

Anti-Theft Application For Android Based Devices: Lostdroid

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Abstract- *In the present the utilization of smartphone supported android software is increasing, many situations connected with anti-theft have already been planned and lots of code supported anti-theft have conjointly been developed, however most of those code don't seem to be much obtainable on regular basis and it's tough to spot the crook by exploitation these software's e.g.(find my device by google , lost android).The aim is to place forward a brand new scheme, which reinforces this situation, supported new technologies like multimedia system Messages (WhatsApp, email). The situation planned during this work is completely addicted to the hardware of your smartphone like camera (front & back) and support for multimedia system messages. Once this code is put in, it'll add the background it will browse message validate key message and method functionalities like fetching device location send it via short message service or WhatsApp with image attach to that, it'll conjointly stop unauthorized user from switch off the device.*

Keywords- Android Device, App, Smartphone, Security, Location, Hardware, Multimedia message, Lock Device, SMS, Remote Access, snapshot, email.

I. INTRODUCTION

The latest mobile phones like android based mostly mobile phones, known as smartphones, are changing the approach we tend to live our lives and became a awfully vital part of our everyday life. Smartphone's amendment the ways in which of communication not like mounted line phones, it provides a bonus of human activity with anyone nearly through video-conferencing, email, etc. Now a days, Smartphone's are acting sort of a laptop, it are often accustomed store info, documents etc., and may be shared with anyone through web. These latest Smartphone's are terribly useful for doing business. Company connected info and documents are often viewed anyplace and may be shared with anyone. Nowadays automaton based mostly mobiles phones/ devices are very hip as a result of it provides an outsized variety of utilities for hand-held devices through that it acts as a personal computer in a very pocket. Thanks to its ASCII text file nature an outsized variety of utilities has been

developed and automaton package is obtaining utilized in several mobile phones. Thanks to its small-size, it are often taken or left somewhere terribly simply and also the confidential-information of any organization or personal details hold on the device memory can be easily exposed.

Our project LOSTDROID puts forward a method through that users are able to find their phones terribly simply. in an exceedingly case if a user United Nations agency has put in LOSTDROID application in his phone loses his phone, he/she would be able to send a message via some other's phone to his phone in order that his phone mechanically sends him/her the situation of the phone additionally because the pictures of the location of the phone and can also lock the phone so that users valuable info won't get purloined or any malpractices may be through with the phone.

LOSTDROID puts forward a technique through which the thief/person, who steals/found any android based mobile phone installed with this application, gets captured and the user can make him/her stop misusing any confidential information. This application includes the latest technology like email, WhatsApp for sending mms(multimedia messaging service) where you can send pictures ,live location etc.to other device, which helps us to find geolocation as well as to recognize the person who's holding the device. This application can also stop the person/thief from switching off the device, so that the application can continuously send the live location to the user remotely accessing it.

The basic plan behind creating a project like LOSTDROID is knowing the importance of mobile phones in our day to day routine. Since one's dependence on our phone has redoubled vastly its vital to search out completely different secure ways in which therefore on defend our valuable information at any price. For this our project can use several advanced options like MMS, SMS, would lock the screen and would conjointly take pictures exploitation the hardware of the phone and would overcome the problems found in previous applications.

II. IDENTIFY, RESEARCH AND COLLECT IDEA

For this project, we have studied some published papers and applications which are present in market right now, which are similar to our field. Papers which we have studied

Azim Shan Khan, Mohamad Naved Qureshi, Mohamed Abdul Qadeer, Antitheft Appn. for Android based mobile devices[1]. Wahid Ahmad, Riaz Ali, Salman Saleem, A research on smart-phone application for location tracking through internet server and short messages service (sms) July-August, 2015[2]. M. Palash Uddin, Zahidul Islam, Nadim, "GPS-based geolocation Tracking system via android device" international journal of research in computer engg. and electronics VOL: 2 ISSUE: 5[3]. CrazySoftech. (2015). Mobile Location Tracer. Retrieved: <https://play.google.com/store/apps/details?id=com.crazyapps.mobilelocationtracker&hl=en>[4].

We rigorously studied the given paper. From the primary paper Authors Azeem Ush Tai Khan, Mohammad Naved Qureshi, prophet Abdul Qadeer in their paper Anti-theft application for automaton primarily based devices 2014 IEEE International Advance Computing Conference (IACC) has mentioned a way within which the felon, United Nations agency steals any automaton primarily based device put in with their application, gets captured and also the user will build him/her stop misusing any counsel. Their application includes the newest technology like MMS. The situation planned in their work is completely addicted to the hardware of user smartphone like camera (front & rear) and support for transmission messages. Once this code is put in, it'll add the background, stores this SIM range in a very variable and keeps checking unceasingly for SIM modification, whenever SIM gets modified from mobile, it'll take snapshots and record a video within the background i.e., while not taking user permission so it'll send associate MMS.

In the second paper, "Wahid Ahmad, Riaz Ali, Salman Salem, a research on mobile application for geo-location pursuit through net server and short messages service (sms) July-August, 2015" This paper aims to develop an golem application for android package (OS) platform that mechanically send the present address location of the user to the server info and might even be sent sporadically through SMS (short message services) to store mobile numbers by the user. Location of mobile device is within the type of latitude and great circle that is reborn into full address by this application that features country/state, city, and street variety. just in case of emergency the user will merely press the emergency button and also the application can mechanically

send SMS alert as well as location address to the shop mobile numbers which may be a station house or shut relative. otherwise to trace the user is that the net server info that keeps change the situation address as long because the application is connected or last location address. the look shows the way to implement and develop this app and has been tested on few mobile devices it somewhat be tested on large variety of mobile devices later.

In the third paper, with recent technological advancement of recent science individuals are currently expecting the data concerning the situation of any object for pursuit functions. Presently, we would like a lot of location primarily based services for being advanced and to avoid wasting time and cash conjointly. GPS may be a system that is already enforced and everybody will access it with none restriction. Having the power of GPS to develop this method we'd like a GPS device to calculate the situation from the data taken from GPS. Hence, we've chosen golem device to perform this calculations as a result of golem portable is value effective and offers two-dimensional functions having some special intrinsically options like GPS service. Thus, this method is developed for location pursuit of a gaggle of individuals with a proximity alert system exploitation numerous latest stringent tools and technology like mythical being, Java, AVD, LAMP etc.

Applications which we referred in this project are:

- [1] Google: Find my device
- [2] Android Lost

Google find my device android application has been developed by google LLC. Find my device helps user to locate a lost android device and keeps your data safe and sound the device while you're looking for it. It provides features like device status (imei number, battery percentage connection details etc.), location, show a custom message, alarm beeping, lock device, erase data.

Lost-Android application by Thais Borg, this application allow the user to remotely access their mobile device using their web service(<https://www.androidlost.com>) main features they are providing are locate device by GPS or network, lock phone erase SD card, start alarm, start/stop GPS, phone status, take a picture from camera ,email when SIM card is changed. The app does not connected to a server, so there is no extra battery usage. It also uses the Device Administrator Permissions.

III. STUDIES AND FINDINGS

We have compared the Applications to determine what are merits and demerits of them and how can it be beneficial to us.

Sr.	Application	Merits	Demerits
1.	Google:Find My Device	It provides the current status of device(battery, imei no. etc). Format data, ring device, message on lock screen, last online location of device.	User has to access his google account from different device which is not possible if the account is 2 step privacy enabled, takes more time, work only if device has internet on, does not click the picture.
2.	Android lost	Allow user to access device remotely, fetch important data from device, lock device, capture images, ring device,	Requires a system to open their site, time taking, user has to login his google account, using id pass anyone can retrieve the data present in device

After all this comparisons we have seen that both applications does not stops the unauthorized person from switching of the device and both will work only if the internet is on in the device.

To overcome these problems this new application allow user to access his device by just sending a normal sms to the device. Application will automatically enable the wifi and mobile data in device and send the device information to the other device with the current location and images of front and rare camera of device apart from that the application will also hide the device power turn off menu from the lock screen so that the one who found the mobile device won't be ready to shut down the device.

IV. WORKING

Once the proposed application is installed in the device it will ask user to add email-id, trusted whatsapp number, number, and Secret key. After filling these fields the info is passed to the applying activities. Once the device standing is fetched from the device into the applying the app can begin checking sim card variety and keeps reading all the incoming message from inbox in background. Once the app finds the message with the valid key provided by the user at the time of installation. Now the application will call the

activity in background to perform some functionalities like lock device, fetch device location, lock power key on lock screen, enable gps /mobile data if disabled, click pictures from (front/rear) camera, send the collected information to the activity where the user trusted email-id and mobile number is stored then it will send the multimedia message as well as normal sms to email id and mobile number given at the time of installation.

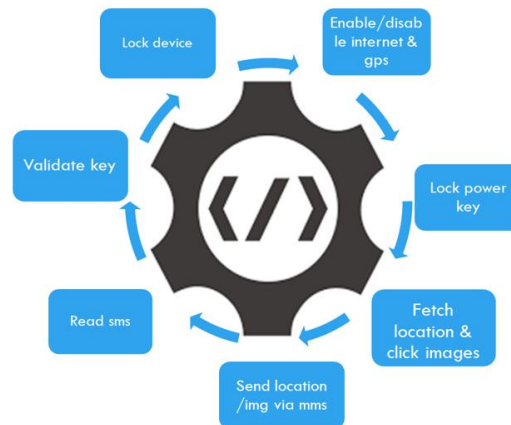


Fig. basic flow of application lostroid

V. CONCLUSION

This paper present a anti-theft android application for smart-phones. The application deploys an security solution for all android smartphone users that meets users immediate and long term requirements by providing the images of the thief, which makes easy for the user to identify the thief and make him/her get caught and arrested. This app will stop the unauthorized person from switching off the device by hiding the power off menu from lockscreen. We are enhancing this application by providing the information about the geolocation of the android based smartphone with the help of text messages as well as sending multimedia message like e-mail. this application will also check the sim card serial number every time the device will turn on.

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REFERENCES

- [1] Azim Ush Shan Khan, Mohamad Naved Qureshi, Mohamad Abdul Qadeer, Antitheft Appn for Android based devices.
- [2] Wahid Ahmad, Riaz Ali , Salman Saleem, A research on mobile application for location tracking through web server and short messages service(sms) July-August, 2015.
- [3] Palash Uddin,. Zahidul islam,. Nadim, “GPS-based location Tracking ystem via android device” international journal of research in computer engineering and electronics VOL: 2 ISSUE: 5.
- [4] CrazySoftech. (2015). Mobile Location Tracer. Retrieved: <https://play.google.com/store/apps/details?id=com.crazyapps.mobilelocationtracker&hl=en>
- [5] Google Find My Device Android application by Google LLC.
- [6] Lost Android Android application by Theis Borg.
- [7] Developer. Android. (2015). Android, the world's most popular mobile platform. Retrieved from [developer.android.com: http://developer.android.com/about/index.html](http://developer.android.com/about/index.html)
- [8] BruSd. (2015). Google Play store. Retrieved from Google Play Store website: <https://play.google.com/store/apps/details?id=allcall.location.tracker&hl=en>