

NEXT GENERATION SYSTEM ASSISTANT

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ABSTRACT

One of the goals of Artificial intelligence (AI) is the realization of natural dialogue between humans and machines. In recent years, the dialogue systems, also known as interactive conversational systems are the fastest growing area in AI. This paper also presents an assistance system for helping deaf-mute people or elderly singletons. The proposed system assists deaf-mute people or elderly singletons in the shortest possible time to report, the report also uses SMS intimate to achieve offline report. This paper also proposes a novel approach to defining and simulating a new generation of virtual personal assistants as multi-application multi-domain distributed dialogue systems. The subject of the paper is a personal assistant design. The goal of personal assistant is a daily activities list planning. The Personal assistant will assist the customer that is human operator for planning is an optimum succession of desired activity.

Keyword: *System Assistant, Artificial Intelligence, Voice Recognition, Speech Processing, Hand free computing, Secured.*

1. INTRODUCTION

As computing technology has become more advanced and less expensive, it can be built into an increasing number of devices of all kinds. However, a large section of visually impaired People in different countries, in particular, the Indian sub-continent could not benefit much from such systems. Many device has been designed and modeled to help normal people's daily routine. Due to busy schedule many technologies has been developed which can make people to do their work easily and without time consuming. One of the technologies is virtual assistant services can help you with every possible task you have to perform provided it does not need a physical presence. The range of tasks can vary from phone call answering to scheduling appointments and file management system working on voice commands. On giving input through voice or text, the system will recognize the voice and will give the following results as per demanded. In this way, it has introduced to the virtual reality. But this technologies must not only benefit normal people but also physically challenge people which includes deaf and dumb people. Our system will not only helpful to perform daily activities of normal people but it will also Help physically challenge people for communication.

1.1 PROBLEM STATEMENT

The system assistant will help the user for communication, to communicate information, manage their daily activities. The system assistant performs tasks like calling, messaging, calendar scheduling. The subject of the paper is a personal assistant design for normal and physically challenge people like deaf and dumb people. The goal of personal assistant is a daily activities list planning. The personal assistant will assist the user (human operator) for planning an optimum succession of desired activities.

2. LITERATURE SURVEY

1. Personal Assistant
 - Useful for tracking expenses and appointment. Once entered dates for the appointment cannot be changed.
 - Difficulty in retrieving information from notes and diary provided by this application.
 - Useful for storing only appointments and expenses.
2. Haptic Assistant- Reminders, Flight, Daily Quiz.
 - Sets the reminder perfectly, used for Flights, Daily Quiz.
 - Consumes lot of data. Sometimes results in failure in working in app.
 - Many times it has took money from the user and has not recharged.
3. Personal Assistant
 - Easy to use.
 - The notifications doesn't have buttons to dismiss or snooze the message.
 - No popup screen, the display doesn't light up.
 - Has very attractive Graphical user interface.

3. PROPOSED SYSTEM

The development of the system assistant as a personal assistant is done to help users to cope with information overload. The idea is a software agent that behaves as a personal assistant who collaborates with and supports the user in various ways such as hiding the complexity of difficult tasks, performing tasks on the user's behalf, and helping the user to manage his/her own activities.

4. SYSTEM ARCHITECTURE

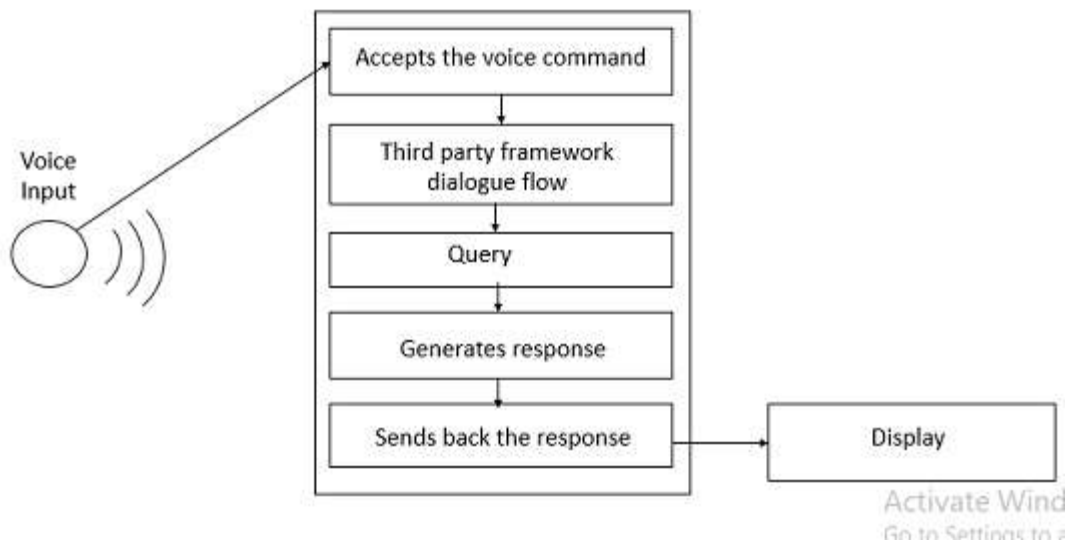


Fig 1: System architecture of personal assistant

The overall system design consists of following:

1. Data collection in the form of speech.
2. Voice analysis and conversion to text
3. Generating speech from the processed text output and Data storage and processing.

In first phase, the data is collected in the form of speech and stored as an input for the next phase for processing. In second phase, the input voice is continuously processed and converted to text using STT. In next phase the converted text is analyzed and processed using Java to identify the response to be taken against the command. Finally once the response is identified, output is generated from simple text to speech conversion using TTS.

4. CONCLUSION

The system assistant is designed to help all the people to perform their daily activities and also to perform some task. It is designed in such a way that it can be beneficial to physically challenged people (dumb and deaf) so that they can also communicate with each other using this application and also can various perform task. The input is given in voice format. The system assistant works on the voice commands or text commands. Tasks like calling a person, messaging a person, setting an alarm, setting a schedule, etc.

5. REFERENCES

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