

# Mobile Theft Monitoring

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**Abstract:** The objective of this project is to create an application “Theft Monitoring” where we are able to find our lost phone easily. Sometimes we accidentally tend to replace our phone somewhere and we end up searching for it. Hence to avoid such situations and keeping the recent demand and the greed for phones in mind we have decided to develop this application “theft monitoring”. This application gets activated as soon as the person who has stolen the phone changes the SIM and switches on the phone. The user will not know that an automatic message is being sent to the predefined number. This message will contain the SIM details as well as the location details. This information will be sent as a message to the destined number till the application is uninstalled in the mobile. This makes it easy to find the location of the phone and track the user. The location of the device is found using GPS and the details are sent to the predefined number in the form of a message as soon as the user changes the SIM and switches on the phone. The application also consists of the setting of the number to which the message regarding the SIM and the location details are to be sent .In this application all the operation are done in the background using the concept called “service”. Thus “theft monitoring” is a useful application which helps us to track and find the device in effective manner.

**Keywords:** Theft Monitoring Application, SIM GPS Service.

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## I. INTRODUCTION

Nowadays since the usage of phones has increased, the demand for creative and new applications has also increased. The security of mobile phones play an important role hence we decided to create a project called “theft monitoring”. This makes it easy to find the location of the phone and track the user. The location of the device is found using GPS and the details are sent to the predefined number in the form of a message as soon as the user changes the SIM and switches on the phone .The application also consists of the setting of the number to which the message regarding the SIM and the location details are to be sent .In this application all the operation are done in the background using the concept called “service”. Thus “theft monitoring” is a useful application which helps us to track and find the device in effective manner.

### **Android:**

**Android is a Linux-based operating system for mobile devices such as smartphones and tablet computers. It is developed by the Open Handset Alliance, led by Google, and other companies.**

It is a mobile operating system that is based on a modified version of Linux. It was originally developed by a startup of the same name, Android, Inc. In 2005, as part of its strategy to enter the mobile space, Google purchased Android and took over its development work (as well as its Development team). Google wanted Android to be open and free; hence, most of the Android code was released under the open source Apache License, which means that anyone who wants to use Android can do so by Downloading the full Android source code. Moreover, vendors (typically hardware manufacturers) can add their own proprietary extensions to Android and customize Android to differentiate their products from others. This simple development model makes Android very attractive and has thus piqued the interest of many vendors. This has been especially true for companies affected by the phenomenon of Apple’s iPhone, a hugely successful product that revolutionized the smartphone industry. Such companies include Motorola and Sony Ericsson, which for many years have been developing their own mobile operating systems. When the iPhone was launched, many of these manufacturers had to scramble to find new ways of revitalizing their products. These manufacturers see Android as a solution — they will continue to design their own hardware and use Android as the operating system that powers it.

The main advantage of adopting Android is that it offers a unified approach to application development. Developers need only develop for Android, and their applications should be able to run on numerous different devices, as long as the devices are powered using Android. In the world of smartphones, applications are the most important part of the success chain. Device manufacturers therefore see Android as their best hope to challenge the onslaught of the iPhone, which already commands a large base of applications.

#### Features of Android:

However, Android itself supports the following features:

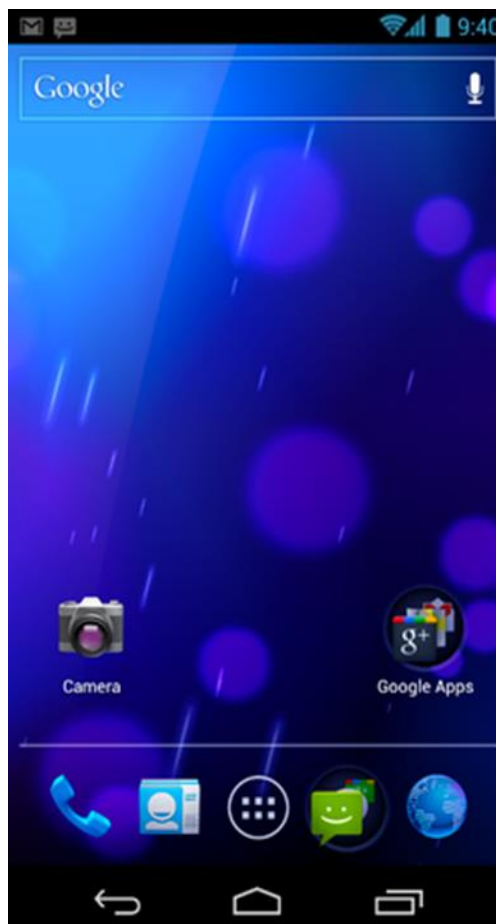
**Storage:** Uses SQLite, a lightweight relational database, for data storage.

**Connectivity:** Supports GSM/EDGE, IDEN, CDMA, EV-DO, UMTS, Bluetooth (includes A2DP and AVRCP), Wi-Fi, LTE, and WiMAX.

**Messaging:** Supports both SMS and MMS.

**Web browser:** Based on the open source WebKit, together with Chrome's V8 JavaScript engine.

**Media support:** Includes support for the following media: H.263, H.264 (in 3GP or MP4 container), MPEG-4 SP, AMR, AMR-WB (in 3GP container), AAC, HE-AAC (in MP4 or 3GP container), MP3, MIDI, Ogg Vorbis, WAV, JPEG, PNG, GIF, and BMP.



Home screen displayed by Samsung Galaxy Nexus, running Android 4.0 "Ice Cream Sandwich".

**Hardware support:** Accelerometer Sensor, Camera, Digital Compass, Proximity Sensor and GPS.

**Multi-touch:** Supports multi-touch screens.

**Multi-tasking:** Supports multi-tasking applications.

**Flash support:** Android 2.3 supports Flash 10.1.

**Tethering:** Supports sharing of Internet connections as a wired/wireless hotspot.

**Foundation:** Android, Inc. was founded in Palo Alto, California, United States in October, 2003 by Andy Rubin, Rich Miner (co-founder of Wildfire Communications, Inc.), Nick Sears (once VP at T-Mobile), and Chris White (headed design and interface development at WebTV) to develop, in Rubin's words "...smarter mobile devices that are more aware of its owner's location and preferences". Despite the obvious past accomplishments of the founders and early employees, Android Inc. operated secretly, revealing only that it was working on software for mobile phones. That same year, Rubin ran out of money. Steve Perlman, a close friend of Rubin, brought him \$10,000 in cash in an envelope and refused a stake in the company.

#### Design:



#### Features:

- **Connectivity:** Android supports connectivity technologies including GSM/EDGE, IDEN, CDMA, EV-DO, UMTS, Bluetooth, Wi-Fi, LTE, NFC and WiMAX.
- Orientation, scaling, pixel format conversion) and accelerated 3D graphics.
- **Multi-touch:** Android has native support for multi-touch which was initially made available in handsets such as the HTC Hero. The feature was originally disabled at the kernel level (possibly to avoid infringing Apple's patents on touch-screen technology at the time). Google has since released an update for the Nexus One and the Motorola Droid which enables multi-touch natively.

#### EXISTING SYSTEM WITH FEATURES:

In the existing phones we only have the facility where the location of the device is tracked and is sent back to the user. In such cases if the user has lost his phone and the person who has taken the device changes the SIM and replaces it with another SIM then the tracking of location will be of no use since the SIM has been replaced with another SIM and even if there is a provision of sending the location of the device to another android phone, the information is not enough to find out the location of the device. This application combines both the details that is the SIM and the location details and sends it in a message to the predefined number making the tracking of the device an easy task.

#### GPS:

GPS modules are popularly used for navigation, positioning, time and other purposes. GPS antenna receives the location values from the satellites.

1. Message transmission time
2. Position at that time

#### PROPOSED SYSTEM WITH FEATURES:

In our application "theft monitoring" gives both the SIM details as well as the location details of the device which has been stolen. As soon as the user removes the SIM and replaces it with another SIM the GPS tracks the location of the device and sends it in the form of a message to the predefined number which has been set by the owner of the phone. Additionally this application takes all the SIM details such as phone number, SIM serial number and the IMEI number

and sends these details as a message to the predefined number. It is an application where it helps the user to find out where the device is if it is stolen. when the person steals the phone and changes the SIM an automatic message which displays the location of the device, SIM number, phone number, IMEI number will be sent to a number which we specify in the settings . Thus the device that has been stolen will be found easily. In our application we have the facility to specify the number to which a message about the location. The application also consists of the setting of the number to which the message regarding the SIM and the location details are to be sent. In this application all the operation is done in the background using the concept called “service”. A special feature of this application is that we have provided a long press for the specification of the broadcast receiver number in the application itself which the user will not know. The screen will be displayed to him.

#### SCOPE:

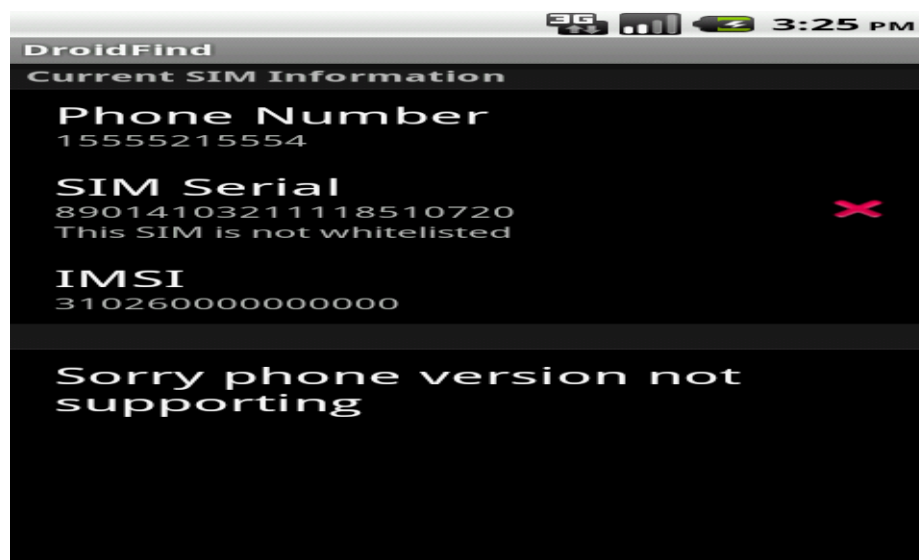
The scope of this project is that we will be able to get our device back and we will get the SIM details even if the person has changed the SIM. In addition to that we will also get the phone number and the location details which make the theft monitoring action an easy task. The objective is to design a simple, intuitive interface with limited screen estate for the monitoring of the theft action.

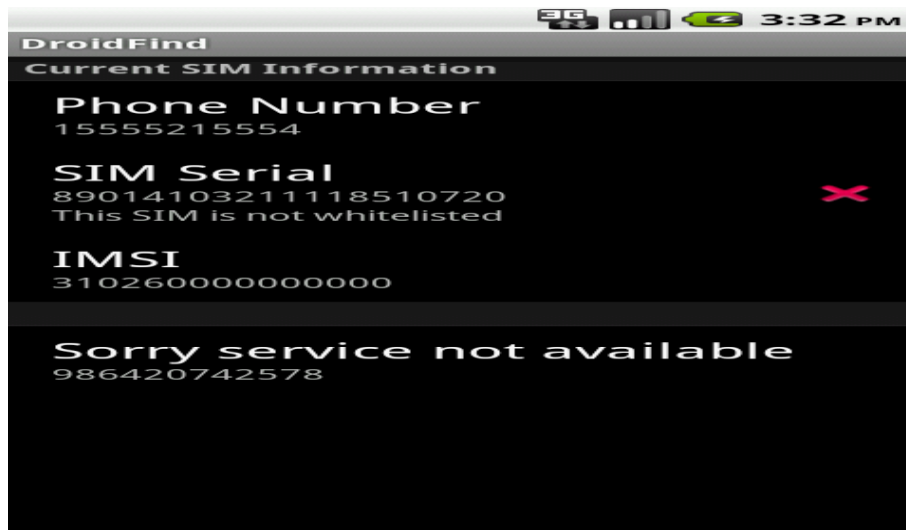
#### FEATURES:

The main feature of this project is that this application does not need any special indication or operation, the SIM and location details are automatically sent as a message to the destined number as soon as the user changes the SIM and switches on the phone. Another feature of this project is that we have the option to put the SIM in white list, so that it traces only if a new SIM has been inserted by another person and not our permanent number. Usually when a device is lost we have applications where only the location of the phone is sent to another phone but in our project the SIM details and the location details are sent to the destined number making the tracking process a less tedious job. Our project works in such a way that the user will not be knowing that the SIM and the location details is being sent as a message to a specified number as soon as he changes the SIM switches on the phone. Since nowadays the craze and the greed for phones has increased it is becoming highly difficult to protect and safeguard our devices Hence we have proposed this project in such a way to get our devices back even if it gets stolen.

#### OUTPUT SCREENS:

When the application is opened the screen is appeared as below immediately after the user changes the SIM and replaces it with another SIM. “Sorry phone version not supporting” is where we give the phone number of the broadcast receiver to whom the message is sent. Since the user should not understand such a name is given. And it doesn’t open unless and until we give it a long press.. The second screen shot is displayed when the broadcast receiver number is entered in the box.





## II. CONCLUSION

Purchasing a latest and a good phone should not only be the priority of a user. What play an important role is the maintenance and the security of the device. In such a hectic and a busy life people tend to forget the small things in their life and misplace them at times, and they end up searching for it. Our application comes in handy in such situations. "Theft monitoring" is such an application which helps us to track the device. When the user takes the device and changes the SIM the application opens and checks the location of the device using GPS. The location details along with the SIM details are sent in a message to the predefined number which has been set by the owner of the device. This application helps the owner of the phone to get his phone back easily and effectively. In other phones there is no facility of getting the SIM details but this application gives all the details required to get his device back. Thus this is a very useful application for every mobile user.

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