

Location based secure way of receiving contacts and messages using smart phone application

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Abstract-- As and when the mobile users are increasing in day by day the demands of video traffic over mobile networks keep on rising, so the wireless link capacity cannot satisfying the demands of mobile user due to the variation in the link status and many disruptions, it causes long time buffering to mobile user. To overcome from this a framework is proposed for the efficient utilization of wireless link capacity by the combination of Adaptive mobile video streaming [AMoV] and Efficient social video sharing [ESoV] techniques using cloud. In AMoV, there is a combination of adaptability and scalability features, So that it provides efficient utilization of bandwidth. Likewise ESoV provides efficient social video sharing by use of same combination of features. So that user experiences continuous flow of video streaming by avoid of buffering.

Keywords-- Adaptive video streaming, cloud computing, mobile networks, scalable video coding, Efficient social video sharing.

I. INTRODUCTION

Android is the world's most popular mobile platform it powers millions and thousands of phones, tablets, and other devices and brings the power of Google and others and also the web into your hands. Android is a Linux-based operating system for mobile devices such as Smartphone and tablet computers. It is developed by the Open Handset Alliance, led by Google, and other companies.

Everybody loves to use the Smartphone and everybody wants their phone to do all the work of their diary, address book and more than that, every person wants their phone to work as a personal assistant, and the android Smartphone platform fulfilled all these desires.

Here, with this Mobile Access by SMS application, we want to make the Android Smartphone smarter enough to respond to your password protected messages with the required content automatically without introduction of any other third person.

Android Application via SMS is an android application which fetches the required information from android mobile by receiving on SMS commands. This application allows us to access our mobile easily. We can access & retrieve a lot of data from our mobile phone even if we don't have our mobile with us.

II. PROBLEM SPECIFICATION

Consider the situation; where the user has Android Smartphone, with irrespective of any work or urgency, unknowingly for some reason he may forget and leave his Android Smartphone and then went to some remote place. He realizes that he has left his

Smartphone in the home itself then there are probably chances of missing calls, missing SMS's and also missing some important contacts information which might be very important for him when he need it.

Consider the situation; you have misplaced your phone somewhere nearby in your example in your home, Can't find it by even by calling on your number as your phone is on silent mode or placed somewhere and forgot. This is what the situation where our Application helps.

So he may be in need of those information's like contacts, call log and also recent SMS's and siren. The idea is to help the users for getting those contacts, call logs and last SMS which is managed by sending simple SMS securely which is simple and easy way which everyone understands.

A. Possible Solutions

- He might travel back to his home and check those information.
- He may call to his home members/friends and enquire; it can be not feasible in case of absence of home members.

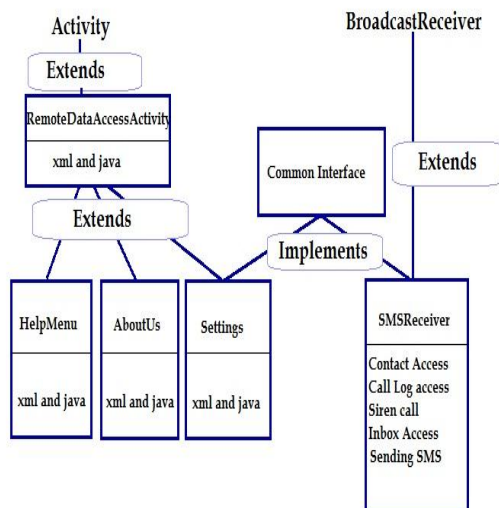
So it leads to large number of wastage of time and effort and it also becomes the irrelevant/infeasible solution.

B. Objectives

- To provide means of accessing the mobile information securely by sending simple SMS.
- We can reduce the work load of user.
- Only the registered user will be allowed to access the information.

- When SMS is sent the Broadcast Receiver activates the overall execution process.
- User can get the contact information it's related to recent call logs and also recent SMS sent by that number.
- The user can get back contact details, call-log information, or any messages without any kind of user interactions.
- User can easily access the information by sending simple SMS.
- By sending simple SMS we can also run the application that is installed in Smartphone.

III. METHODOLOGY



A. Class Model

RemoteDataAccessActivity class: In the class model Activity extends RemoteDataAccessActivity class with front end tool xml and back end tool like

Java. Three separate classes are extended for the user to make more interactive and efficient.

Help menu class: Help menu class extends RemoteDataAccessActivity class. The help menu provides the user various operations for which he has to send message in this specified format as shown:

- Contact Name: gives the contact details such as contact name & contact number.
- Call-log: provides the user recent call-log information.
- Siren: plays the siren.
- Recent SMS: provides the user recent SMS's.

AboutUs class: The AboutUs class extends RemoteDataAccessActivity class. It gives details to carry out the project.

Settings class: The Settings class extends RemoteDataAccessActivity class. It is used for setting the password using the interface.

SMSReceiver class: When the SMS is sent it will be registered in the BroadcastReceiver class. The BroadcastReceiver enables application to receive intents that are broadcast by the system even when the components of application are not running. When the SMS is received it will be stored in onReceive() function of SMSReceiver() class. Which in turn extends BroadcastReceiver.

- Here setting and SMSReceiver implements CommonInterface because password will be set in settings and when the SMS is received it should match with format of SMS.

- When there is a match user can easily access following
 - Contact access-accessing contact no's.
 - Call log access-recent call-log information.
 - Siren call-plays siren.
 - Inbox access-recent SMS sent.
- If there are any corresponding matches found with respect to these access, it generates text message and sent back to user.

B.Featured Options

1. Contact Access

The format followed for this is mention below,
Password <space> option number <space> contact name.

If the password is matched with the recent password which is set during logging. After matching password it go for option_ number, here the option_ number is unique means we can't use same option number for different option. The option number 1 is for only getting the contact back by sending contact name of particular person. We should also make sure that while sending the contact name, he should know in what manner he has saved in phone memory. It is somewhat case sensitive.

If there is a valid contact name it retrieves the contact number associated with this particular contact name then it generates the message text of both contact name and number. If the contact name is invalid, does not create any message text.

2. Call-Logs

The format followed for this is mention below,
Password <space> option number
The option number 2 is set for call log option if the above format is matches, when it checks in the call log any recent call is made if any recent call is made then it gives contact name, contact number, time, duration which is generated in the form of text message.

3. Triggering Siren

The format followed for this is mention below,
Password <space> option number
The option 3 is set for media player if the above format is matches, it play a music. It support mp3, mp4, avi, wav this types of files should be saved in the 'raw' folder. It just a application and we can set any type of music.

4. Recent SMS

The format followed for this is mention below,
Password <space>option number
The option 4 is set for recent SMS if the above format is matches, it first checks message in the inbox. If

there are any recent messages in the inbox which contains less than or equal to 160 characters then it generates same text message.

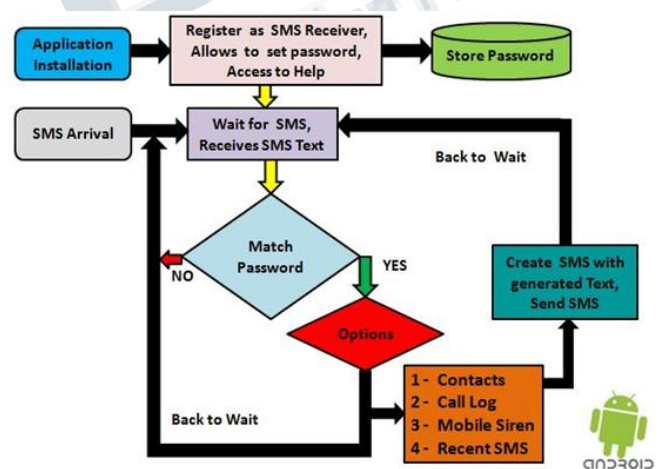
If there are any recent messages in the inbox which exceeds more than 160 characters then the particular messages split into two message bodies and generates the same text message.If there are no messages in the inbox does not generate text message.

5. Default Options

There options are reserved for future use. If we want to add some more features in our existing applications then we can use these options.

If there are no option is selected it goes to help menu. Help menu instructs a specific format to be followed sending a SMS.As we know every options generates a text message. If the user selects any of these desired options, then that generated message text with respect to particular options it sent back to the user. If the user do not select any options it goes to the user menu.

IV. FLOW SEQUENCE



The very first and foremost thing is that the application needs to be installed. Then the installed application is registered to SMS receiver. For SMS to receive which allows the application to set the authorization and authentication like username and password with some help menu and other options. In development of program code the program is

arranged or associated with password which will be static in nature if can't be modified. However if the user wants to change password, then he has to go back to development code to edit and modify it. Run that program, then "apk" file needs to be installed in the mobile and later run the application. To overcome this disadvantage we are using database.

With use of database we can set the password because using the database we can frequently change/set the password providing the user more security feature.

The next step is waiting for the SMS arrive and when the SMS is sent it is registered as per SmsReceiver then it calls the BroadcastReceiver which enables the application to receive intents that are broadcast by the system or by others applications even when the other components of application are not running.

If password matches following tasks will be carried out and also If password matches then he will be provided with certain options like help menu included with

- Contact access
- Call log
- Mobile Siren
- RecentSMS

V. ARCHITECTURE



In the architecture we have 3 components. One android mobile, one basic mobile or consider any Smartphone and a base station which works an intermediate to send and receive the messages.

In android mobile we have to install the application and we need to set the password, now the application is ready to use. Now send SMS command from mobile and it will be received by android mobile through a base station. After receiving the SMS the android mobile will generate the text data for the received SMS command and it will send the generated text in the form of SMS then it will be received by mobile through a base station.

VI. CONCLUSION

Android is a growing platform for the Smartphones, tablets and other devices. It's a small effort from us to join our hands to make a user friendly and a handy tool to reduce the human effort in the strange situations.

With the help of Android SDK, Eclipse IDE, JDK and SMS services, we implemented the Mobile Access by SMS application. Now with the help of Mobile Access by SMS Application, accessing your Android Smartphone is just a SMS away. Our application successfully completed the various tests on emulator and on various handsets. This guarantees to reduce the human effort in the emergency situations with the simple and handy interface. We genuinely tried to set a user friendly interface and the SMS command format, hope this helps the users.

REFERENCES

- [1] Sayed Y. Hashimi and SatyaKomatineni, Pro Android, Apress, First Edition, 2010
- [2] Mark L. Murphy, Beginning Android, Apress, Apress, First Edition, 2014
- [3] Herbert Schildt, Java 2: The Complete Reference, McGraw-Hill/Osborne, Fifth Edition, 2015