Remind-It

I'm an android app. I can remember all your tasks and remind them when you reach your location

Microsoft Hack-2022

>hackathon_

DEFINE POSSIBLE.

HACKED BY ~

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The Garage

ABSTRACT- What is this App?

In our present busy lives, smart phones are becoming our essentiality. Often, we forget things to do or buy things at various locations that we pass by. For instance, a user wants to purchase some books from bookstore and generally he/she forgets to buy it even though we pass by bookstores many times and remember it later. We often forget to send a message home after we have reached a particular destination. We forget to turn our mobiles to do-not-disturb or silent mode, when we are at professional meetings or office hours. This app is a one stop solution to such problems, which provides location-based alerts. The app stores the related information of any specific location given by the user and when the user comes under that specific location at any point of time, it automatically pops the message according to the location and stored information related to that in the database.

Timely reminders reduce chances of missing the location of interest and tasks to be reminded of can be performed at desired time and at desired location. In our modern busy days, this application can be a boon. The system uses public API service from Google Maps for the Map Integration, Android Studio and Java programming language to provide user-friendly and seamless location-based reminders.

Proposal- Our App

Whenever the app is installed, it requires the user permission to access the location. The user can give the inputs to the app based on his requirements, to trigger his desired event at the desired location. The application has a background job that keeps running and fetches the current location of the user using the integrated Google maps API. It compares the current location with target locations specified by the user for every five minutes and when the two locations match, it triggers the predefined events provided by the user earlier.

Major Functionalities:

- ✓ Fetches the current location using the integrated map.
- ✓ A background job keeps running which would identify current location.
- ✓ Compares current and destination locations every five minutes.
- ✓ Triggers the predefined actions when the specific destination is reached.

Features & Business Impact

Features:

- User Friendly UI which displays all the reminders and enables users to create and edit reminders with custom locations.
- User can create 5 different location-based events based on the requirements:
    - Sends a text message
    - Pops up a to-do list
    - Turns mobile to silent/vibration mode
    - Sends a WhatsApp message
    - Places a call

Business Impact:

- The app intends to resolve the problem of remembering all the mundane tasks in our busy lives and try to automate them.
- Every individual has benefits from this app, it has multiple different levels of benefit—individual, organizational and social benefits.
- It helps in increasing the efficiency and productivity of individuals by leveraging the automatic alerts based on locations.

Use Cases

Target users:

- Every individual with a smart phone and access to the location

Use Cases & Examples:

There are many use cases in our everyday lives. Some of the examples are:

a) A user can list out all the items he wants to buy at a specific grocery store, keeps adding items as he remembers them and when the user reaches the vicinity of that store, the notification of those items pops up, thus reminding them to buy items.
b) Whenever a professor reaches the academic building where he teaches, his mobile automatically can be turned to silent mode instead of him manually doing it every time.
c) A student can automate the “Reached” message to his Home/family members as soon as he reaches college every day to ensure safety instead of sending a message manually every day.

Technical Details

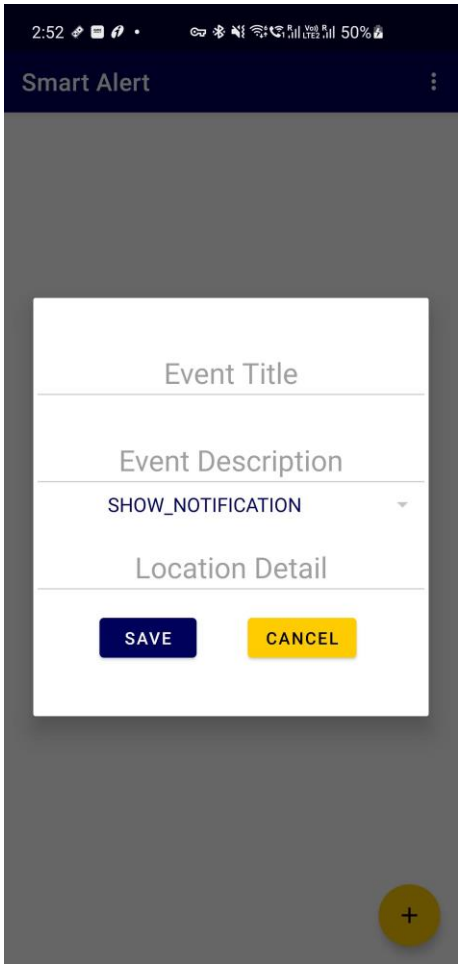
Requirements:

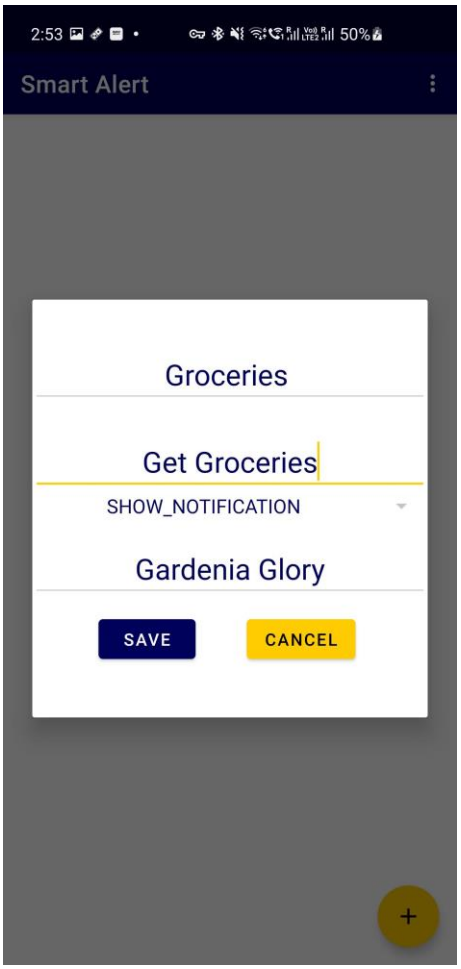
- Any android based mobile phone which contains inbuilt GPS receiver with a minimum software version 24(Android 7.0)

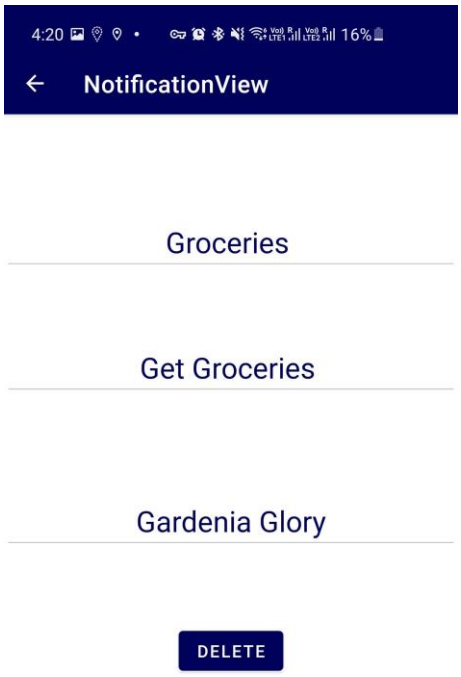
Tech Stack used:

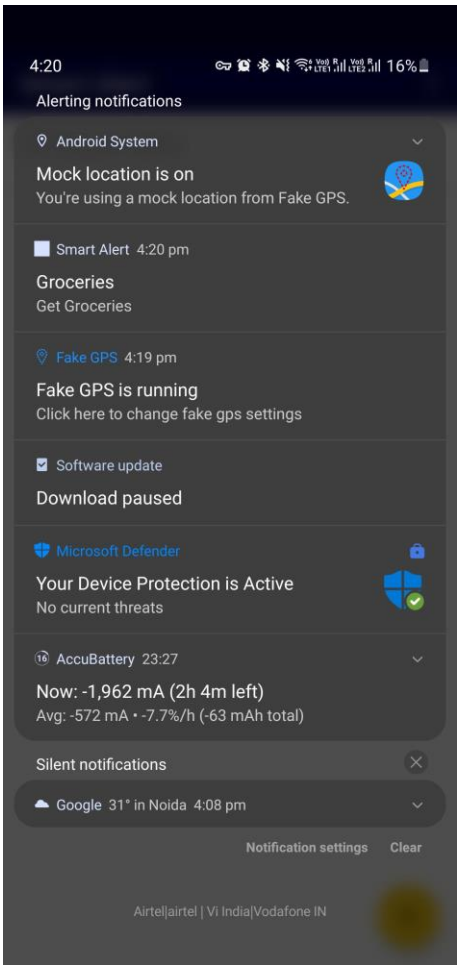
- Android Studio
- Java programming language
- Android 2.3 edition SDK
- SQLite database

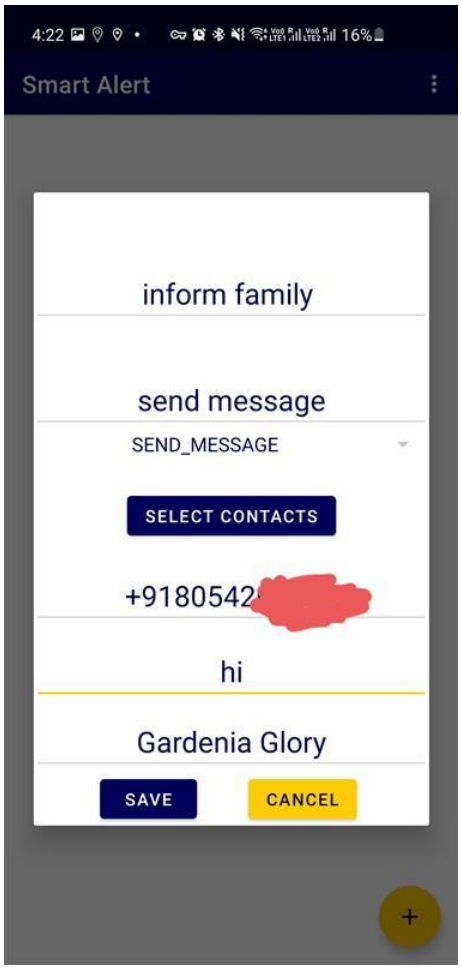
Application Flow

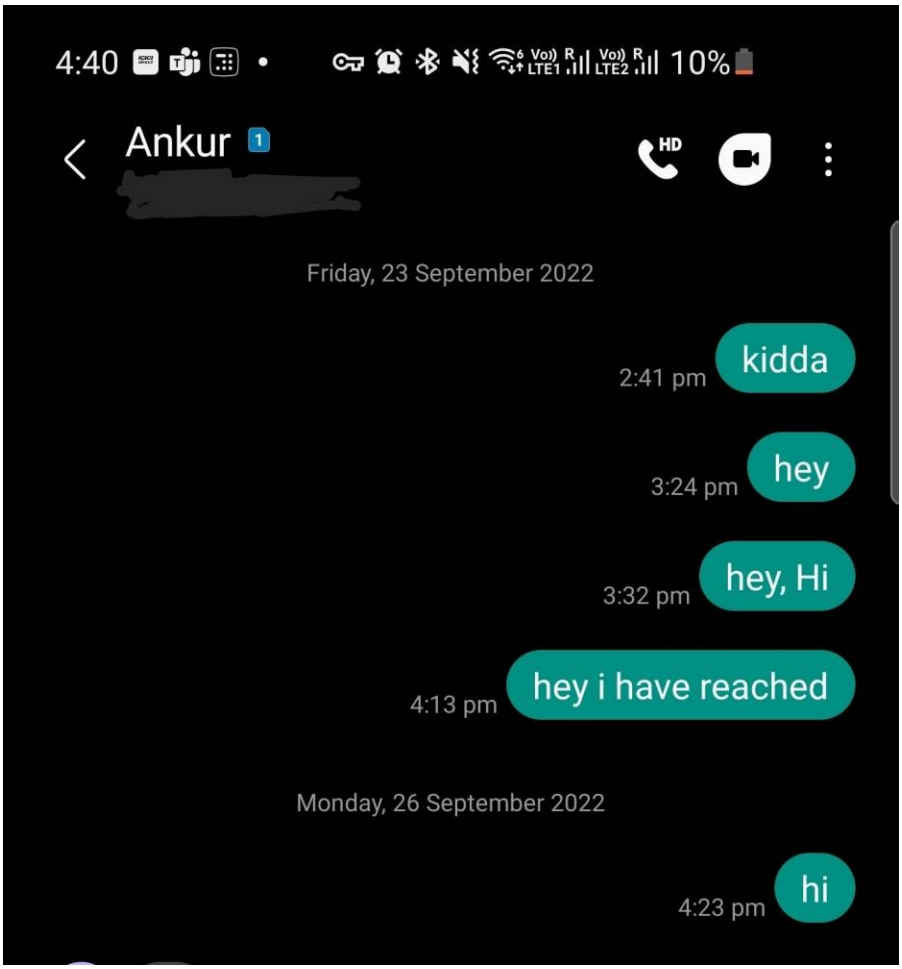



2:53
50%
Smart Alert
Groceries
Get Groceries
SHOW_NOTIFICATION
Gardenia Glory
SAVE
CANCEL


4:20
16%
NotificationView
Groceries
Get Groceries
Gardenia Glory
DELETE


4:20
16%
Alerting notifications
Android System
Mock location is on
You're using a mock location from Fake GPS.
Smart Alert 4:20 pm
Groceries
Get Groceries
Fake GPS 4:19 pm
Fake GPS is running
Click here to change fake gps settings
Software update
Download paused
Microsoft Defender
Your Device Protection is Active
No current threats
AccuBattery 23:27
Now: -1,962 mA (2h 4m left)
Avg: -572 mA • -7.7%/h (-63 mAh total)
Silent notifications
Google 31° in Noida 4:08 pm
Notification settings
Clear
Airtel|airtel | Vi India|Vodafone IN


4:22
16%
Smart Alert
inform family
send message
SEND_MESSAGE
SELECT CONTACTS
+9180542
hi
Gardenia Glory
SAVE
CANCEL


4:40
10%
Ankur
Friday, 23 September 2022
2:41 pm
kidda
3:24 pm
hey
3:32 pm
hey, Hi
4:13 pm
hey i have reached
Monday, 26 September 2022
4:23 pm
hi

Risks and Dependencies

Risks:

- ✓ There are no possible risks identified with the application

Dependencies:

- ✓ Requires the user permissions to access the location and to keep the location turned on always
- ✓ Has a dependency on Google maps API and integration

Future Enhancements & Additional Features

- The notification can have a snooze button. The system will notify the user again after T minutes if he is still in the vicinity of the target location.

  Scenario: *I have a task to purchase something from customs from an airport. The application will notify the user as soon as he is at the gate of the airport. But the user wants to be notified after 30 mins when he is done with all the formalities. So, in those cases the user can snooze that task for 30 mins.*

- The tasks can be pinged twice to the user, when he has reached the place and when he is leaving the place as well.

  Scenario: *The user has reached a particular place and the list is pinged to the user. The user forgets to do all the tasks which he listed in the list. Now, when the user leaves the place, as soon as he does so, we can ping the same list again, allowing the user to cross check, if he has done all the tasks or not.*

- Voice automated task creation – Like The user can just use his voice to tell our app what needs to be done and where and using voice to text conversion we can create an event for him , something like turn my phone to vibrate when I reach Microsoft Hyderabad in voice -> This should create an event in our app with event title can be like phone setting, description can be the entire statement, event type will be turn the phone to vibrate and location will be picked as microsoft hyderabad from maps.

- This feature can be integrated with the Microsoft To-do-App

- When a user writes a task along with the location as a sentence, for example: "Go to wonderla park when I reach hyderabad", in the task, the app could parse the sentence and automatically set hyderabad as target location for the task, instead of user manually setting hyderabad, in the location tab.

Thank You

~RemindIt