Automatic Missed Calls Recorder and Reminder

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Abstract – **In the fastest growing world, people are always very busy with their life schedules. People are normally engaged with many tasks and works. During their busy schedules, they cannot respond to their phone calls.**

When the people are not responding to calls, normally the calling people will have some bad impression on them and hence it may lead for some problems and misunderstandings in their life. For the people who are engaged with some business and enterprises, this kind of call ignorance may affect their business and this may lead to lose the relationships with their customers and entrepreneurs. The call ignorance not only affects business people, but it will affect all type of type people.

So here with our proposed android application, we have planned to make thing easier than ever before to identify and record the calls obtained by them in a most effective manner. The application is designed in such a way that on obtaining a call from any number during your busy schedule, automatically a text message is sent to the caller notifying about your busy status. Upon repeated calls received from the same number, application will automatically receive the call and the communications from the caller gets recorded. This works based on some profile's settings of the users.

1. INTRODUCTION

Automatic call recording offers an automatic way of recording inbound and outbound calls. Once a call is recorded, it is stored in the mobile storage and is available for playback and share at anytime, from anywhere. Listen to the recording as many times as you would like in order to review theconversation or take notes.

Mobile applications are driven by the need to provide more advanced services to mobile users, such as improved usability criteria, traceability, etc. Proposed application is operated accordingly to the profile set by the users. The users are opted to set different profile status like, 'general', 'busy', 'meeting', etc. The app looks at the set profile and operated based on that.

2. EXISTING SYSTEM

In existing mobile, the ring tone for an incoming call on the phone may be different. For example, when the phone receives an incoming call from a contact stored in the local directory, it will play the ring tone assigned to the contact in the contact directory (refer to Adding Contacts in the Contact Management section). Otherwise, the phone will play the ring tone assigned to the account. If both the contact ring tone and the account ring tone are not assigned, then the phone will play the ring tone assigned to the phone. That makes noise at crucial time. So user will kept the mobile in silence mode that may cause or loss some important calls.

SIM card providers usual have an option of notifying the caller about the availability of receiver when the receiver's number is either switched off or unavailable.

There are some more apps which have the option of recording the entire calls even from the ringing sound till the end.

3. LIMITATION

- Automatic notification is not there in existing system
- Instant replay and review can't possible
- Conference calls cost big bucks in labor costs alone.
- Missing or forgetting an important detail can mean lost time, or worse, a lost deal.

4. PROPOSED SYSTEM

You can enable or disable the phone to automatically answer an incoming call recording. If smart phone Allow is enabled, the phone automatically records the incoming call. If option Allow is disabled, the phone rejects incoming intercom calls and sends a busy signal to the caller. Allow is enabled by default.

The application consists of the following aspects:
- Auto text message response to missing call
- Auto call receiving when the call arrives again
- Then the call will be recorded.
- Miscalls trace
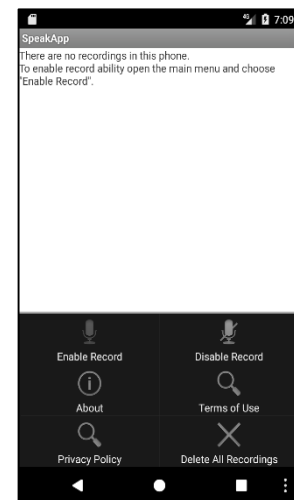- Received calls trace
- Recorded calls trace

Figure 1. Screenshot of Settings in App

Special Issue - 2017

International Journal of Engineering Research & Technology (IJERT)
ISSN: 2278-0181
NLPGPS - 2017 Conference Proceedings
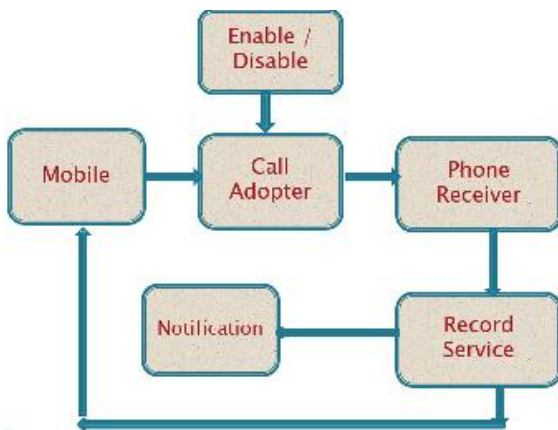
5. SYSTEMARCITECTURE

Figure 2. System Architecture

MODULES OF SYSTEM

The proposed system consist of five modules namely

1. Mobile
2. Call Adapter
3. Terms Activity
4. Phone Receiver
5. Record Service

1. Mobile
   - This module is the main activity model which acts as the user graphics interface system.

2. Call Adapter
   - This module which is the interface between the mobile hardware and the mobile application.
   - It also includes message adapter.

3. TERMS ACTIVITY
   - This module consists of enable and disable options, by default the app will be enabled.

4. PHONE RECEIVER
   - If the caller calls the callee it checks for the number of times of the incoming call.

5. RECORD SERVICE
   - This module automatically receives the call when the call exceeds three times and the conversation will be recorded.
   - This is used mainly for activation of recorder.

6. ADVANTAGES

- Easy to set up
- With a few simple clicks, user can enable automatic recordings for one or multiple users.
- Quickly select recordings for incoming calls.
- Playback or download recordings anytime
- As many as 100,000 recordings are saved per account, and recordings are available for download.

- Download individual or multiple recordings for review and playback.
- Flexible announcements.
- Use default or custom announcements for inbound calls.
- Notification are automatically sent to users enabled for automatic recordings.
- On-demand option
- Enabled users can record calls they make or receive, at their convenience.
- Such calls can be recorded from any anytime.
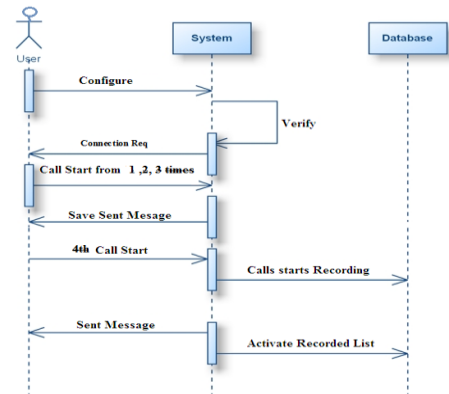
7. SEGUENCE DIAGRAM

Figure 3. Sequence Diagram

A sequence diagram is an interaction diagram that shows how process is operate with one another and what is their order. A sequence diagram shows object interaction arranged in time sequence.

From the figure 3, User configures with system and system verifies for connection and request for connection is sent to the user.

Once connection is established, call starts for first time. Again, this continues for two more times.

Later message is sent to the caller to notify them about the recording option. For the next call, record service begins by enabling the database.

Finally, the message notifying about the success of record is sent to user and record list gets activated.

8. CONCLUSION AND FUTURE ENHANCEMENT

When people have misunderstanding for not attending the call, this app will be very helpful and hence it is effective. It can be used by all kind of people with a smartphones and people who constantly miss their calls due to their busy schedules like entrepreneurs etc. Finally this app is very useful for all kind of people.

- White list and black list can be added, white list consists of wanted members and black list consists of list of unknown numbers.
- Withheld numbers can be saved in the name as saved in phone.
- Popup messages or notification for the receiver can be added.

Special Issue - 2017

International Journal of Engineering Research & Technology (IJERT)
ISSN: 2278-0181
NLPGPS - 2017 Conference Proceedings

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