

CS654A: Project Report

Secure Me Android Application

By

Vipul Kumar (12816)

Sunil Chaudhary (12738)

Instructor: Dr. T.V. Prabhakar

Mentors: Sumit, Saurabh, Mohit



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Abstract:

In this project we have developed an Android Application that can be used for security purposes. We have worked on various feature like give tracking or track somebody when needed, raise alarm when destination is reached, send sms to somebody for help when accident detected. In accident case we can further work on accuracy on this app by taking more accurate data

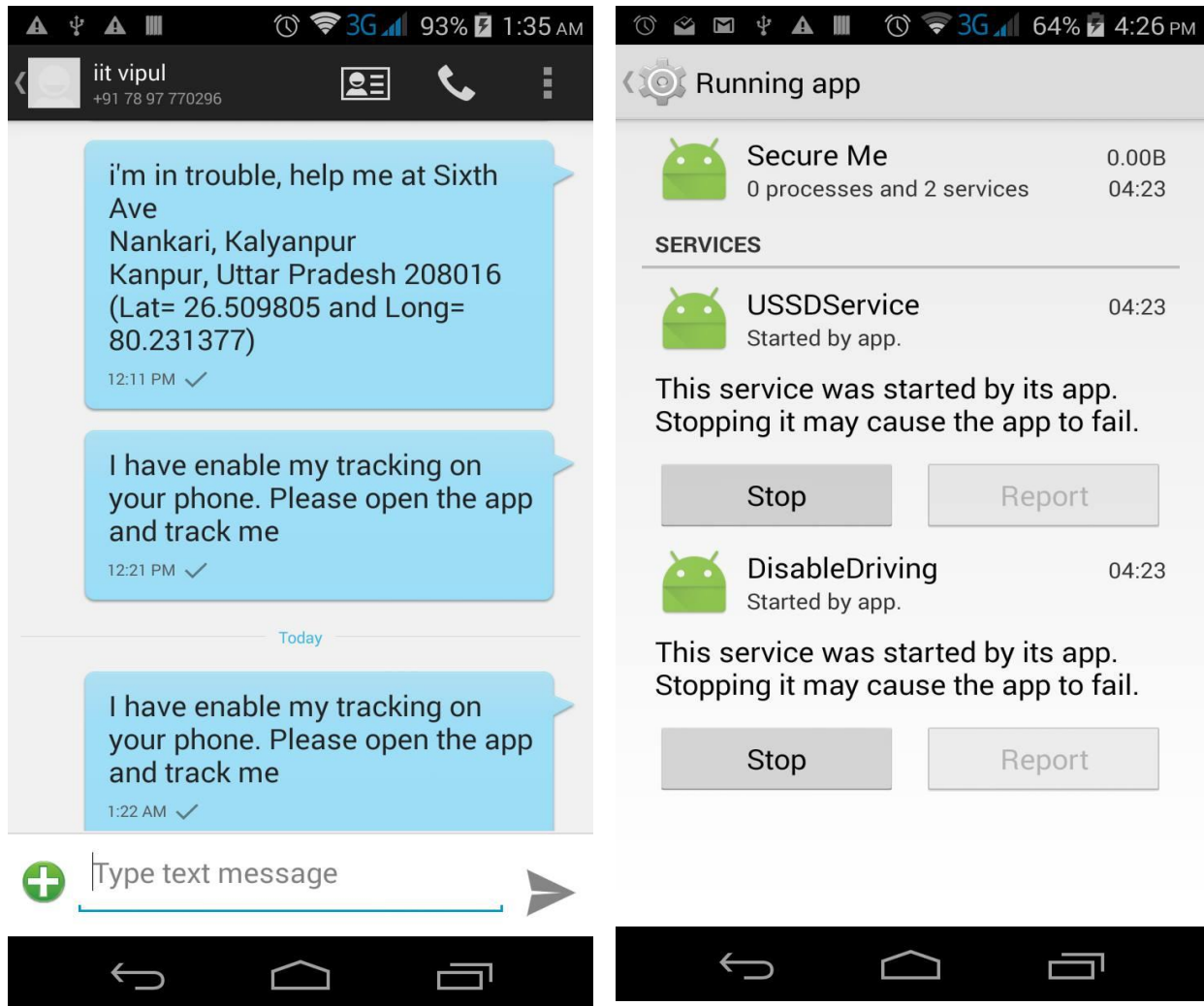
Introduction:

Nowadays people are using smartphones very widely. So an android application can be good idea to make your product (or idea) available to more people. And this app can be very helpful to the people who are more concerned about their security these days.

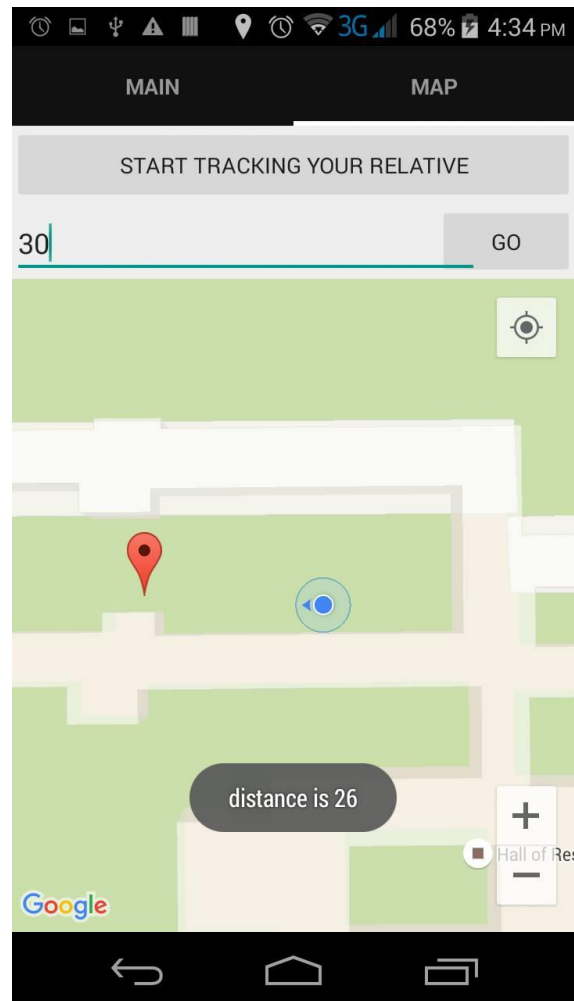
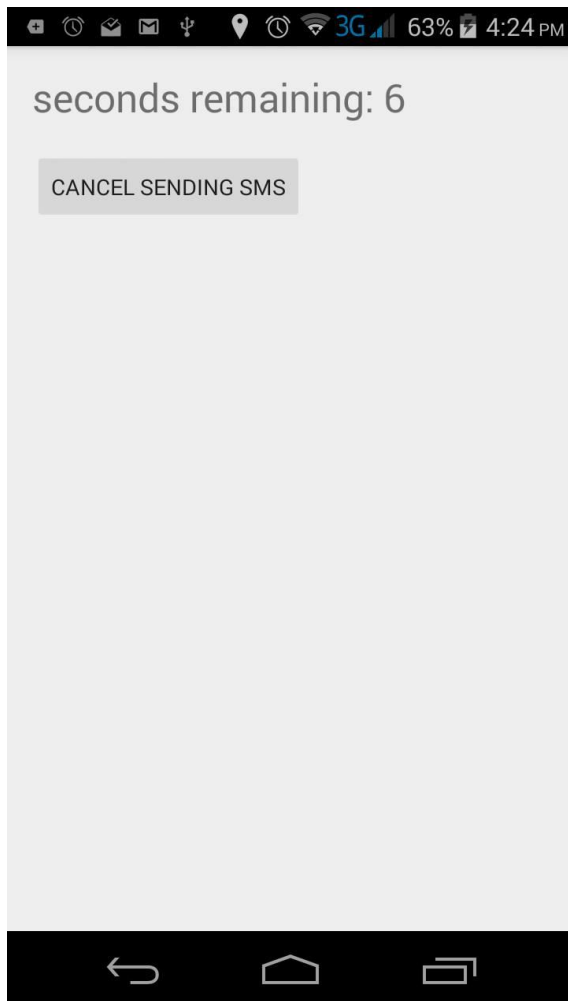
Main feature of our app which we have worked on:

1. One can allow his tracking by another user when needed
2. If anything wrong happens(such as accident) it'll send message to the selected user
3. Always disable airplane mode whenever app is working
4. Do a quick recharge in case of zero balance
5. Force the mobile to lock when driving above certain speed
6. Set destination and raise alarm when destination is reached
7. Flash light

Some Screenshots of our working app:



Figures: Sending sms when something bad happens and app feature running individually in background



Figures: Start timeout when accidentally mobile exceeds acceleration speed limit and setting destination

Quality Attribute which we have focused on:

- Performance and Responsiveness: Multi-threading has been used so components will work parallel to each other.
- Reliability and Dependability: Most services will work in background even if mobile is closed
- Availability: Max components of App are running stand alone on mobile so they will work till the mobile functions
- Maintainability and Reusability: Every feature has different modules so it can be easily changed, imported and exported.
- Flexibility: App can be easily further developed to introduce flexibility such that it can send sms to many users at a time and customize some feature like speed limit.

Tactics:

- Our project is based on Client-Server Architecture Style
- To check the server we have used ping-echo tactic