

SIFI (Save It Forget It)

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Abstract: As everyone is busy with their mobiles, they don't have any time to remember special events, meeting etc. Reminders are very important in our life, certain things needs to be planned for the next day. While there are a lot of reminder apps on the market that claim to function well, but when it comes to the performance it lack functionalities. So, here we are with our new mobile application SIFI i.e. (Save it forget it) is an user program that helps in recording user events in calendar and then display and send auto-generated event's message using voice input.

Keywords: Speech Corpus, Suggestion List, Text Editor, Calendar study, Message sending.

1. INTRODUCTION

SIFI i.e. (Save it Forget it) is an Android mobile application. SIFI is assemble in Java, as Java is open source programming languages which become the main development platform for many software. Java relies on JVM to be secure and highly portable. Java library support logging, repository and iterators, algorithms, GUI programming, graphics, multi-threading, networking, platform security, dynamic class loading, blocking and non-blocking I/O. It rendered interfaces or support classes for XML, database connectivity, naming services, cryptography, and web services. NLP (Natural Language Processing) is important for scientific, economic, social, and cultural reasons. NLP is experiencing rapid growth as its theories and methods are deployed in a variety of new language technologies. For this reason it is important for a wide range of people to have a working knowledge of NLP. Within industry, this includes people in human-computer interaction, business information analysis, and web software development. Within academia, it includes people in areas from humanities computing and corpus linguistics through to computer science and artificial intelligence.

2. OBJECTIVE

1. Convert voice message into the text format.
2. Save voice recorded event on the calendar on that specific date.
3. Take appropriate action based on that event.
4. Send auto-generated message on that date to the specified person.

3. SCOPE

The Scope of SIFI according to the mobile app are as:

- As we all are so busy in our life such that we don't have that much time to type a message and save it for that special event. So SIFI is an application which will allow you to only say the message and it will get store in the calendar on the specific date .This will reduce typing time of the user.
- As we using java platform for building this application, it will become very easier to work quicker and smarter in any environment.
- SIFI will be very easy and convenient to use.

4. SIFI MODULE

Save it forget it mobile application is divided into three main modules:

- Voice to text
- Text to save
- Save to send
- **Voice to text:**

Internet is a vast and open source repository of knowledge. We have the flexibility to use the well tested application and source codes from authentic sources. There are many voices to text translation applications which help us to understand and act as trusted source of knowledge. Developing technology doesn't always mean to invent things, it sometime mean to enhance the work of what already there. We are learning the details on natural language processing which tell us how the interaction between computer and human takes place. As language is a mean of communication between any two entities, so we are learning new syntax and semantics of natural language to make interaction possible between them. The goal of the Natural Language Processing (NLP) is to design and build software that will analyze , understand, and produce languages that humans use naturally, so that finally you will be able to address your computer as though you were addressing another person.



Fig. A

In voice to text modules, the user need to dictate the message and his/her voice get recognized by the application. The challenges we face stem from the highly ambiguous nature of natural language. As an English speaker you effortlessly understand a sentence like "Flying planes can be dangerous". Yet this sentence presents difficulties to a software program that lacks both your knowledge of the world and your experience with linguistic structures. We address these problems using a mix of knowledge-engineered and statistical/machine-learning techniques to disambiguate and respond to natural language input. Our work has implications for applications like text critiquing, information retrieval, question answering, summarization, gaming, and translation. The grammar checkers in Office for English, French, German, and Spanish are outgrowths of our research; Encarta uses our technology to retrieve answers to user questions; uses natural language technology to compress cell phone messages. As our work evolves, we expect it to enable any area where human users can benefit by communicating with their computers in a natural way.

The module translates spoken words into text by capturing the speaker's words and comparing them to preloaded words. Words that nearby match those identified by the software are converted to text.

- **Text to save:**



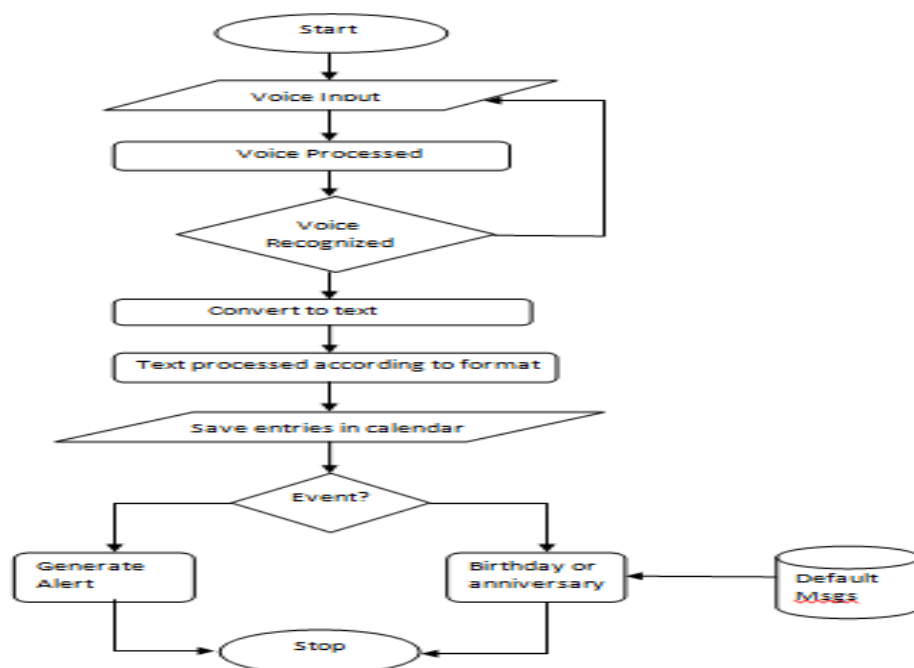
Fig. B

We may have a habit of marking important dates in calendar. The reason behind this is usual that we can't remember everything. This module will take converted voice to text and perform operation on that text. The inputted text is get split according to the format i.e. the string will be broken down into three main units-subject, object and predicate. Noun or else Pronoun are considered to be in the subject part where else events such as birthday, anniversary, and meeting are come under the category of objects and lastly time and date are considered as predicate. For e.g.: if we say ("xyz is having a meeting at 10 am"). So from this, the pronoun gets spilt i.e. "xyz" and the "meeting" will go into the object where as the "10 am" will be the predicate and the remaining left words are skipped by the application. The splitter text is now ready so save into the calendar. As mobile devices are now becoming an up-growing technology and also gives us many variety of application to store the events which we unable to remember for a long duration. An Google Calendar is a prime app calendar which already come along with android devices and it has the functionality that it can be used with the mobile calendar. For the ease of use we can access the Google calendar to save our entries. Just speak your appointments instead of typing them down. Insert and save events completely with your voice, also in different calendars. Automatically stored reminders will not let you miss your appointment.

➤ Save to send:

In this module, the saved entries are send according to the user defined event. Short Message Service (SMS) is a text messaging service component of phone, Web, or mobile communication systems. It uses standardized communications to allow fixed line or mobile phone devices to exchange short text messages. SMS is used for M2M (Machine to Machine) communication. Threaded SMS is a visual styling orientation of SMS message history that arranges messages to and from a contact in chronological order on a single screen. While SMS reached its popularity as a person-to-person messaging, another type of SMS is growing fast: application-to-person (A2P) messaging. A2P is a type of SMS sent from a subscriber to an application or sent from an application to a subscriber. It is commonly used by financial institutions, airlines, hotel booking sites, social networks, and other organizations sending SMS from their systems to their customers. This module has two options i.e. whether it send message or generate an alert. If an event is a birthday or an anniversary then the application will take default message from the database and ask whether to send a message or not. If user wishes to send the message then the sending process will continue and if in case user doesn't want to send a message because of low balance then the user can click on cancel button. Now the next scenario is of generating an alert. If the stored event is a meeting then only the application will generate a pop-up message or a reminder.

5. WORKING



Any idea when elaborated with diagram gives more clear description of an application. Flowcharts are the ideal diagrams for visually representing an application. The flowchart of SIFI notifies us how flow is taking place from start till end. Firstly the application get start from the initial point and then the user have to speak the sentence in the correct ascent. At this point the voice get processed to match with the pre-defined natural language processing syntax and semantics. If a program validates spoken words of the user to be the correct one then the flow will transfer to the next process else the user has to speak again in the correct ascent. The next process is to convert the inputted voice into the text format .This step doesn't concern with any condition, only conversion of voice to text is taking place in this phase. Then the converted text message gets saved in the calendar on the specified date. This step requires processing of converted text into the specified format. The processed text gets saved in the form of data. Now when the particularized date came, the application will generate a pop-up message accordingly. If the event is a birthday /anniversary then the application will take normal message i.e. "Happy Birthday/Anniversary" which are already stored in the database and ask the user on that date that he/she wishes to send a message to another person. If the event is a meeting then the application only makes an alert on that time which the user had specified earlier. In this way the flow comes to an end in a systematic manner.

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