



CHAPTER II

LITERATURE REVIEW

2.1 Review of the Current Situation

Currently, cell phone tracking systems are becoming more sophisticated by using a GPS tracker called Google Maps. Although some cell phone trackers already have google maps, under certain circumstances, they cannot track the face of the thief and it can make the stolen user feel confused to find out who the perpetrator of the thief's cell phone is.

There are also cell phone trackers that use a system that helps find out the position of the user's cellphone by sounding a cellphone ringtone, but systems such as ringing a cellphone ringtone can still be used by thieves in other ways, such as turning off or turning down the sound on the phone so that the user cannot hear the cellphone user. the system cannot make the user adjust the volume level remotely.

2.2 Review of Related Literature

2.2.1 Data Collection

This article is from Academia Edu. It is dated April 2017, when researchers named Deore Sayali, Karishma Khodade, and Shweta Patil released the study to the public. A full-text document will be produced for this study to be freely consulted by users. The study is titled Anti-theft Apps for Lost or Misplaced Android Phones.

Data Analysis

Nowadays, smartphones are acting like a computer, they can be used to store information, documents, etc., and can be shared with anyone through the internet. So guarding smartphones safely is one of the most important things. The purpose behind developing this project is to provide the user with to track their lost or misplaced devices. A simple command from a friend's mobile will make the user's



phone ring even if it is in silent mode if the phone is placed within a reachable range. This research concluded that GPS is the main backbone of any tracking system and it gives accurate coordinates in terms of latitude and longitude. While GPS is widely used in outdoor localization, it does not perform well in indoor localization. This is because it cannot penetrate through building walls and requires custom infrastructures for every area. concluded by using GPS for tracking and also some related techniques such as Mobile Camera and Ringer which will help us in locating the device.

2.2.2 Data collection

This article was obtained from IJIRT (INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY). It was dated back in April 2022, when researchers named Mure Samruddhi, Praktiksa Gulhane, Vaishnavi Jadhao, Shalvi Salunkhe, and Prof. Namrata Khade released this research report to the public. This research will be having a full text document available so users can view it for free. This research is titled **Mobile Anti Theft Security Using Sensor and GPS Tracking**.

Data Analysis

This article provides a rough localization of the phone, illustrating the performance of the GPS, alarm sensors and emergency modules. The Android device art is updated with excellence focused on accuracy, proper power consumption and reliability. This application provides security to devices and users in various situations. But this system still hard to know who steal your phone.

2.3 Review of Related Products

2.3.1 Lockwatch

Lockwatch helps user locate and use user stolen or damaged mobile device. It is a simple application that takes discreet photos using the front camera when someone enters the valid unlock code on your phone.

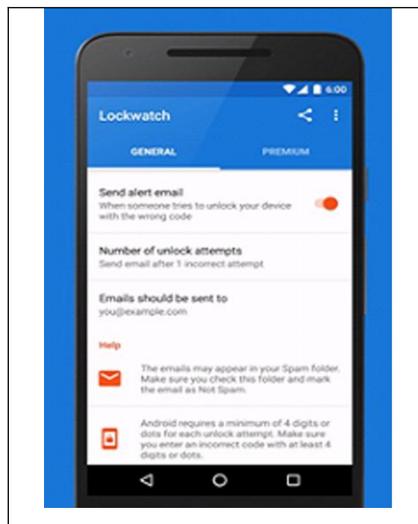


Figure 2. 1 Lockwatch Display

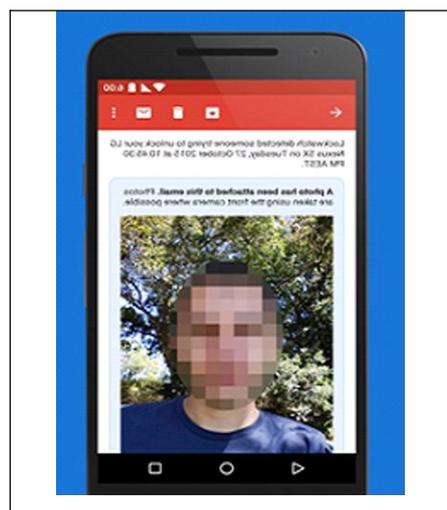


Figure 2. 2 Lockwatch Track

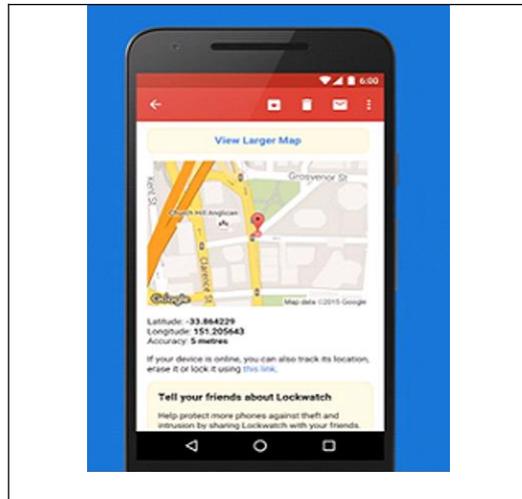


Figure 2. 3 Lockwatch location

2.3.2 Third Eye

Comparable in many ways to the LockWatch app is Third Eye. When someone tries to access your phone using the incorrect PIN, Password, or Pattern, the app is intended to take a photo of them. If it captures images, it automatically sends the email to the registered email account. The email also includes the GPS position of your phone and the most recent unlock time.

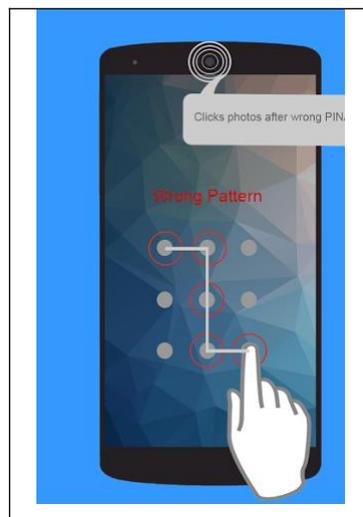


Figure 2. 4 Third Eye Invalid Pin



Figure 2. 5 Third Eye Intruders

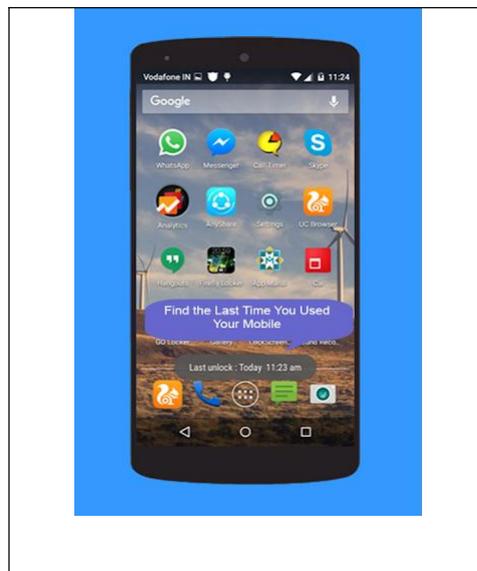


Figure 2.6 Third Eye Display

2.3.3 Prey Anti theft

Prey anti theft is the another application which can help you find your lost, misplaced, or stolen android device. With Prey Anti Theft, you can get the GPS coordinates of the lost smartphones.

Not just that, but it automatically captures the picture throught the front camera whenever anyone to unlock the phone with the wrong code.



Figure 2.7 Prey Anti Theft Display

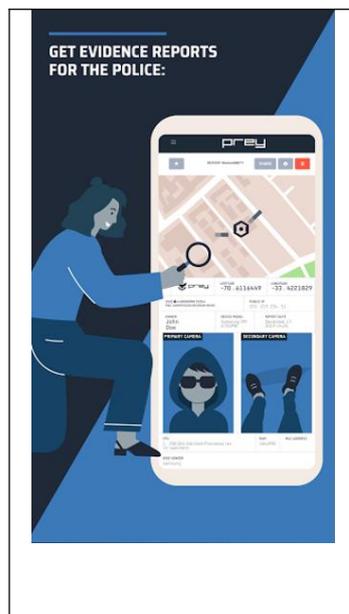


Figure 2.8 Prey Anti Theft Display