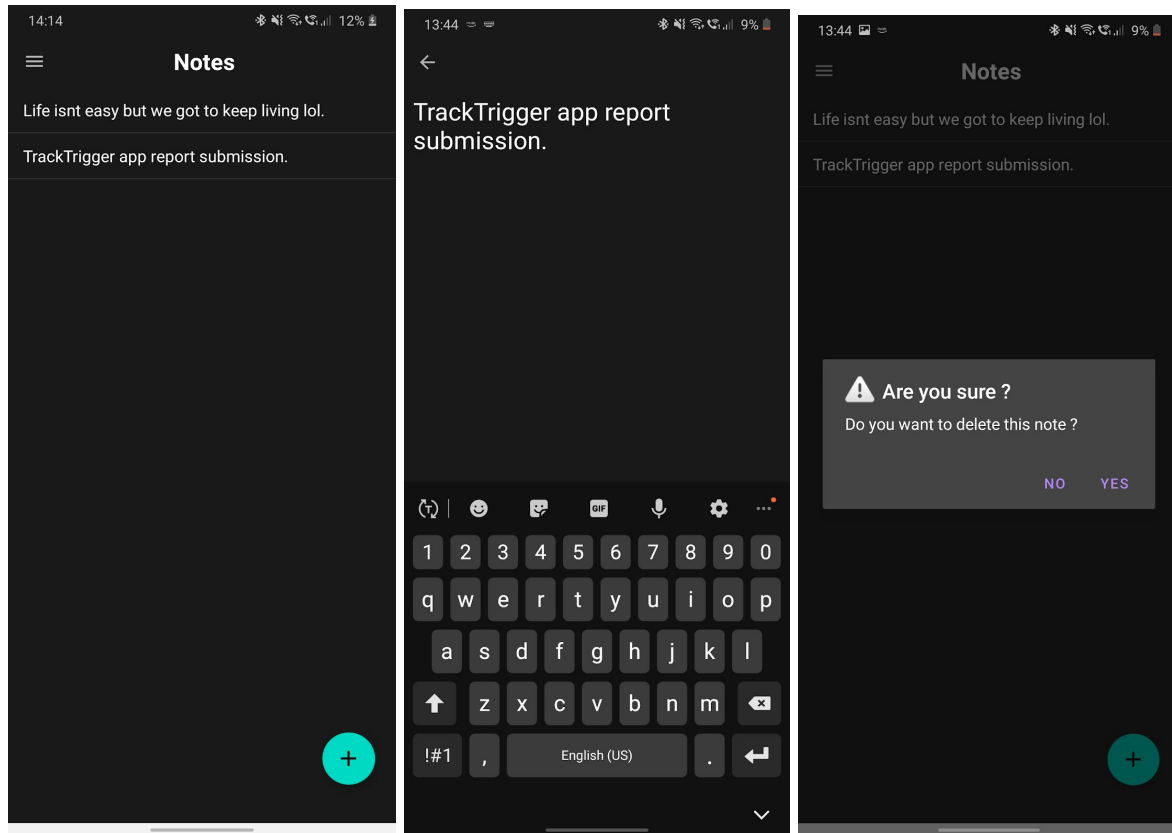
Push Notifications

Our app also has the push notification enabled for reminders and we will also get a daily/weekly notification, asking us to check our inventory.
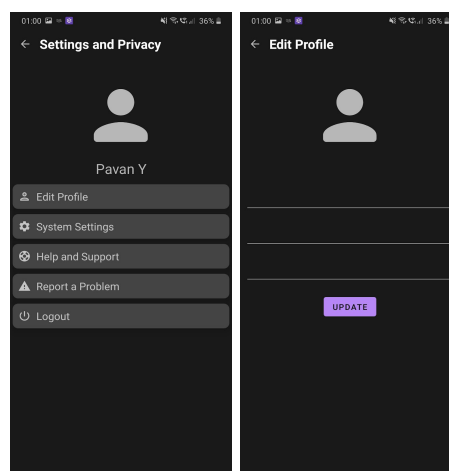
Notes

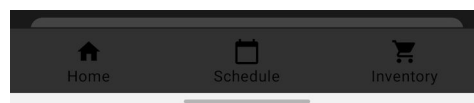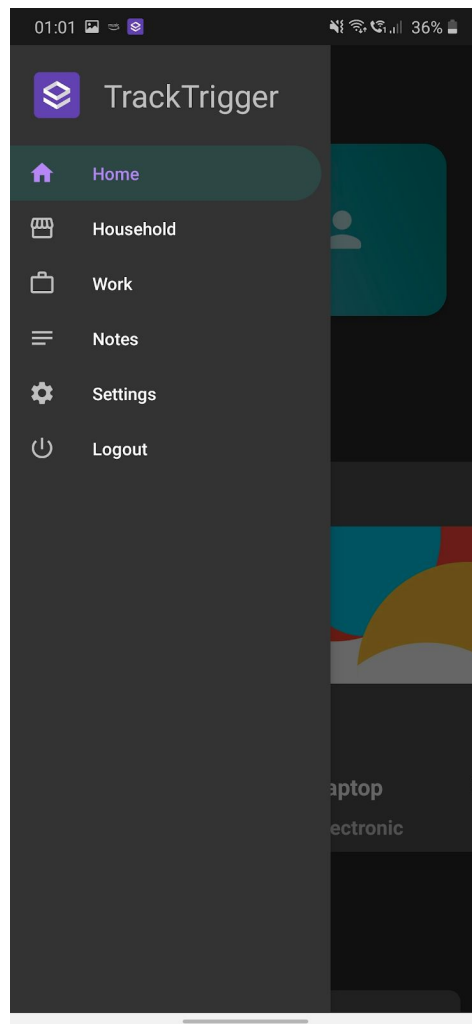One can add, edit and delete notes. These notes are stored locally on our device.
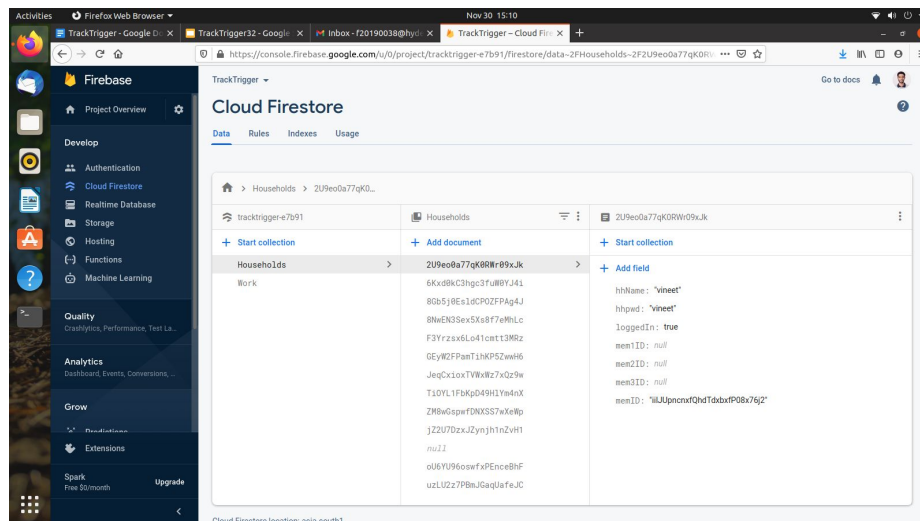

Settings

Navigation Drawer

Navigation drawer and bottom navigation bar to navigate between activities and pages.
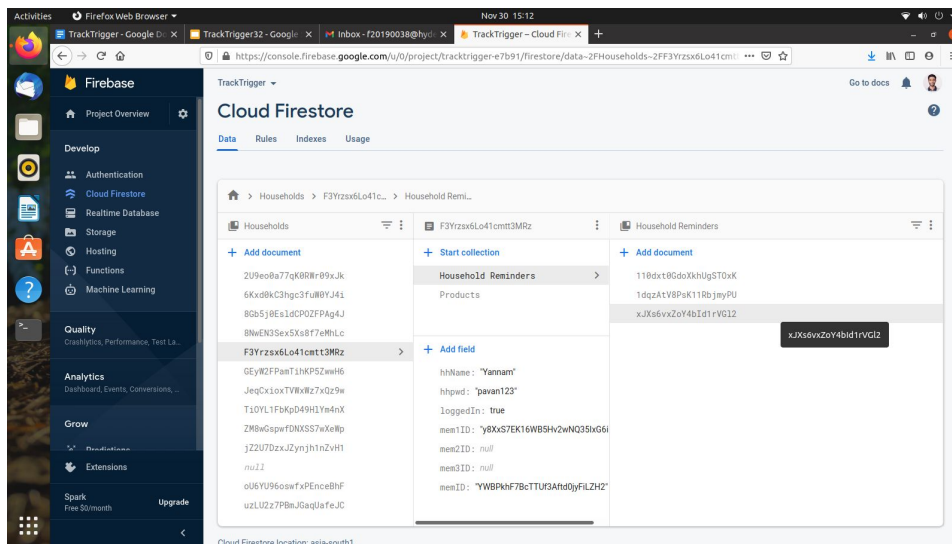
Backend

We have used a no sql firebase cloud database (Firestore) for our backend work. Firebase also offers free google analytic services which we plan to use in our future plans, wot deploy the app in local communities.
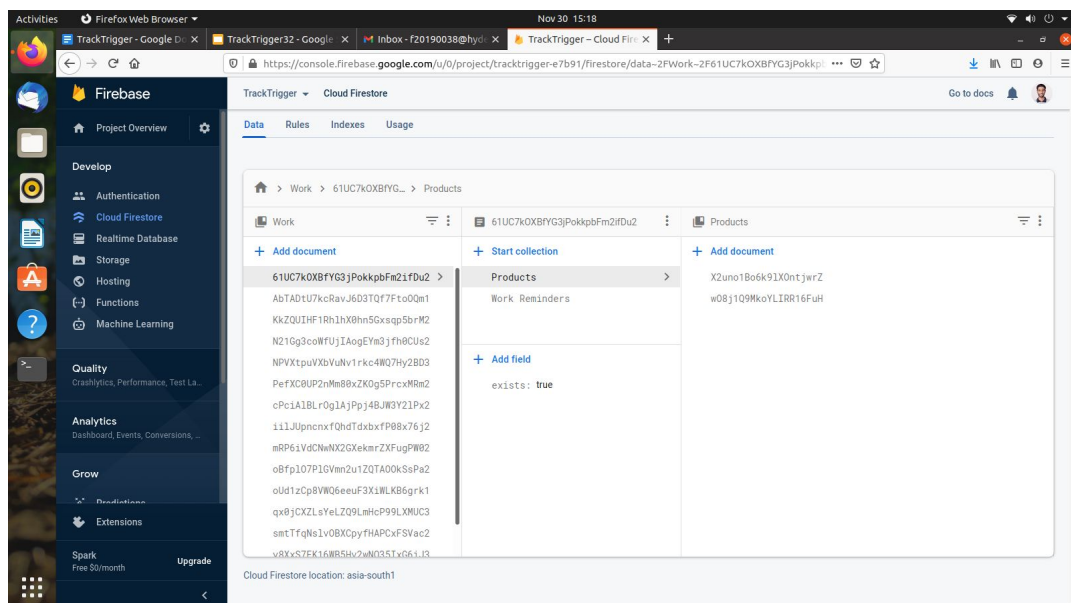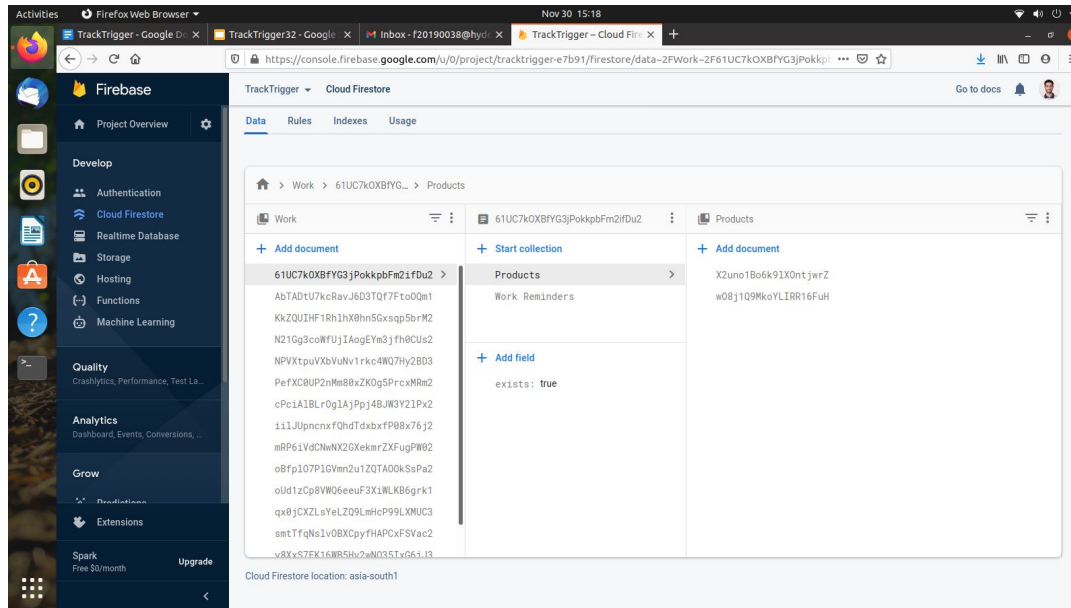
Our cloud is divided into two root collections: Household and Work.

Each Household root collection has a unique document (with a unique ID). Each of these documents is further divided into reminders and inventorycollections. Documents in these collections contain basic fields like time, title, product name etc.

Work root Collection contains documents with the Firebase user ID as the document ID. Therefore, each document is unique to a user. Each of these documents is further divided into Reminders and Inventory collections. Documents in these collections contain basic fields like time, title, product name etc.

THANK YOU