



International Journal of Innovative Research in Computer and Communication Engineering

(An ISO 3297: 2007 Certified Organization)

Vol. 4, Issue 3, March 2016

Anti Theft Mobile Tracker Application

Deebika.T^{#1}, Dhanalakshmi.S^{#2}, Durga.S^{#3}, Francis Shamili.S^{#4}, Merlyne Sandra Christina.C^{#5}

B.E. Student, Dept. of Computer Science and Engineering, Saranathan College of Engineering, Venkateshwara Nagar,
Panjapur, Trichy, Tamilnadu, India^{1,2,3,4}

Assistant Professor, Dept. of Computer Science and Engineering, Saranathan College of Engineering, Venkateshwara
Nagar, Panjapur, Trichy, Tamilnadu, India⁵

ABSTRACT: The introduction of Android Mobile phones has brought a new revolution in the mobile phone market and almost everyone might have experienced misplacing or losing their mobile phones. Hence it is necessary to develop an application in all smart phones to prevent the mobile phone theft. This paper describes a tracking application, which is embedded with a lot of features such as location tracking, SIM card detection, capturing of images, sending of message. An application for android mobile to find a lost mobile, deals with login of mobile user when mobile owner switch on the mobile the application will automatically started and it takes a snapshot of mobile owner. Also application gets the latitude and longitude value of the mobile by using the inbuilt GPS in mobile. The mobile moves from one place to another place the value of the latitude and longitude is taken and stored in the memory. Only the latest value is stored in the memory. Once the SIM card is removed from the mobile it wait for the other SIM card to be inserted. If SIM card is inserted then the application compares the owner's SIM card number and current SIM number. If SIM card number match, it should be in idle. If there is a mismatch, then the present latitude and longitude value of the mobile is sent as the SMS to the specified phone number and without the knowledge of the person. The application takes snapshot of current mobile user and send picture via Email to mobile owner's Email id. The proposed intelligent android Anti-theft application provides the safe and alert mode options (to avoid unwanted notifications). It is embedded with a lot of features such as SIM tracking based on location, detecting change in SIM card, application enabling at the time message sending and also delete important data from mobile phone. Thus proves to be different from the existing mobile tracker applications.

KEYWORDS: Android, Email, GPS, SIM, SMS and Wipe out.

I. INTRODUCTION

Android powers hundreds of thousands of mobile devices around the world. The smart phones have become attractive targets for the thief. There are a number of precautions that the users of the android phones can take to reduce the chance of their phone being stolen and to ensure that, in the event that the worst happens, the thief is unable to misuse the private data stored in the memory card. An android application that demonstrates a system which uses a regular mobile phone equipped with a GPS receptor and connected to a Global System for Mobile (GSM) network that takes advantage of these technologies in behalf of the user safety. The system is filled on with features like SIM card detection, location fetching through GPS and transfer of images to email address and delete important data from mobile phones. All these features work on the SMS basis. So, incoming SMS format plays an important role. The android application running in the Smart phone monitors all the incoming messages. If the SMS is received in a predefined format it reads the SMS and performs the expected task.

II. EXISTING SYSTEM

The existing system describes the features of the previous working model and their drawback. Existing system does all process in mobile phone. Once the application is installed then it get the location of the mobile whenever it is intimated. This location value is send as SMS to the owner of the mobile. There is no image capturing and wipe out features in a existing system. The existing system requires the GPS and mobile data should always be enabled. There is no possibility to enable the mobile data always in the android mobile phone.

International Journal of Innovative Research in Computer and Communication Engineering

(An ISO 3297: 2007 Certified Organization)

Vol. 4, Issue 3, March 2016

III. PROPOSED SYSTEM

The aim of the proposed system is to start the GPS service to track the location, front camera to capture images and data connection when it is intimated by sending a message so that it reduces the battery consumption and then the image of a person is captured and send via Email. This application also enables us to delete the confidential data in the lost mobile phone. With this app, your mobile is immediately enabling the application upon receiving the predefined template message from the pre-registered mobile numbers. When SIM card on your phone is changed, the location is automatically shared with the server. The role of the user in this application is to set the mode as safe when he changes the SIM card and to send SMS to the Android Smart phone having this application installed in it, when it is stolen or lost. The syntax of SMSs that can be set by the user and its functionalities are as follows.

1. If the SIM is changed, the backup number receives the SMS details of new SIM inserted.
2. If SMS is of the format "Detect", then the backup number receives the GPS value of the lost cell in the form of SMS.
3. If phone is switch on with another number means, automatically enable the camera to capture image and send as Email to target number.
4. If phone is switch on by same SIM card means, send SMS as enable application to enable the anti theft application.
5. If the received SMS contains the body as "format", then the application delete the confidential data in the lost phone such as contacts, call log, messages and SDcard.

Anti theft mobile tracker application provides the modules like

- Application installation
- SIM change detection
- Wipe system
- Alert

A. Application Installation

This module is used to fetch the real data from user and store into database using SQLite. In this module, first user interface where user has to provide SIM, IMSI number, Email id and alternate number then click submit button. Next it will store information in the database. User can change the alternate number and IMEI number.



B. SIM change detection

This service starts automatically in stealth mode when one SIM is removed and another is inserted. It will receive information as data from the database and check the SIM Serial Number with the database data. If SIM Number does not match with the database, then automatically capture the snapshot of current user without user interaction.



ISSN(Online): 2320-9801
ISSN (Print) : 2320-9798

International Journal of Innovative Research in Computer and Communication Engineering

(An ISO 3297: 2007 Certified Organization)

Vol. 4, Issue 3, March 2016



C. Wipe system

In the wipe system the application is enabled with a SMS such as the predefined template message. With this application the lost mobile delete the data automatically at the time receiving the predefined message from pre-registered numbers.



D. Alert

In this module the current location of unknown user is send as the SMS to a registered mobile number. Captured image will automatically send to Email. These processes don't need the user interventions.



International Journal of Innovative Research in Computer and Communication Engineering

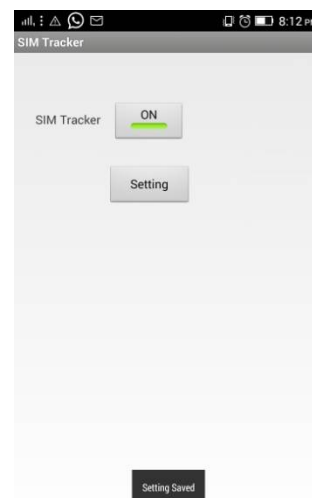
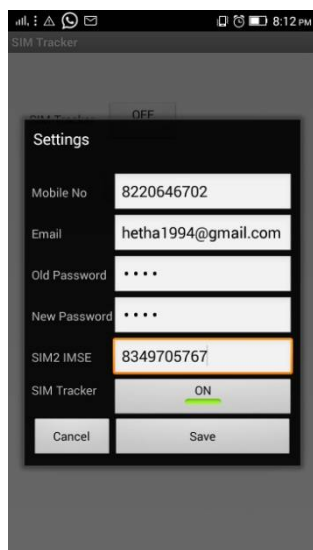
(An ISO 3297: 2007 Certified Organization)

Vol. 4, Issue 3, March 2016

IV. SYSTEM ARCHITECTURE



V. RESULT

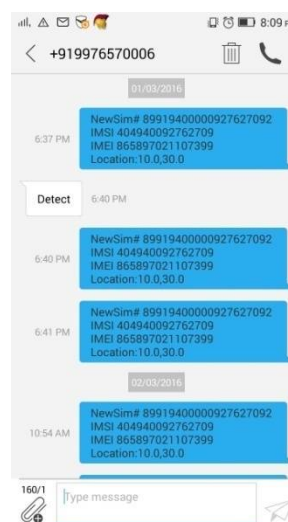




International Journal of Innovative Research in Computer and Communication Engineering

(An ISO 3297: 2007 Certified Organization)

Vol. 4, Issue 3, March 2016



VI. CONCLUSION

The project Anti Theft Mobile Tracker Application using GPS, Mobile network and Mobile camera aims to provide a security for the confidential data in the android mobile. The latitude and longitude value of the current location provided by the system helps to track the location of the mobile. The drawback of the existing model is that the tracking of the location and sending of message via SMS can be done only if the mobile data and GPS should be enabled round the clock. Thus there is no remote triggering process to enable the GPS and mobile data. There is no security for the confidential data for the theft mobile. This project includes the remote triggering option to enable the mobile data and GPS which helps to send the message via email and send the current location. In this case the system also checks that whether the SIM card has been changed in the mobile or not, and if so, then it sends the IMEI and IMSI number of the mobile to the registered mobile number which helps to get the new SIM card number. This system also includes the wipe out concept, which deletes all the confidential data in the mobile. Thus this system gives all information about the theft mobile that helps the user to find the thief and also the theft mobile.

REFERENCES

1. Luis C.M Varandas;Binod Vaidya;Joel J.P.C Rodrigues; "mTracker: A Mobile Tracking Application for Pervasive Environment" *IEEE 24th International Conference on Advanced Information Networking and Applications Workshops*.pp.962-967April 2010.
2. Lin, Ding-Bing B. "Mobile location estimation and tracking for GSM systems" *IEEE 15th International Conference on Personal, Indoor and Mobile Radio Communications*, vol.4, pp.2835-2839, Sep. 2004.
3. Bayir, Murat Ali" Track me! a web based location tracking and analysis system for smart phone users" 24th International Symposium on Computer and Information Sciences, pp.117-122,Sep.2009.
4. Hellebrandt,Martin ,Mathar,Rudolf "Location tracking of mobiles in cellular radio networks" *IEEE Transactions on Vehicular Technology*,vol.48,pp.1558-1562,Sep1999.
5. Sangwoo Cho; Haekyung Jwa; Joohwan Chun; Jong Heun Lee; Yoon Seok Jung; "Mobile position location with the constrained bootstrap filter in a cellular communicationsystem"Thirty-Fourth Asilomar Conference 2000,p.590.
6. Jami, I;Ali, M;Ormondroyd, R.F; "Comparison of methods of locating and tracking cellular mobiles and Their System Applications" , IEE Colloquium on Mobiles and Their System Applications, 1999,p.1/1-1/6.
7. Chao-Lin Chen; Kai-Ten Feng; "Hybrid Location Estimation and Tracking System for Mobile Devices" *IEEE 61st Conference on Vehicular Technology Volume 4*, 2005, p.2648.
8. Madlmayr, G.; Dillinger, O.; Langer, J.; Schaffer, C.; Kantner, C. "The benefit of using SIM application toolkit in the context of near field communication applications", International Conference on Management of Mobile business, 2007, p.5.
9. MobileTrackingSystemAvailable:<http://www.ersiontracker.com/dyn/moreinfo/win/66596>.
10. AccuTracking.Available:<http://www.accutracking.com/>.