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An intelligent recommendation system for tracking larceny mobile

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ABSTRACT

Most of the people fully depend on their mobile phone for their daily day to day activities. Using the mobile phone, the people complete their work in time but not able to learn to keep their mobile safe. Even though, the mobile companies providing some kind of security like password for the mobile, it is not sufficient to keep it safe. Because of that, urgently we are in need of finding the new or enhanced security mechanism to keep our mobile safe. Here, the new mobile application is proposed which will provide the facilities to track the larceny mobile by sending the person image, location details and restricting in using the mobile and its app installed already further. In addition, the person details who had stolen our mobile phone will be reviled to the registered mobile numbers. This proposed mobile application providing more security than existing systems and performing well.

KEYWORDS: Mobile tracking, theft mobile, Larceny mobile

1. INTRODUCTION

"Tracking Theft Mobile" APP is an application for smart phones that works on Android Operating System. If the mobile is lost, we have to suffer a lot. The existing mobile tracking app is only used to identify the locations with the help of SIM NUMBER from other mobile Hoh, 2007; Chadil, 2008, otherwise we can able to find the new SIM card number Beresford, 2003; Michael, 2006. Suppose when the SIM card is thrown, we are not able to find the mobile. Android is a powerful Operating System supporting a large number of applications multitasking ability in the Android platform. Mobile tracking method using a constrained Bayesian bootstrap filter with signal power measurements Sangwoo Cho, 2000; Smailagic, 2002 is the existing system but need to calculate the power also. To track the stolen mobile device, we are proposing a new App. Our new proposed App is a Tracking Theft Mobile (TTM).

So, we propose this TTM app to overcome this problem. The main aim of this TTM App is to find out the theft mobile or the mobile that had lost effectively. When we lost our mobile, the person who had taken our mobile will be restarted our mobile once again by inserting the new SIM card. While restarting the theft mobile, this TTM app will send the default message like "Hello I Am Using Ur App" to the contact number Huang, 2006, which we had already saved in our phone memory.

The two additional features handling by this TTM app. Firstly, it will send the current location of the user via GPS, it is a technology where satellites send down radio signals which GPS units and receivers use to work out their current location (which is shown by latitude, longitude and elevation).

Working of GPS: There are 24 working satellites circling the globe at any given moment. A GPS navigator or GPS tracker searches for the transmission signal from at least three satellites) who had using our phone i.e., exact address of the user. Finally, it will also send the image captured via front camera automatically. This app can also be used by the user in an emergency situation.

System Architecture: The mobile phone is restarted by the person who had stolen it. By restarting your mobile phone, it will send us the default message like "Hai I'm using Ur app". Also it sends the current location of the user through Global Positioning System. The additional feature in this TTM app is that it will also send the automatically captured image of the person who is currently using your mobile phone. Using this information's, we can track your mobile phone easily. When the mobile restarted, the default text message will be sent to the particular contact number saved in the app. The text message, image captured and location through GPS will be identified. If it is received, the mobile can be tracked else it cannot be tracked.

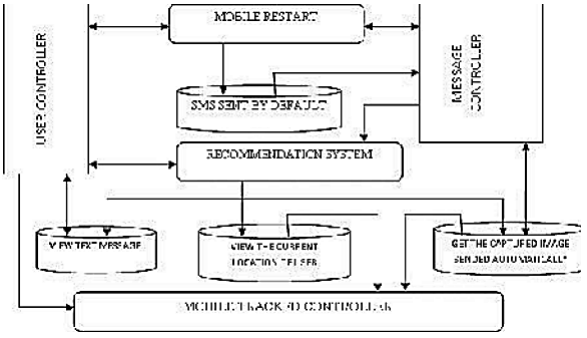

Figure.1.Proposed System Architecture

User Controller: Through User controller, the user will restart the mobile. At the same time the registered mobile will receive the SMS regarding the mobile location and the person details who is handling the mobile at present.

Continuously, the controller will try always to track and receive the SMS.

Message Controller: The message controller will always track the mobile action and operation. According to the actual position of the mobile, the message controller, based on the recommendation system direction will send the message and receive the message. The collective messages will be retrieved from the database in which the predefined messages are stored already.

Mobile Tracked Controller: Based on the mobile user controller activities and the data stored in the database, as well as the message controller in which the message received from and delivers to, process will be analyzed and the location of the mobile will be tracked and with help of message controller, the suitable message will be delivered to the user.

Recommendation System: The recommendation system is one of the important sections of the proposed system. This will coordinate all the functions involved in the proposed system. Collecting different inputs from different section and based on the rule in the rule base and messages received from mobile, the recommendation system will recommend the suitable message to be delivered in which the location details mobile details and also the person who is using this mobile with sim card support. It purely rule based decision support system.

Apart from different process, in this proposed system, we are also maintaining different database for different purpose to store different kinds of data collected from many resources. But everything will be coordinated and controlled by the recommendation system. Through this proposed system, the quality, efficiency and also time management are all handled properly and improved to the accepted level.

2. RESULTS AND DISCUSSION

The message will be sent to the particular contact number. With the help of information, we can track the mobile easily. GPS is automatically locating the latitude & longitude and finally it find the location area.

Proposed Algorithm

Input : save the contact numbers to the phone memory

Output: will receive the message with default text, location and image of the stolen person

Proposed Algorithm

STEP-1: Switch off and change the sim
STEP-2: Initialize the app
STEP-3: Check the sim network and mobile number
STEP-4: verify the mobile number and profile
STEP-5: if is registered sim and mobile number, goto step 10
STEP-6: If not, receive the default message
STEP-7: if message is received
STEP-8: read the text message
STEP-9: view the location via GPS
STEP-10: then see the image captured automatically STEP -11: loc all the application installed in the mobile STEP-12: send message to all registered mobile numbers STEP-13: track your mobile phone
STEP-14: end

The mobile phone is restarted by the person who had stolen it. By restarting your mobile phone, it will send us the default message like “Hi I am with your application”. Also it sends the current location of the user through Global Positioning System. The additional feature in this TTM app is that it will also send the automatically captured image of the person who is currently using your mobile phone. Using this information, we can track your mobile phone easily.

Table.1.Performance Analysis Mobile App

Existing Mobile App	Proposed Mobile App
This app will not respond any of the predefined set of alerts when it is turned ON.	This app will respond to the predefined alert message when it is turned ON.
We have to depend on any one of the global position system	The proposed Mobile APP always alert about the location details with help of associated Camera
There is no facility is provided to person image who stolen the image	Facilities provided to capture the image of the person who stolen the mobile
There is no facilities are provided to control the person in using the existing app installed already in the mobile	There facilities are provided to control the person in using the existing app installed already in the mobile
Control mechanism provided not given to provide the contact details about the stolen person.	Control mechanism provided not given to collect the complete contact details about the stolen person.

In the Table 1. The performance comparison analysis is given based on the text message received and also location details of the theft mobile used. Even though, both are possible, the person image will not be sent. But in the case of proposed system, the additional facility is created and using the front camera, the person who is having theft

mobile will also be sent to the owner mobile. Based on the quality of the camera, the image quality and clarity will differ.

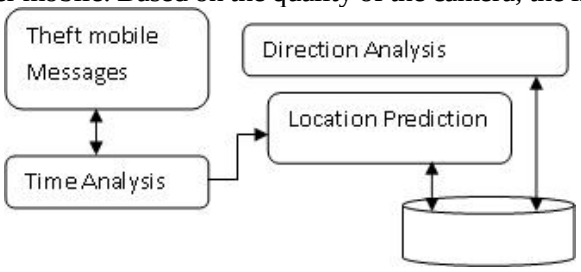

Figure.2.Received Message Analysis

The above figure (2) shows that the app sends the automatic message to the registered number when the mobile is restarted again. It is to make the owner of the mobile to aware of the process.

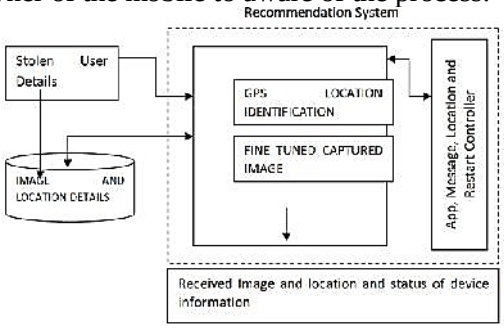

Figure.3.Location and Image Identification Controller

The above figure (3) shows the location of the user when your GPS is switched ON. It also shows the image of the person captured by automatic front camera of the theft mobile. Based on the quality of the mobile camera, quality image of the person will be captured and delivered to the mobile owner. App, Message, Location and Restart Controller will control and direct hardware and also associated software routine to perform efficiently in their role. The objective of the controller is to synchronize the relevant operations in the respective time. Most of the issues like location identification, person image and also the control of the mobile are identified and rectified with proper solution in proper time with maximum satisfaction.

Thus, with this proposed work, we improved the security mechanism in capturing the person who had stolen the mobile, location identification and controlling the mobile app and also tracking the theft mobile efficiently. All the operations are performed to track the theft mobile as well as person as early as possible.

3. CONCLUSION

Android has been recommended for the developers because of its simplicity in working. Android is basically a multitasking platform. These applications can work simultaneously with other applications because of multitasking ability of the Android platform. To track the stolen mobile device, we are proposing a new App is called as an Intelligent Recommendation System for Tracking Theft Mobile (TTM). The proposed TTM app is used to find our phone without the help of the police higher officials. Because of the use of android mobile is increasing, this app will helpful to all users if it is stolen by somebody.

With help of this proposed App, the mobile owner can find the correct person by receiving his image and also can locate the person by receiving the location Details with image with help of GPS. Through the proposed mobile app, the front camera was also utilized effectively. Effective usage of automatic front camera we used to track the stolen person exactly.

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