VOICE RECOGNITION BASED CALL AND NOTIFICATION ANDROID APP

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Abstract- Make Noise speaks out name of the caller on Incoming call, reads outs SMS and notifications. It secures confidential messages. i.e., without the user’s authorization it’s difficult to reveal the message. In situations like you are driving and the Phone is in your pocket, or another room, so that you can identify who is calling you without looking your phone screen. This system improves the living standard by making the life easier. The development of the prototype will be made within a low budget in hopes to attract people. Speech recognition is technology that uses desired equipment and a service which can be controlled through voice without touching the screen of the android smart phone.

Keywords- Android Smart Phone, Speech Recognition, Voice, Application, Call, SMS.

I. INTRODUCTION

Speech Recognition is the procedure by which a portable recognizes talked words. Individuals adore their telephones since they can really remain in touch wherever they are. There is no compelling reason to scan for your telephone when you are pushing or occupied far from telephone. We are building with the development of cell phone innovation. According to the clients are increment step by step, offices are likewise expanding.

Discourse advancements are utilized as a part of voice handling applications: put away discourse, content to – discourse and discourse acknowledgment. Discourse acknowledgment, otherwise called discourse to-content (or) programmed discourse acknowledgment (ASR). Commercial items running from discourse input like client administration hotlines, voice aide operators, for example, SIRI and Google Now. SIRI is a standout amongst the most conspicuous or best cases of a portable voice interface, most recent iPhone have worked in voice initiated individual right hand. Application programming interface (API) empowers simple and consistent intergation of adaptable content to-discourse usefulness in versatile applications and backings both on the web and disconnected discourse acknowledgment. Utilizing the android which is best appropriate working framework. It is the open source working framework to build up a portable application for the android clients. Put away discourse includes the generation of versatile discourse from a real human voice that is put away in a portable's memory and utilized as a part of any of a few ways.

Discourse examination can be considered as that piece of voice preparing that believers human discourse to advanced structures appropriate for transmission. Discourse blend capacities are basically the backwards of discourse investigation – they reconvert discourse information from a computerized frame to one that is like the first recording and reasonable for playback. Discourse examination procedures can likewise be alluded to as a computerized discourse encoding and discourse amalgamation can be alluded to as Speech deciphering.
II. MAJOR ARCHITECTURAL COMPONENTS

1. A source-channel model for a typical speech-recognition system

![Communication channel diagram](image)

A source channel numerical model or a sort of generative measurable model is regularly used to define discourse acknowledgment issues. As delineated in Figure 1.1, the speaker's psyche chooses the source word grouping $W$ that is conveyed through his or her content generator. The source is gone through an uproarious correspondence channel that comprises of the speaker's vocal mechanical assembly to create the discourse waveform and the discourse flag handling segment of the discourse recognizer. At last, the discourse decoder expects to decipher the acoustic flag $X$ into a word arrangement $W$, which is in perfect cases near the first word grouping $W$. Figure 1.2. Applications interface with the decoder to get acknowledgment comes about that might be utilized to adjust different parts in the framework. Acoustic models incorporate the representation of learning about acoustics, phonetics, amplifier and environment fluctuation, sexual orientation and vernacular contrasts among speakers, and so on. Dialect models allude to a framework's information of what constitutes a conceivable word, what words are probably going to co-happen, and in what arrangement.

III. PROPOSED SYSTEM

You can command the system to attend/reject the call placed by the caller through the voice command. To attend call –YES, To reject call -NO
If it is about the reject the call from the caller, it asks 2 questions
1. Do you want to send any message- YES or NO is to be replied by the user.
2. If YES - it asks for the appropriate message
3. If No- it rejects the call as well as it omits the message service.

The previously mentioned prepare works based upon TTS (Text to speech). It is a screen reader application created by Google for its Android operating system. It powers application to browse so anyone might hear (talk) the content on the screen. With Google Text-to-Speech API (Application program interface) which Speaks out the Contact Name while getting a call and furthermore sits tight for client to react with proper message.

The discourse innovation are boundless. Most exertion right now bases on attempting to give voice information and yield to data frameworks. It just means the arrangement of, say, a discourse acknowledgment framework for giving a contribution to a versatile when the speaker has their hands drew in on some other errand and can't control a console.

**IV. THE PROPOSED SOFTWARE ARCHITECTURE**

<table>
<thead>
<tr>
<th>Respond with:</th>
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<tbody>
<tr>
<td>Sorry, I can’t talk right now.</td>
</tr>
<tr>
<td>I’m on my way.</td>
</tr>
<tr>
<td>Can I call you later?</td>
</tr>
<tr>
<td>Custom...</td>
</tr>
<tr>
<td>Cancel</td>
</tr>
</tbody>
</table>
V. APPLICATIONS

1. Announces the Caller Name.
2. Interactive SMS read option to control SMS content reading with voice commands.
3. Instant Location sender to the Caller at emergency time when Phone is not reachable to hand.
4. Reject Calls through Voice Command While Driving and Other Unreachable Conditions!
5. Helps people such as blind and other physically challenged people who face using Phones difficult on a day to day life by interactive voice control.

VI. SUMMARY

Make Noise (Android Based App) developing for this purpose works based on the Google Text-to-Speech Technique. App lets user to customize settings such as what the must do based on events of Call, SMS and others Android Apps and OS Notifications. Some of the toggle settings to be implemented in call are Nickname setting for a Caller, Repeat Caller name Unless Accept the Call, Speech Delay, Permissions Request such as what to do next on Specific caller, Driving Mode enables to speak out all Call, SMS and other Notifications in Headset only mode or Private Car Mode.

Some settings to be implemented on SMS and notifications are Hiding Sensitive Information Such as OTP, Banking Transactions, personal Messages from specific people from social networks etc. Hiding doesn’t mean of not speaking out the SMS messages and notifications, it simply asks for permissions to users before reading out these messages through voice commands from Google Now and Text-to-Speech Engine. Example of such an event would be like this (i.e.) when an user gets an SMS from a Banking transactions the app identify those information tell only the user id (Contact Name of that Message) and eventually asks for Permissions such as shown below.

1. Would you like to read out SMS or Notification?
   Reply “YES” – Reads out the SMS or Notification
   “NO” – Be silent.

Call Event Works as described below, An example of a call event is when an user gets a call on his or her Phone, App speaks outs the name of caller on speaker or in Earphones based upon the mode set by the user for app such normal mode or Driving mode. Once Speaks out the caller Name or id then it asks the user questions as mentioned in “3.Proposed system”.

VII. CONCLUSION

In this Paper, we have made some points on betterment of the Android Voice Controlled apps on Mobile and also added some features which are currently unavailable in android based phones such as attending a Call over the Voice Commands and also rejecting the call over the Voice Command. This app also helps people such as blind and other physically challenged people who face using Phones difficult on a day to day life by voice controlled calls and reading out SMS & Notification.

REFERENCES


