iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 8 **Issue:** V **Month of publication:** May 2020

DOI: http://doi.org/10.22214/ijraset.2020.5005

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429
Volume 8 Issue V May 2020- Available at www.ijraset.com

Steal Me Not

Mr. Hardik Soneria[1], Farhan Achchhu[2], Shivam Patel[3], Himanshu Pujari[4], Vishal Dubey[5]
[1]*Assistant Professor, Department of I.T, Laxmi Institute Of Technology, Sarigam*
[2, 3, 4, 5]*Student, Department of I.T, Laxmi Institute Of Technology, Sarigam*

Abstract: ***Nowadays, Mobile Theft is one of the major problem as it contains every personal details of the owner. In existing system, we can protect the device from getting stolen but for that it should have an active Internet connection. So we made Mobile Application through which user can protect his mobile from getting stolen and if in case it is stolen then user can remotely control his device. In one module all the necessary functionalities of the app will be placed & user has to enable them. If the phone is kept on the desk, charging, and pocket and if someone tries to steal it then Alarm is fired up after some time asking for a password to stop it. There will be a second module where all the controls of the button are placed in GUI form. So, if in case the phone is stolen then with the help of this module user can control phones data to Lock device, Erase data, access GPS location, detect SIM card changes etc. When any button is clicked, SMS is sent to the device & it is fetched by the App & it's appropriate event gets executed.***

Keywords: ***Mobile theft protection, Mobile theft detection, GPS Location, SMS Commands, Detect SIM card removal, Lock device***

I. INTRODUCTION

Recent years, the use of mobile application has become popular. Mobile Application represents the excellent example of managing the online information in its best possible way. The cost includes the manpower uses, and the time issue. By using the mobile application, there is extreme flexibility in managing the data. In our day to day life all of us use mobile devices which include most of our day to day important data. But nowadays, cases of mobile theft have increased. So, we are trying to develop a mobile application through which users can prevent their device from being stolen and in case the device gets stolen then user can control his/her data and can prevent it from being misused as well as he/she can find his/her device.

A. Related Work

There are many software and services for smartphones are available in market, whereby a registered user can find the approximate location of the phone if it is connected through Internet. This helps to locate lost or stolen phones. Apple offers a free service called Find My iPhone for iPhones running iOS. Microsoft's My Windows Phone offers a similar service for phones running Windows Phone. Similarly, Google offers Find My Device for phones running on Android. Some of these applications may have limitations which can be checked before installing, such as only working in some countries, dependencies upon the phone's implementation of GPS, etc. Similar paid or free apps are also available for all device platforms. [1] Suppose an application helps you know whenever someone is trying to unlock your mobile when it is not with you. Imagine you are sleeping or in bathroom and someone tries to unlock your mobile to see the content, even if you set a good pattern or pin one would figure out after few attempts. And imagine if there is an App which would scream loud when it detects that. Anti theft alarm is just that. A loud siren is played when someone tries to unlock and fail to unlock your mobile's pin/pattern/password. A must have app on all your hard earned Smartphone. [2]
There is an android application in which, initial registration of Alternative Mobile numbers are taken as input. An Application which is deployed in the mobile devices can be able to Track the current location of the device. If the robber changes the SIM card, immediately then location details are sent to the alternative Phone number of the original User. In this paper, both the logic of tracking the Theft Phone with SIM Card & Theft Phone with changed SIM Card is tracked continuously. The registered mobile numbers can get the SMS alert from the Theft Mobile. This process is reworked continuously to track the android mobile phone. [3]

II. METHODOLOGY

We have implemented different methods in two modules Pre-protection and Post-Protection module. Pre-Protection consist of methods like movement detection, pocket detection, headphone detection, charging detection to prevent the theft as if anyone of this method gets detected it will fire an alarm which can only be stopped by password set by user and Post-protection consist of methods like GPS Location, Lock Device, Format Data, Sim Card status which would be helpful to check user device status in case if it is stolen.

©IJRASET: All Rights are Reserved

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429
Volume 8 Issue V May 2020- Available at www.ijraset.com

A. Algorithm I. (Pre-Protection)

1) *Step 1:* User Logins if already registered or Registers.
2) *Step 2:* After login user selects password type i.e. user defined password or system password which will be useful while any of pre-protection method is detected so its user can stop alarm using this password.
3) *Step 3:* User enters the emergency contact which would be helpful in case of theft. (These contacts would be notified in case of theft)
4) *Step 4:* User selects the modes as per his/her need and situation.
5) *Step 5:* If any unauthorised activity is detected, the system will ask for the password set by user earlier or will fire alarm. If password is entered correct it would stop their or if not it would start alarm after particular defined time interval.

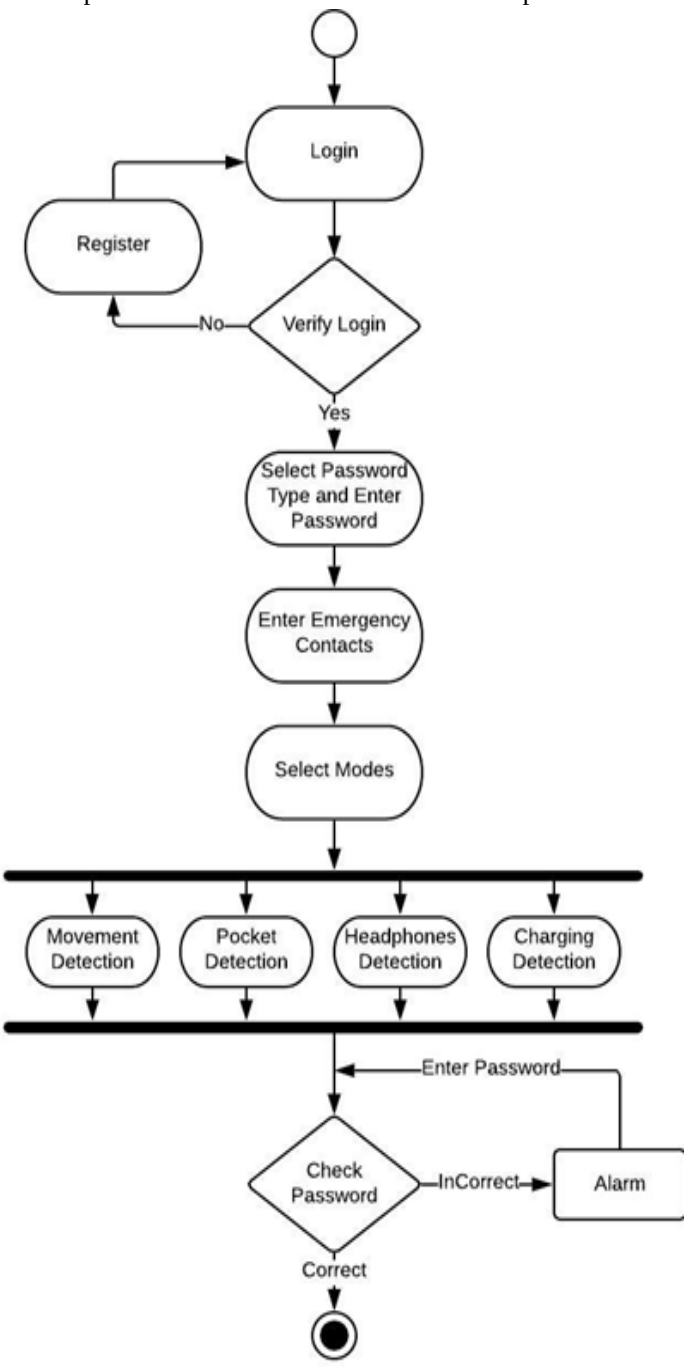


Fig. 1 Activity Diagram I (Pre-Protection)

©IJRASET: All Rights are Reserved

B. Algorithm II. (Post-Protection)

1) Step 1: User Logins from other device with the same id used on stolen (Primary) device.

2) Step 2: After login user selects the post-protection module (Lost device option) where different options are provided.

3) Step 3: As per the option selected by user the emergency contact would get status of the user's stolen device in form of SMS. (Options would be in form of button but would work on command based on SMS)

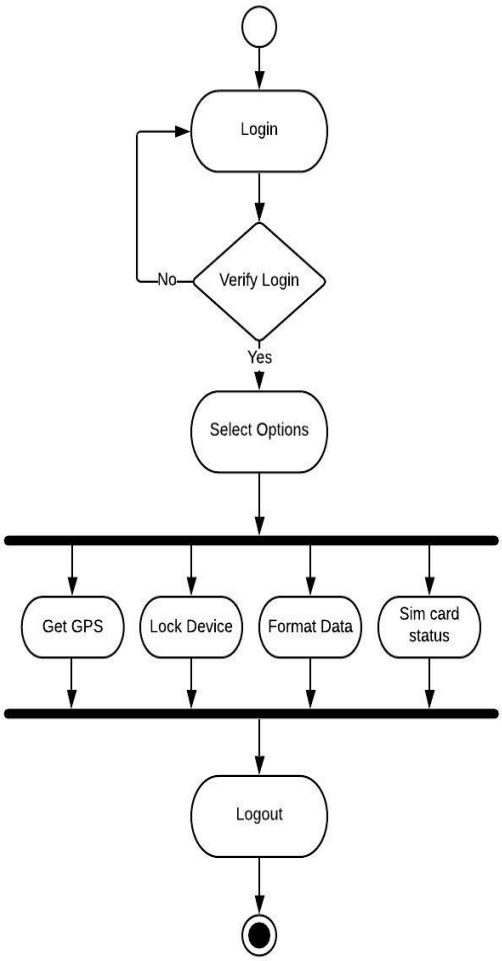


Fig. 2 Activity Diagram II (Post-Protection)

III. IMPLEMENTATION AND RESULT

A. System Requirements

1) Android Smartphone running Android version 6.0 or above

2) Active Sim card during registration.

B. Working

Firstly the user has to register in application. At the time of registration, Users present Sim card details are automatically stored. The details include Integrated Circuit card ID (ICC-ID) and mobile numbers. ICC-IDs are printed on the Sim cards and also stored inside the Sim cards which can be fetched programmatically. After successful registration User is asked to choose Password type like if he/she wants his/her own PIN or wants to use Device Password. After that User enters emergency contacts it can of his/her friends or family members from which SMS will be sent if the device is stolen.

Steal Me Not Application include two modules. First Module is for Mobile theft Protection which we have named as Pre-Protection and Second Module is for Mobile theft Detection which we have named Post-Protection.

©IJRASET: All Rights are Reserved

In Pre-Protection Module, there are different modes like Charging detection, Movement detection, Pocket detection, Headphone detection. There is one main mode that is Mater mode. It can be used only for Charging and Headphone detection if it is turned on then wherever User wants to charge his device he/she just simply needs to connect his device with Adapter and charging detection is automatically turned on. Same for headphone detection User just needs to plug his/her earphone. If charger plug is detached from device or headphone jack is detached from device then a Pin/Password is prompted on screen and User have to enter his PIN/Password which he had set while registration. If User fails to enter PIN/Password in 10 Seconds then Alarm will fired up until User enters correct password and then Alarm gets stop. User can set after what time interval alarm should be fired up based on his choice under settings page. Likely in Movement detection, User has to open application and start Movement detection mode. Whenever User starts this mode after 10 seconds his mode is started and device sensor values are collected. If there is any change in sensors data, PIN/password is prompted to enter on screen Similar to what happens in charging/headphone detection modes.

In Post-Protection Module, we have implemented features like GPS Location, Format Device, New SIM Card detect & Remotely Lock Device. There are various buttons placed in GUI form in this module which are used to send SMS commands to the owner. If in case Users device gets stolen then User will login in the app from their friends/family's device to the same account which they logged in to their device. If User wants to get his stolen device location then User will click on Get GPS Button. There can be two cases that Users stolen device may or may not have internet connection turned ON. So based on that we have implemented like if Users internet is OFF then device will send Latitude and Longitude value in SMS and if Internet is ON then along with Latitude and Longitude value, Full address location of the device containing City name, State name, Zip code and Country Name. There are other buttons like Format Device, New Sim Detect, and Lock Device. In Format device once the SMS is received in stolen device then our application will receive the broadcast and compare the SMS code with code stored inside application if it is matched then device will be factory reset which can prevent misuse of any personal data of the owner. In New Sim detection, at the time of registration User's SIM details are stored that data and current SIM card data are compared and if it is not same SMS is sent back to User with message saying Your Sim is changed with the mobile number of current Sim and Users Mobile number. If Sim card is not changed then message is sent back saying Sim card is working fine. In Lock Device, user can lock the device screen using a single SMS command.

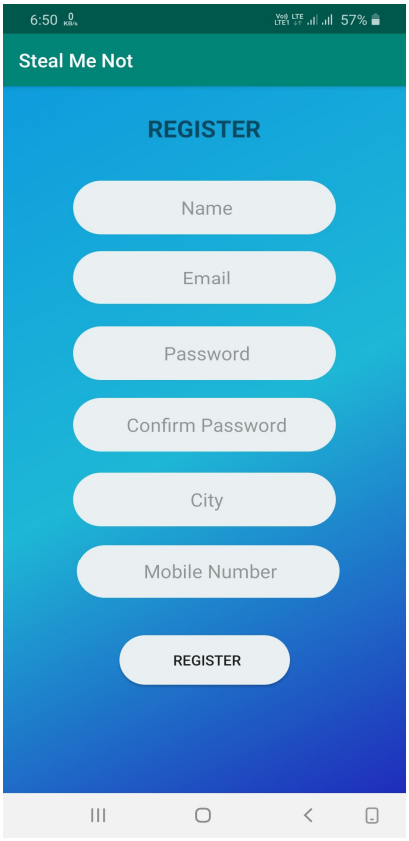


Fig. 3 Registration Page

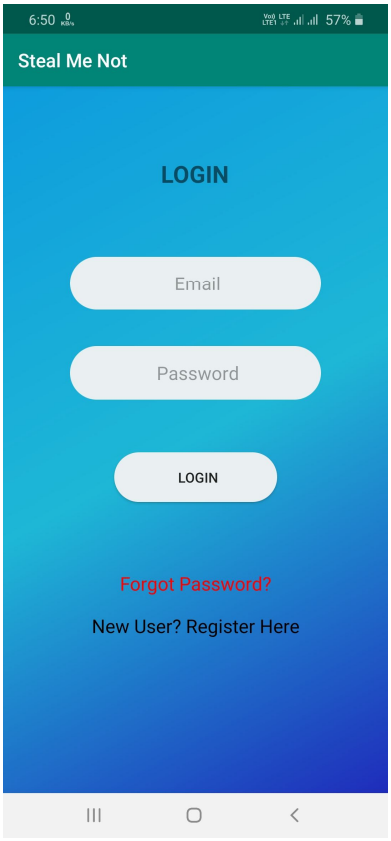


Fig. 4 Login Page

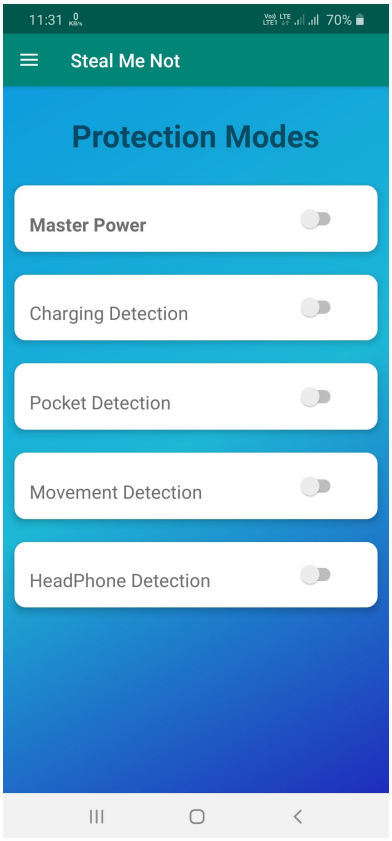


Fig. 5 Pre-Protection

©IJRASET: All Rights are Reserved

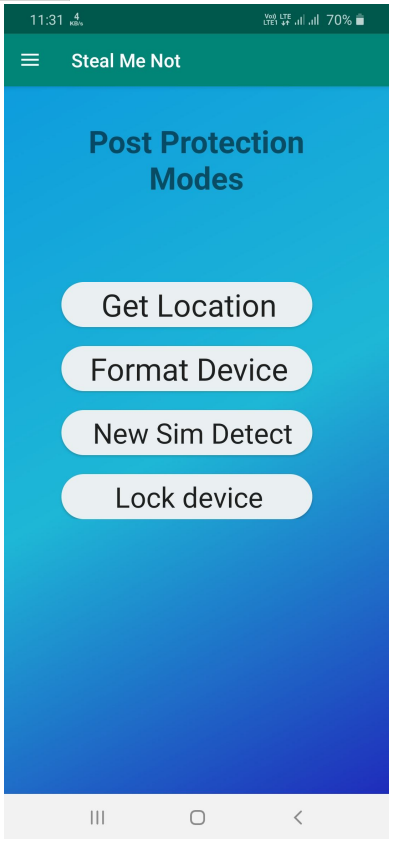


Fig .6 Post-Protection

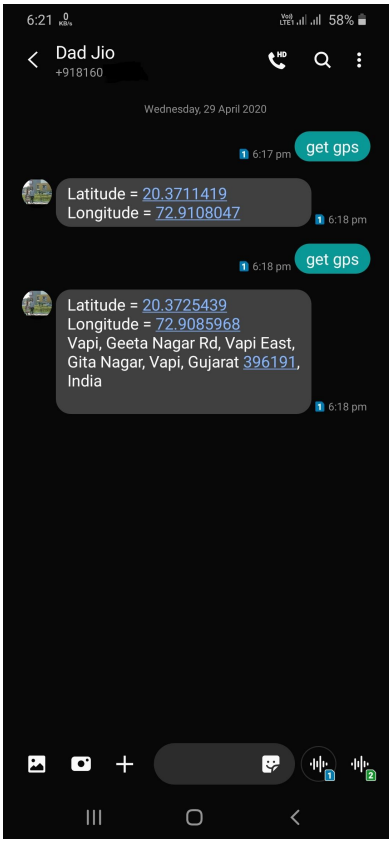


Fig. 7 Fetching Location

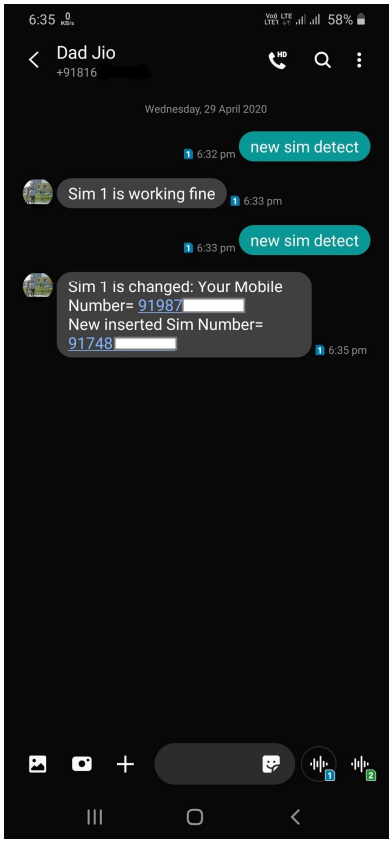


Fig. 8 Detecting SIM Status

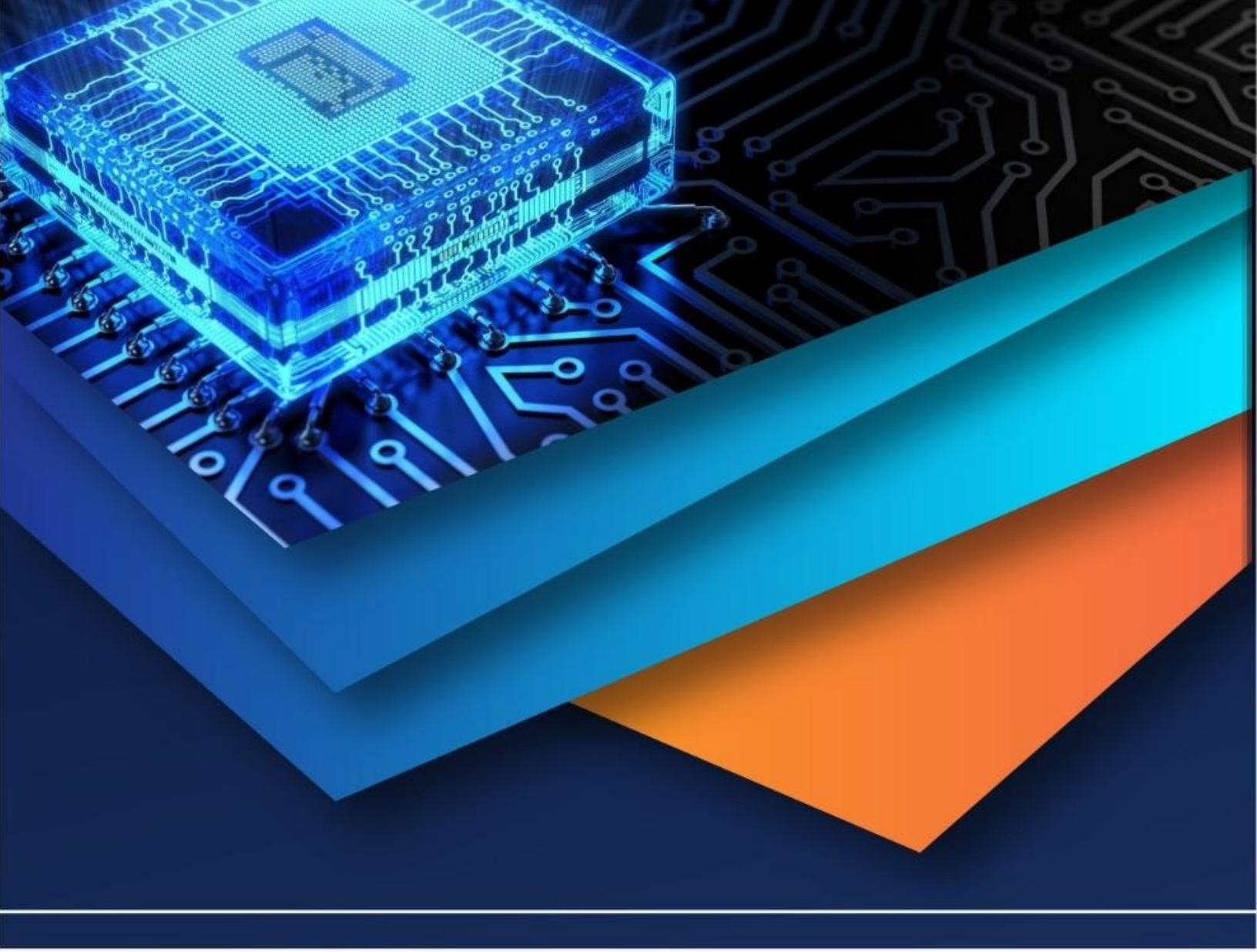
IV. CONCLUSION AND FUTURE WORK

This Android Application provide pre-protection modes like Headphones detection, Pocket detection, Movement detection and Charging detection to prevent mobile theft and in case if mobile is stolen other Post-protection mode like request GPS location, Format data, Lock device are provided which one can use logging from other device using same user-id which is on stolen device. This application can be used so; day to day users of mobile phone can prevent their device from getting stolen and keep their data safe, as all of one's important data are present on mobile device. It will provides useful functionalities in very easy way and will be time saving. The future work is to add more features to this application like implementing automatically sending the GPS Location, capturing images if the device alarm is ranging continuously for a longer time.

REFERENCES

[1] ”Find My Device”: https://en.wikipedia.org/wiki/Find_My_Phone
[2] ”Mobile Tracking Based on Phone Theft Detection”, “Author: B. Srilekha, Dr. V. Dhanakoti”, “Journal name: IJARCCE” , “ISSN: 2278-1021”, “page number :192-197” : https://www.ijarcce.com/upload/2016/march-16/IJARCCE%2048.pdf
[3] “Mobile Theft Tracking Application”, “Author: . Kishore N. Shedge , Dnyaneshwar C. Dhatrak, Kanchan S. Ugale,Asmita P. Walimbe, Anil S. Khade”, “Journal name: IRJET” , “ISSN: 2278-1021”, “page number :192-197” : https://www.irjet.net/archives/V4/i1/IRJET-V4I1105.pdf
[4] “GPS-based Location Tracking System via Android Device”, “Author: . Md. Palash Uddin, Md Nadim, Md. Zahidul Islam”, “Journal name: Research Gate” , “ISSN2319-376X”, “page number :1-4” : shorturl.at/beSY4
[5] “Anti-Theft Application for Android Based Devices”, “Author: . Ankit Shetty,Ashish Trivedi”, “Journal name:IJRAR”, ” E-ISSN 2348-1269”, “page number:11-14” : http://www.ijrar.org/papers/IJRAR1ABP003.pdf
[6] “Android Anti-Theft Application using Google Drive”, “Author: Ms. Amitha N S, Ms. Deepika N, Ms. Manasa, Ms. Bhavana J”, “Journal name:IJRAT”, ” E-ISSN: 2321-9637”, “page number: 1-3” : http://www.ijrat.org/downloads/Conference_Proceedings/Special_Issue_March-19/Paper%20ID-110

©IJRASET: All Rights are Reserved



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)