

# Remote Access through Android Devices

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## ABSTRACT

As per recent survey, It has been specified that android has approximately 1.4 billion users worldwide. Also the growth in the Internet technology has led for almost half the world's population to carry out their works using internet. With the use of mobile phones had increased the incidents of misplacing the phone and then problems to retrieve it. This research is to describe an android application that would help users to get all updates of their phone as well as to retrieve its location when it is on. The recent applications that were proposed were message based applications as well as even the ones with internet as their communication link doesn't introduce more of facilities to control their phones.

**Keywords :** Remote access, open source, GPS, GSM, security.

## I. INTRODUCTION

Remote access through android is an android application that helps user to remotely control certain features of a phone he is registered to. The core features are: Remotely tracking a phones location, diverting all calls and SMS to a specified phone, modifying the sound profile of the phone, to monitor a phones location by other phone and availability of website facility when no such application is available. Also to provide offline mode which will be message based so that in case of no internet the commands can reach the target phone. Being a fact that most phones misplaced are always lost it can't be ignored that some phones can be left behind at home or office. In such cases user might be willing to receive all incoming calls and messages of that phone. This paper not only focuses on such needs but also works to retrieve user's location as precise as possible.

Open source platform needs strong and rigorous security architecture to provide security. Android is designed with multilayered security that provides flexibleness needed for an open platform, whereas

providing protection for all users of the platform designed to a software stack, android includes an operating system, middleware and core application as a complete. Android powers hundreds of millions of mobile devices in more than 190 countries around the world<sup>[1]</sup>.

This paper focuses on the survey of existing methodology, technology being used as well as proposed work following with conclusion.

## II. LITERATURE REVIEW

### In [1]:

It is an android application that allows user to control a phone using internet facility. It checks the availability of internet and then the tasks are performed accordingly.

### In [2]:

This research proposed an android application that used SMS services for retrieval of location of the lost phone. This application allows user to send SMS to the lost phone and then get the Location as reply

from the lost phone which then could be viewed using Google Maps.

### In [3]:

A Mobile tracking application for locating a mobile based on GPS as well as GSM positioning. And also provides a facility to alert user if the mobile is moving out of a perimeter which is already defined for it. This perimeter is defined by the administrator user when he starts using the application. So when the radius specified by the user is crossed by the phone the user is automatically alerted.

Including all these features together in one single application, our application will also provide user with few more features that would help user to attend his /her important calls as well as SMS from his /her misplaced phone.

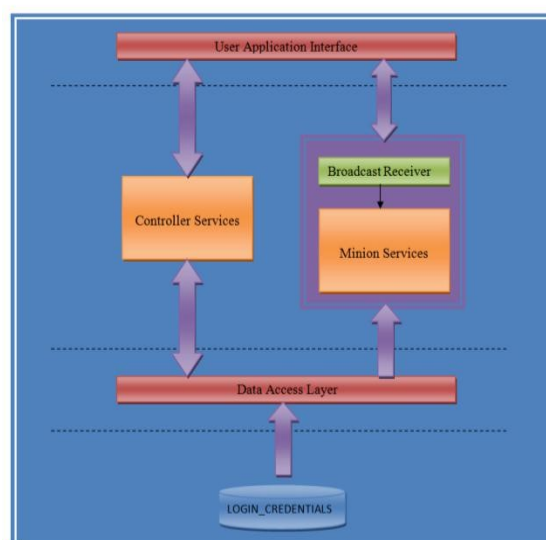
## III. PROPOSED WORK

In today's android applications there are various system applications like Android Device Manager or third party applications like Prey. Although all these do not provide a combined facility for SMS sending as well as internet based access. Our application combines both these facilities into a single application.

This application is divided into two sections: offline mode and online mode. In offline mode it is necessary that user must have application installed on both the sides which is client and controller side. As the application will be preinstalled user will have to keep a password that would help him for authentication of the access to this application. In this mode the controller will be made to input client password for authentication followed by the option for operation to be performed at client side. Also a keyword can be introduced to keep the messages unique from messages received by any other applications. At the client side the phone will have a broadcast receiver listening the messages being received on the phone. The message with unique

keyword shall be considered and string in that message will be parsed. Fragments would be made separating the authentication password. If password authentication is successful then the other fragments of command would be used to execute the specified operation in command.

In online mode the user would be allowed to register his/her phone to server which will help user to authenticate his/her phone through application as well as website.



**Figure 1.** architecture diagram for offline mode

Algorithm for location fetches:

- Step 1. Start
- Step 2. Select the functionality
- Step 3. Checks GPS location based service is ON.
- Step 4. Get the location from GPS\_Provider.
- Step 5. Send location information to controller user. Create an intent for SMS, import SmsManager Use SendMessage() for sending the SMS.
- Step 6. End.

## IV. CONCLUSION

Through this system the user will be able to access his/her remotely located device and also manage different profiles of devices. This internet based system and offline system will help user secure his/her device and receive the calls and messages on desired cell phone. This application gives access to camera of lost cell phone and accesses it to fetch the

picture of its surrounding to know the pictographic view of location.

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