

# Android App for Retrieve Mobile Contacts, SMS, Unread Calls

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**Abstract** — Mobile technology is widely used in all classes of society. It is the most effective way of communication. Nowadays phones are used worldwide and provide many applications which were earlier provided only by desktops or laptops. These smart phones have brought a big change in the technical field. The most popular design earlier used is VNC(Virtual Networking Computing) but here we are using more generalized architecture which is applicable for android operating systems. And here we are making an app for Android mobile phone which must be installed on our phone. Here we are Provide various solution for different problem like, if we have forgotten our android phone at home, and also in case if we have lost the phone, and in case you have misplaced your phone at home and had kept it in silent mode then ringing the phone to find it, is not an option. Remotely administer your android phone: CONTACT–Fetch the contact number of a person from the address book. MESSAGES–Retrieve the text messages received on your phone.

**Keywords**— SMS, Android Phone, Contact, Mobile Technology.

## I. INTRODUCTION

People always want to be in control. They need real-time information whenever they need. With the advance of technology, mobile phone is no longer a luxuries item. It's easily available and possess by most population of our country. The popular communication technology used today is SMS, MMS, GPRS, and 3G. Among these, SMS is most widely use. SMS is commonly used for the purpose of data retrieval & enquiry. Based on a query SMS, the result will be looked up from a database and returned to the sender via SMS. The project will discuss a solution to provide data recovery (in our case it is CONTACTS) from android based mobile devices from a remote location.

The paper is based on Android operating system. The main reason for choosing this platform is it's free and open source nature. Also android is adopted by a very large community. Also android is not limited to phones now a

days, it is also used in a DVR, handheld GPS, an MP3 player etc.

## II. EXISTING SYSTEM

To understand working of application, we need to understand what is Android and Broadcast Receiver. First, let's take intro about Android. Android is a software stack for mobile devices that includes an operating system, middleware and key applications. It's maintained by Google, and comes in a few different versions. At the time of writing, mobile phonesrunavariantofversion2of Android, while most new tablets run a variant of version3. The Android SDK provides the tools and APIs necessary to begin developing applications on the Android platform using the Java programming language. Android uses the Dalvik virtual machine with just-in-time compilation to run Dalvik bytecode ,which is usually translated from Java bytecode. Android has large community of developers writing

applications("apps") that extend the functionality of the devices. Developers write primarily in a customized version of Java. Now, what is Broadcast Receiver? Broadcast Receivers simply respond to broadcast messages from other applications or from the system itself. These messages are sometime called events or intents.

For example, applications can also initiate broadcasts to let other applications know that some data has been downloaded to the device and is available for them to use, so this is broadcast receiver who will intercept this communication and will initiate appropriate action.

There are following two important steps to make Broadcast Receiver works for the system broadcasted intents –

1. Creating the Broadcast Receiver.
2. Registering Broadcast Receiver
- 3.

**1. Creating the Broadcast Receiver:** - broadcast receiver is implemented as a subclass of Broadcast Receiver class and overriding the onReceive() method where each message is received as a Intent object parameter.

**public class MyReceiver extends BroadcastReceiver**

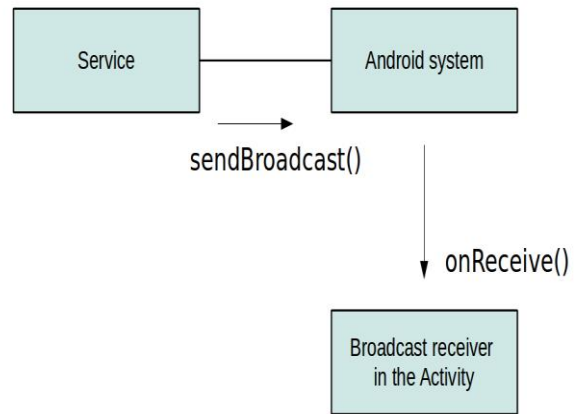
```
{
@Override
public void onReceive(Context context, Intent intent)
{
Toast.makeText(context, "Intent Detected.",
Toast.LENGTH_LONG).show();
}
}
```

**2. Registering Broadcast Receiver:-**

An application listens for specific broadcast intents by registering a broadcast receiver inAndroidManifest.xml file. Consider we are going to register My Receiver for system generated event ACTION\_BOOT\_COMPLETED which is fired by the system once the Android system has completed the boot process.

```
<application
android:icon="@drawable/ic_launcher"
android:label="@string/app_name"
android:theme="@style/AppTheme" >
<receiver android:name="MyReceiver">
```

```
<intent-
filter><actionandroid:name="android.intent.actio
n.BOOT_COMPLETED">
</action>
</intent-filter>
</receiver>
</application>
```

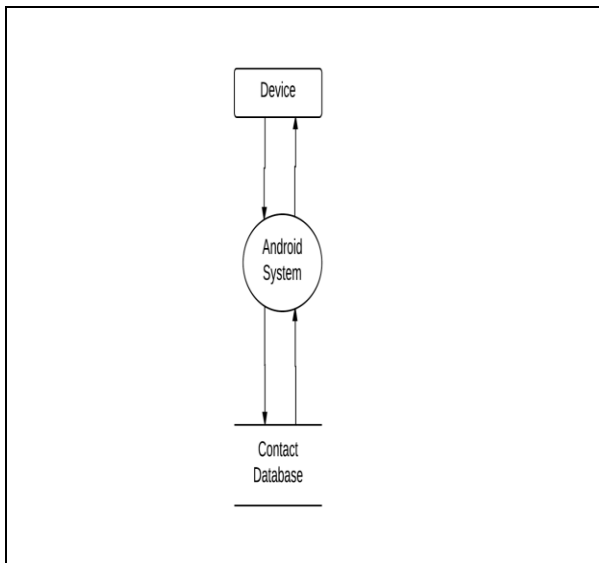


**Img1.Broadcast Receiver**

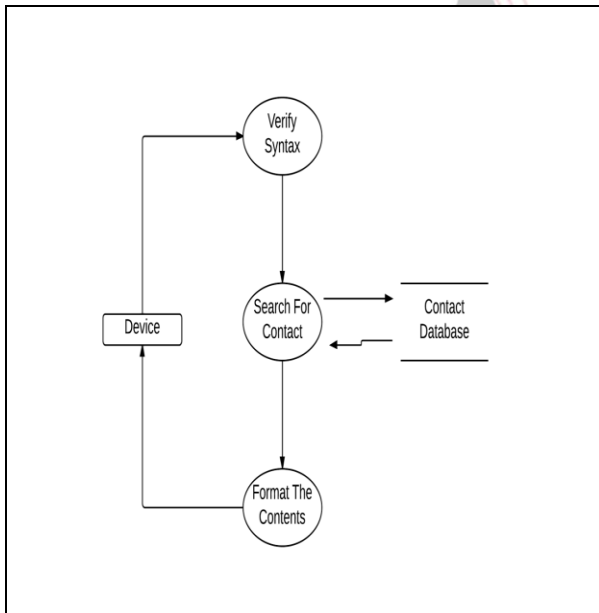
Once we registered on Broadcast receiver it is activated and give instant replay remotely whenever any event or activity will generated. When Sender Send the SMS from Other Device the Broadcast Receiver from Second device is activated and checks proper Syntax of Message If Incoming Message Is in Proper Format Then It Check for Required Data i.e. For Unread SMS Cont.-acts etc. If Required Data Is Found Then Broadcast Receiver Automatically Send the SMS to Number from which we Received Request.

### III. FLOW DIAGRAMS

#### 3.1 Data Flow Diagrams

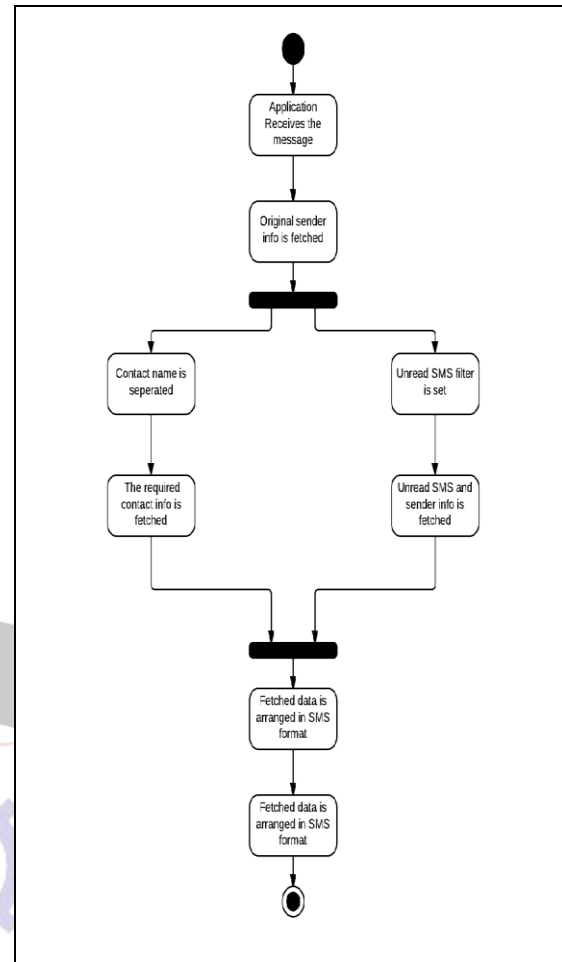


LEVEL 0 DFD

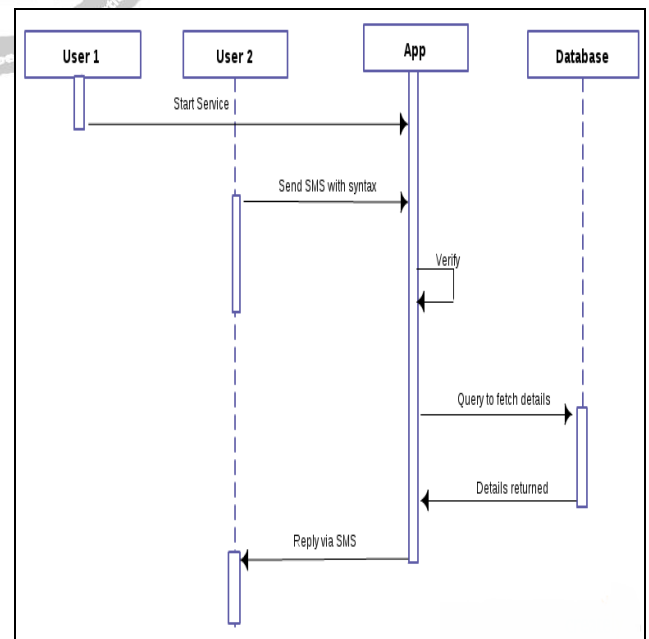


LEVEL 1 DFD

#### 3.2 Activity Diagram



#### 3.3 Sequence Diagrams



#### IV. LITRETURE SURVEY

Previously all smart phone manufactures used to have dedicated software to control the android phones from desktop. But especially with the Android Smart Phones, no particular software is installed. There are plenty of custom third party applications available. But now With This Application You can remotely control your phone without internet. In previously for all software's you need the internet access .Not any application work without internet. So this type of software requires more cost. This is the biggest disadvantage of previous software's. In our Application we will remove the drawback of previously software's. And we will develop this android application which works without internet. Or we can control our android phone remotely without internet. Without using any browser. This Android application require only messaging feature. And all android mobile has an inbuilt messaging feature. What you have to do is. You just want send particular command in particular format as provided in application by sending message on your remote device. Or remote mobile phone. Then the remote mobile work according to that command.

##### a) What Is Android?

Android is a software stack for mobile devices that Includes an operating system, middleware and key applications .It's maintained by Google, and comes in a few different versions. At the time of writing, mobile phonesrunavariantofversion2of Android, while most new tabletsrunavariantofversion3.TheAndroidSDK provides the tools and APIs necessary to begin developing applications on the Android platform using the Java programming language.

##### b) Features of Android

One of the important feature of android is it is Open Source platform for developing application.

There are several features Of Android As Follows,

It supports SMS as well as MMS. Android Also Support integrated browser based on open source web kit engine. Android has native support for multi touch which was initially made available in handsets. The main benefit of using android is the media support provided for common audio, video, and still image formats(MPEG4, H.264, MP3, AAC, AMR, JPG, PNG and GIF) Support to Bluetooth, 3G, and Wi-Fi.

##### c) Why Android?

Here is main question is that why Android? The Answer is The Android Standalone software Google's Android OS is standalone software and that any phone manufacturing company can lend this software to be used on their Smartphone.

The Graphical User Interface of Android is more User Friendly so any one can easily handle the android based device. There are lot of application freely available on android.

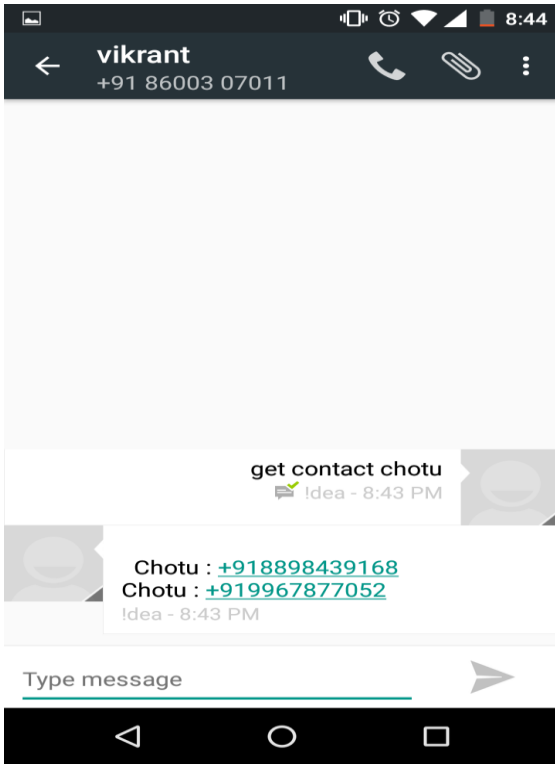
#### V. IMPLEMENTATION

To retrieve the contact from mobile phone one can send message as shown below along with the predefined syntax.

E.g.: **GET CONTACT (Contact name)**

The contact name which you wish to get should write the way it is saved in his/her contact list. If one want multiple contacts, then separate the contacts with comma (.). If one doesn't remember the contact format then send the initial of the contact name along with the syntax and the application will return all the contacts starting from that initial.

Same for if we want to retrieve unread SMS then one can send message as shown below along with predefined syntax.

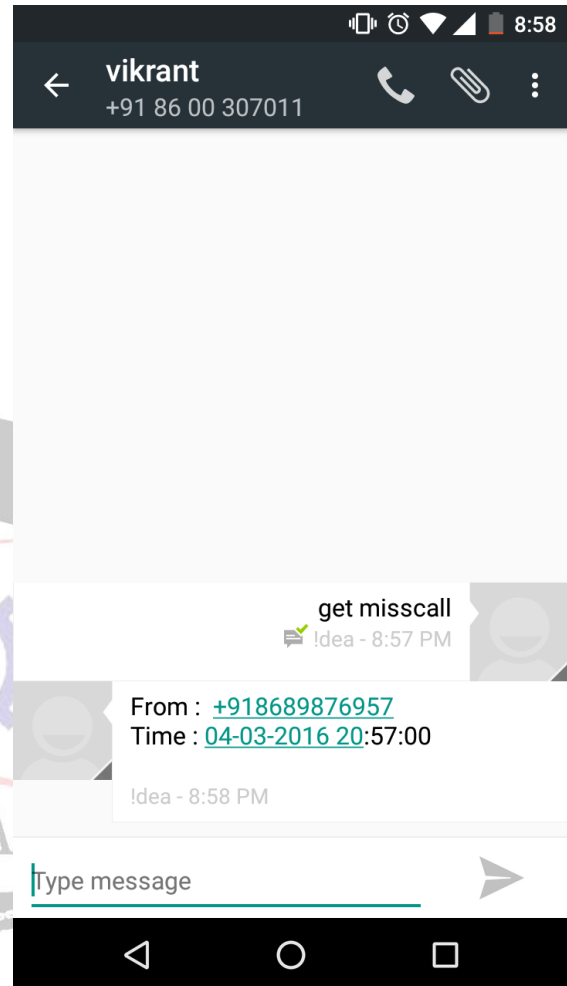


**E.g.: GET MISSCALL**

The Missed Call Number which You wish to get should send a message with predefined syntax i.e.

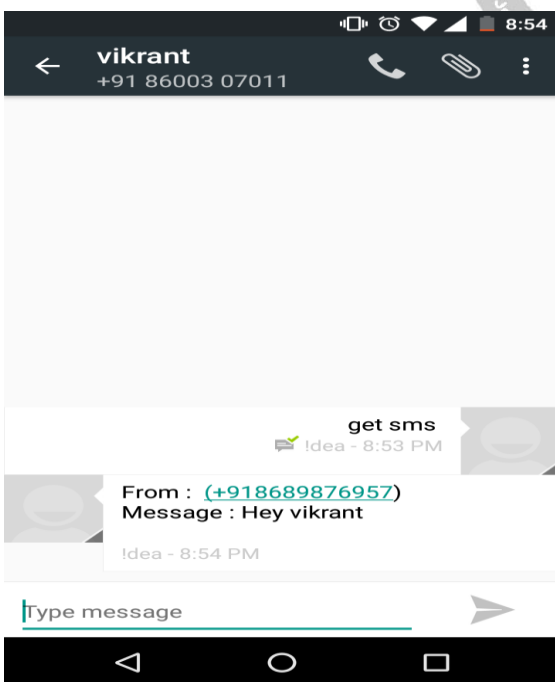
“GET MISSCALL”.

In returned Messages you will get all Unread Numbers from Your Mobile Call Log’s.



**E.g.: GET SMS (Initial)**

As we have message length of 160 characters, the application will ask in the end of every message if you want more contacts or not. If you say ‘YES’, the application will send further contacts through further SMS else it will stop sending contacts. Figure 1 shows how exactly the application works.



**VI. CONCLUSION**

This Application is very useful in case, If we have forgotten, misplaced, lost our android phone. We control our phone remotely through SMS and the apps reacts according to that command. The best part of the system is that it has a very low Memory Footprint i.e. it is very light on your phone's resources. The application overcomes the problem of 160 character length of a message.

## VII. FUTURE SCOPE

The SMS based remote control for home appliances is easy to implement the system that ON/OFF the electrical device through remotely via SMS or it handled more and more electrical devices which are used in home. In simple automation system where the internet facilities and even PC are not provided, one can use mobile phone based control system which is simple and cost-effective. Alternatively for such requirements landline phone with extension card could also be select for the system. The application can be able to send other information such as email ID, address and other personal details via message using Multimedia service. One will not need to access internet to get the personal information.

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