

Voice to Text Converter

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Abstract- There are several applications that let you seek, compose messages, Take notes and set arrangements with your advanced mobile phone. Yet, for a few people the little size of a telephone console or touch screen can point of confinement and hard to utilize. In the event that you experience difficulty seeing the little sort, have an absence of finger aptitude or simply think better so anyone can hear, you may profit by an apparatus that enables you to change over talked words to composed words. "Voice to Text Converter", the application that can be a convenient device for recording every one of your considerations at the finish of every day. Which utilize your voice to direct an instant message and spare it as an archive record as you can reuse it and recoveries your significant time.

I. INTRODUCTION

Problem definition

To create an mobile app which is applicable to all the android smart phone users and help them out in creating a document by taking their voice and converting into the text and save it as a modifiable file. By using the Apache tomcat sever and Android studio an application is created and using the databases as a back end server the data is stored.

Existing system

- "EVERNOTE", an app which is used by the android mobile phones to record audio notes such as lectures or meetings and allows you to turn those audio files into text.
- Ever note saves both the audio and the text file together.
- The app is free, but because Ever note uses Google Android's text transcription service, you do need to be online to use it.

Proposed system

- "VOICE TO TEXT CONVERTER", the app that can be a handy tool for recording all your thoughts at the end of each day. Say what is on your mind and it will be saved, as a document, so that you can even modify it later.
- It recognizes and transcribes your words at lightning speed, and gives you the flexibility to dictate for any situation.
- Allows truly hands-free text input, which is perfect for when you are on the move.

Scope of project

One of the fastest growing industries is IT industry. There are many competitors in this area who are doing research and development on new platforms & user experience. One such technology is speech recognition system. Developing application for such systems using the open source java is quite effective. This makes the application to display text quite easy, efficient, flexible and economic.

II. LITERATURE SURVEY

A database including IJARCCE and IEEE was searched for relevant publications mainly within the past five years. Multiple search terms were used, combining "speech recognition" with "Application development". Review of websites Speech is the primary means of communication between people. Speech recognition, generation of speech waveforms, has been under development for several decades. Automatic speech recognition is a process by which a computer takes a speech signal and Converts it into words .It is the process by which a computer recognizes what a person Said. There is a large variety in the speech recognition technology and it is important to understand the differences. One can classify speech recognition systems according to the type of speech, the size of the vocabulary, the basic units and the speaker dependence. The position of a speech recognition system in these dimensions determines which algorithm has to be used.

A. Type of speech

There are basically two types of speech:

1. Continuous speech
2. Discrete speech.

Discrete speech consists of isolated words that are separated by silences. The advantage of discrete speech is that word boundaries can be set exactly while with continuous speech; words will be spoken without silences.

B. Size of the vocabulary

The size of the vocabulary is the second typical aspect of a speech recognition technology. The vocabulary is a set of words that have to be recognized. A small vocabulary is one, which contains less than about 30 words. A 500-word vocabulary is average size. A vocabulary with more than 25000 words generally will be seen as very big, although these definitions tend to depend on the application field.

C. Speaker dependence

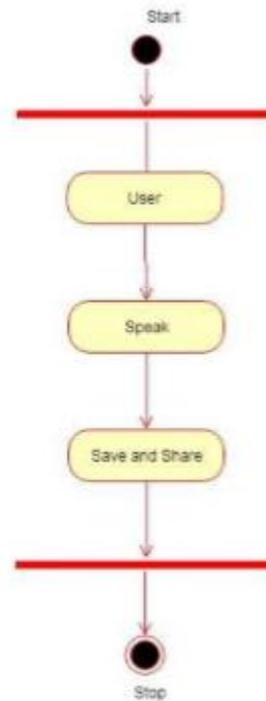
- Speaker dependent system
- Speaker independent system
- Speaker adaptable system

Some speaker-dependent systems require only that the user record a subset of system vocabulary to make the entire vocabulary recognizable. A speaker-independent system does not require any recording prior to speaker-dependent system requires that the user record an example of the word, sentence, or phrase system use. A speaker independent system is developed to operate for any speaker of a particular type (e.g., American English). A speaker adaptive system is developed to adapt its operation to the characteristics of new speakers. Accuracy of the experiments depends upon the training time. If the Training time of the system is increased, accuracy automatically increased. Time is directly proportional to accuracy. If training time increases then accuracy will increase automatically.

III. METHODOLOGY

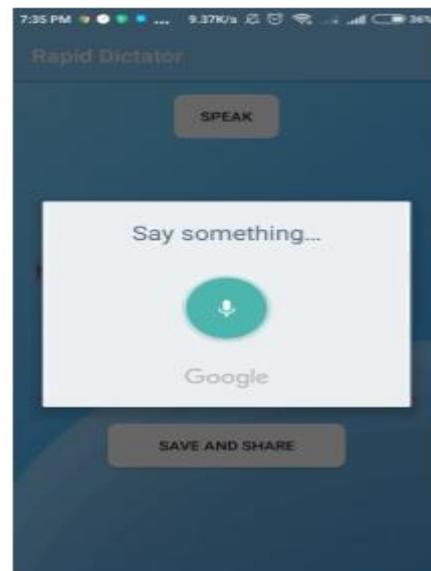
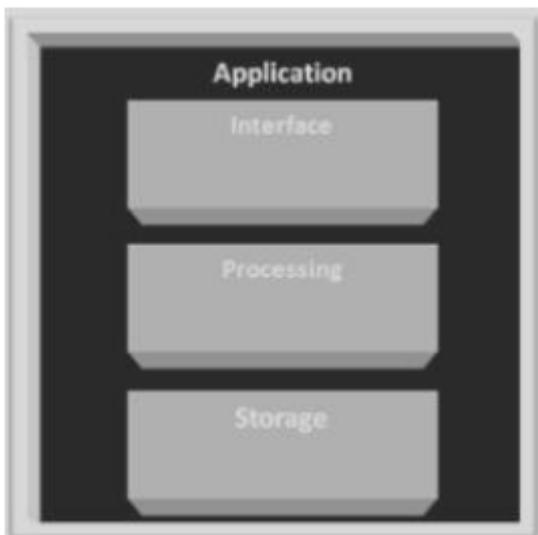
Java Speech API

The Java Speech API (JSAPI) is a specification for cross-platform APIs that supports command-and-control recognizers, dictation systems, and speech synthesizers. Currently, the Java Speech API includes javadocstyle API documentation for the approximately 70 classes in and interfaces to the API. The specification includes a detailed programmer's guide that explains both introductory and advanced speech application programming with JSAPI, but it doesn't yet offer the source code or binary classes required to compile the applications. JSAPI is freely available, and its owners welcome anyone to develop an implementation for it; so far, it has just a few implementations, such as FreeTTS for voice synthesis and IBM Speech for Java for speech recognition.

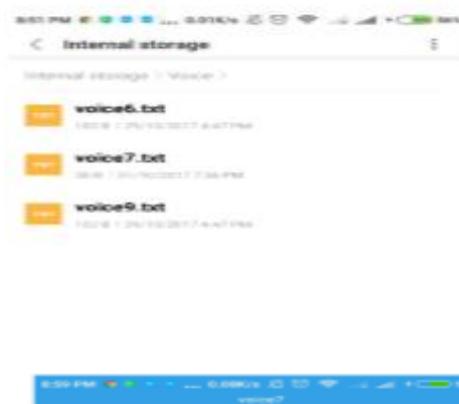
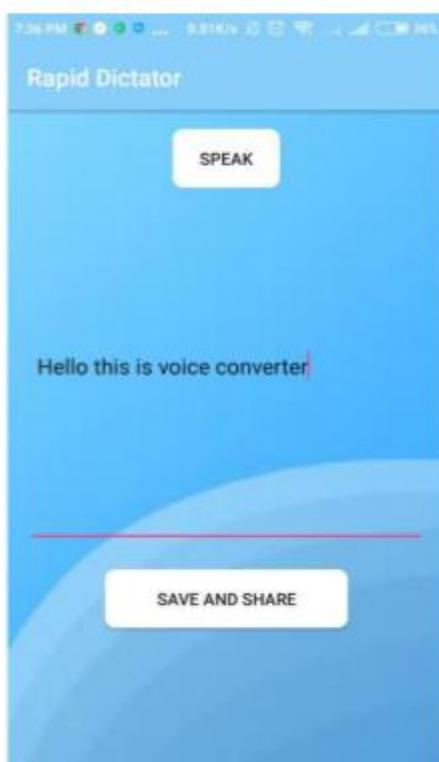
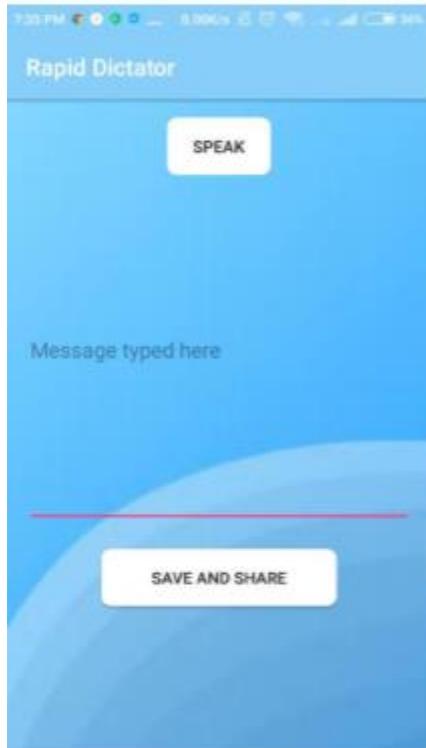


Architecture

The framework is actualized in a single tier architecture that is the User Interface, preparing and the database are altogether executed on a similar stage. This architecture was decided for security reasons. As passing information starting with one stage then onto the next to process them requires an association which might be powerless against assaults this makes touchy information be spilled. Though in a single tier architecture, a client's telephone characterizes the security of the applications running on them. On the off chance that the part biological community is secure and is all around coordinated, at that point it is hard to hack into the application.



IV. RESULTS



V. CONCLUSION

The potential for voice in applications is tremendous. An example is incorporating it in dialect learning applications to as a guide to impeded clients. Later on, wearable gadgets will fuel selection of discourse in portable applications. While it might be some time before discourse will supplant touch as essential contribution to Smartphone applications, designers need to begin considering whether and how to add discourse control to their applications to remain aggressive.

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