

Remote Android Access via SMS

Tushar T. Tupe¹, Ankita A. Mhaske², Arti Thube³, Prof. Shinde S. P.⁴

UG Students, Department of Computer Engineering^{1,2,3}

Professor, Department of Computer Engineering⁴

Rajiv Gandhi College of Engineering, Karjule Harya, Maharashtra, India

Abstract: *In this paper an idea to access the remote mobile base on android operating system via a single sms which can send from any anonymous mobile round the world is presented. The idea is implemented with a designing an android base application by which a remote access can be perform. Accessing leads to the controlling the basic setting of android mobile, the application provides the secure and protected environment to remote access.*

Keywords: Android, Application, Command, IDE, JAVA, Kernel, Remote, SMS, System.

I. INTRODUCTION

In today's life style mobile plays an integral key role in our day to day life .It is part of our life which is as equal as breathing. Our every routing is directly or indirectly depends on mobile. And the common phobia which everyone share is nomophobia i.e. no mobile phobia. Everyone feels it daily when misplace a mobile even for a minute. In the daily professional hectic routing it happen very random where one put the mobile somewhere and forgot, like in office premises, college, at outdoor, at home etc. at this point the real fear is that what happen if it found by someone else, someone will misuse that personal data ,contact or SMS.

To tackle this problem a tool is needed to access the setting of mobile to control some key function of a system. Key function plays an important role if we can control it .it will help a lot to track the mobile by switching the modes like enabling sound profile by which we can ring a mobile or put it on silent, so that no one knows about it. Getting a recent call contact list or getting resents list of SMS .and performing all this activity remotely.

To achieve this a android application is design which gives remote access to the misplace android mobile and perform the changes in mobile setting as per listed in an application with a help of just a SMS, which can be send form any unknown network with a specific user define PIN that authenticate the user identity and provide a remote access to setting without an internet.

II. OBJECTIVES

The primary goal is to create an application which interact with android internal system setting and handle it without affecting a sole of the system. And the second motto is that it must be independent to internet. The application should be hectic free as well as fast, it should provide reliable and convenient way to remote access to android device with authentication packed in security without an internet dependency.

III. LITERATURE REVIEW

In paper [1] the security model is discuss which is based on permissions and to define security issues, discusses the major threats to personal data, concerns and solution over it. In paper [2] the sandbox environment is analyze and discuss .It derives that every application in android must executes in its own environment as well as unable to influence or modify execution of other android application. .In [3] and [4] paper defines the privacy management in Android platform. The permissions module in android allows applications running on it system to call each other as it is multithread operating system .One application indirectly gets access to the permission that was allow to another application .by which it generated the conflict in the privacy-aware role based access control.

IV. IDEA PROTOTYPE

Considering a scenario where a person misplaces own android mobile somewhere. Now the situation is that person wanted a contact number of a specific person and the contact number is save on misplace mobile. Wants to contact a person, but he

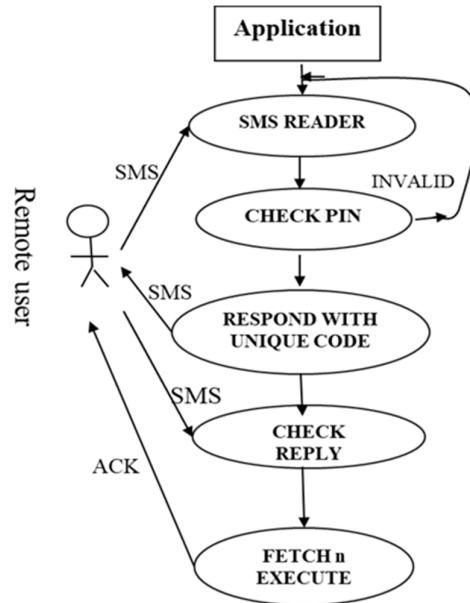


don't recall the person contact number or wants a recent SMS details which is save on the misplace mobile or wants to change the profile .In simply wants to access the basic features. To handle all this type of problem statements one application is design by installing an application in the mobile which is misplaced and by simply via a SMS.

V. IMPLEMENTATION

The idea is sole depends on android internal settings which is also known as kernel. Kernel is basically called as heart. To code and handle the kernel java is best suitable. For development of the application and code Eclipse- IDE (INTEGRATED DEVELEPMANT ENVIRONMENT) is use. GOOGLE ANDROID STUDIO use to test the application, to provide a real-time time environment for different android versions. And test Application comparability and performance.

VI. USE CASE DIAGRAM



Use case Diagram represents the remote user interaction with the application via SMS.

VII. ALGORITHM

Firstly users have to install the application and set a 4 digit pin that can be used for further operations. Now, let's consider the user misplace the mobile and wants to access it. So user has to follow the following steps:

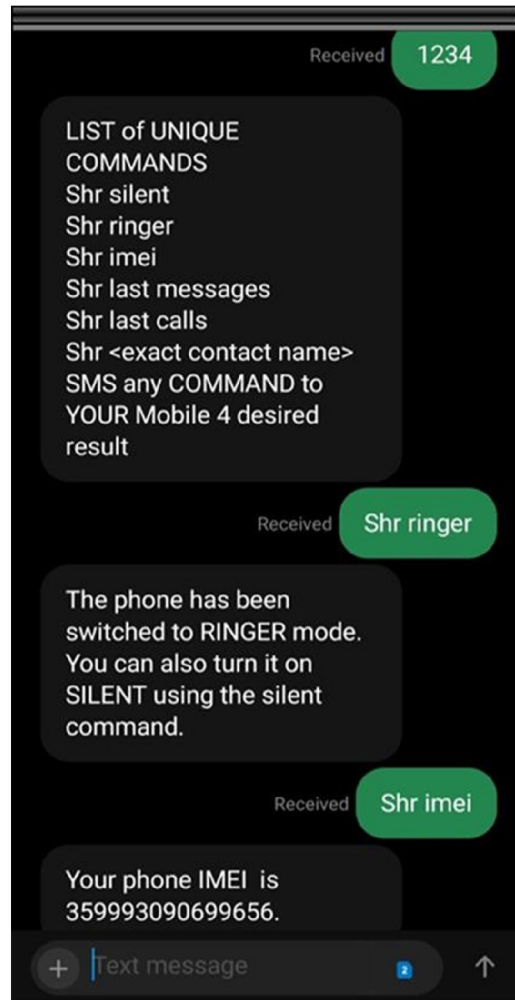
- STEP 1: Remote USER sends the PIN via SMS to a misplace android mobile.
- STEP 2: SMS RAEDER reads a SMS and check whether the PIN is valid or not.
- STEP 3: If the PIN is valid -it continues, else terminate.
- STEP 4: APPLIACTION respond with UNIQUE CODES with available functions to remote user via SMS.
- STEP 5: REMOTE USER gets a SMS and reply with a CODE related to tasks user wants to execute.
- STEP 6: SMS READER reads the code in a SMS.
- STEP 7: CODE fetch and execute.
- STEP 8: Acknowledgement (ACK) of task execution sends to user via a SMS.

7.1 Terms

1. Remote user: A person who misplaces the android mobile and wants to control it remotely.
2. Android application: Android application is coded to access the mobile and operate remotely.
3. SMS: SMS stands for short message service contains text and operate on SIM (Subscriber Identity Module).
4. SMS Reader: A piece of code design to read all the SMS i.e. incoming as well as outgoing.
5. PIN: A four digit user defines numerical code.

6. Unique codes: Code which is generated by application to provide remote access. Example: Omd Recent calls, KRn IMEI etc.
7. Acknowledgement (ACK): A receipt for completion of task successfully.

VIII. OUTPUT



Android mobile access via a SMS

IX. FEATURES AND ADVANTAGES

1. Offline: No need of internet connection
2. Fast: Based on carrier network- SIM, this is available everywhere around the globe with infinite limit.
3. Secure: New unique codes generated every time, making it more secure.
4. Privacy: As there is no internet, no backdoor to attack.
5. Cost efficient: Very cheap as SMS cost very low
6. Convenient: Can be use from any anonymous mobile.

X. LIMITATION

It only works when the SIM-Subscriber identity module is present as well as it does not changed after the installation and setting up the PIN.

XI. CONCLUSION

The goal of developing an android application which provides a reliable and convenient way to access the android mobile via a SMS is achieved successfully. We explore the internet independent way to remotely access the android mobile by which not only the cost is reduced but also the execution gets fast.

FUTURE SCOPE

Android is an open source operating system provides a free hand to explore and developed more futuristic applications. It regularly comes with new updates enhancing the security credential and privacy policy by which this application can be made more secure and convenient. In future more features can be added to access remotely like GPS services, INTRENET services, SIM blocking, STATIC details extraction and many more.

REFERENCES

- [1]. G. Delac, M. Silic, and J. Krolo - "Emerging Security Threats For Mobile Platforms," In Proceedings of the 34th International Convention on Information and Communication Technology,
- [2]. Opatija, Croatia-"SANDBOX," - <http://en.wikipedia.org/wiki/Sandbox> (computer security)-In Electronics and Microelectronics (MIPRO '11), pp. 1468–1473, May 2011.
- [3]. G. Benats, A. Bandara, Y. Yu, J.-N. Colin, and B. Nuseibeh "Primandroid: Privacy Policy Modelling And Analysis for Android Applications,"-In Proceedings of the IEEE International Symposium on Policies for Distributed Systems and Networks, pp. 129– 132, Pisa, Italy, June 2011.
- [4]. Q. Ni, E. Bertino, J. Lobo, and S. B. Calo- "Privacy-aware role- based access control"-In IEEE Security & Privacy, vol. 7, no. 4, pp. 35–43, 2009
- [5]. Archana Jadhav, "VNC Architecture Based Remote Desktop Access Through Android"-In International Journal of Advanced Research in Computer and Communication Engineering, May-2001
- [6]. A. Shabtai, Y. Fledel, U. Kanonov, Y. Elovici, S. Dolev, and Glezer-"Google android: a comprehensive security assessment," In IEEE Security & Privacy, vol. 8, no. 2, pp. 35–44, 2010.
- [7]. G. B. Gil, A. Berlanga, J. M. Molina,-"In Context to: multisensory architecture to obtain people context from Smartphone's," In International Journal of Distributed Sensor Networks, vol. 2012, Article ID 758789, 15 pages, 2012.
- [8]. Prabhat Kumar Singh, Diljeet Singh Chundawat, Roopesh Kumar- "Automatic Response System Using SMS"- In International Journal of Engineering Research and General Science Volume 2, Issue 2, Feb-Mar 2014 ISSN 2091-2730)
- [9]. Android.http://www.android.com-development_guide - for development assistance.