Voice based Intelligent Virtual Assistance for Windows

Abstract :-

This project is based on voice intelligent Assistance. This tool is used for searching purposes, remainders just by using voice commands. If we want to access any document or file we can do it by voice recognition. But there are certain limitations that the user should set some voices as a security options. If the user spells out the word it automatically types in the required field. It recognizes the speech and searches the appropriate content in the database and retrieves it. The user should select the appropriate language for the virtual assistant to understand. If any wrong or invalid communication happens it invokes some messages in dialog box. It is like a software agent which performs tasks and events based on commands. Voice-Command and speech synthesis are enhancing the level of user-interaction in applications. This trend is now approaching business-applications like ERP-Systems.

Introduction:-

This system is voice-based personal assistant has always seemed a little out of place in the enterprise. It's a useful tool for search, for reminders, and to write the note just by speaking it up. Window assistant is to create voice apps for the intelligent assistant. When user need to open any other application, he/she can use the command open. E.g. Open Notepad, File explorer, goggle chrome, this will help to open the applications. When user want to write the message can use command write. And to for searching purpose search command can be use. It will also restart and shutdown on the command. It will detect the speech and save in the database, and retrieve from the database and executive command and delete it from database. Interactions between a user and your Window assistant skill are mostly free-form, so assistant must understand language naturally and also in context.

Window assistant determines what a user wants to do by identifying the user intent from spoken or textual input by utterance. The intent maps utterances to actions that Window assistant can take, such as invoking a dialog.

Intents processing by Siri
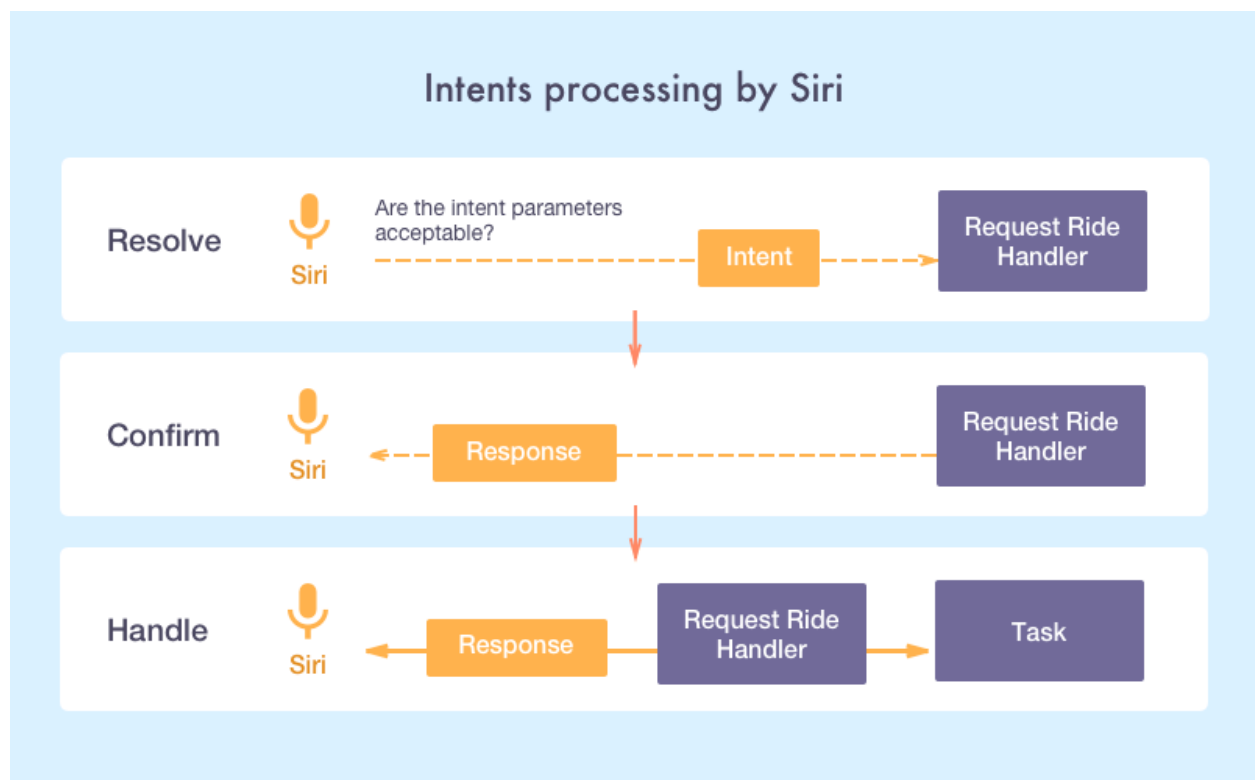
Modules:

The system comprises of 2 major modules with their sub-modules as follows:

1. _User_

- **Speech to Text:** User will ask the computer to run command by giving input as speech

- **Command Execution:** Based on command received from the user, system will execute the command (if available). e.g. Open Notepad, Paint, Google Chrome, etc. System accept various command such as opening of specific applications, writing a note and saving it, opening web URL, Search for any query or details and shutdown & Restart command

- **Text to Speech:** Once a command is received, application speaks the command which make user experience more interactive with the system

Existing system

Virtual assistants may be integrated into many types of platforms or, like Amazon Alexa, across several of them:

- Into devices like smart speakers such as Amazon Echo, Google Home and Apple HomePod
- In instant messaging applications on both smartphones and via the Web, e.g. Facebook's M (virtual assistant) on both Facebook and Facebook Messenger apps or via the Web
- Built into a mobile operating system (OS), as are Apple's Siri on iOS devices and BlackBerry Assistant on BlackBerry 10 devices, or into a desktop OS such as Cortana on Microsoft Windows OS
- Built into a smartphone independent of the OS, as is Bixby on the Samsung Galaxy S8 and Note 8.
- Within instant messaging platforms, assistants from specific organizations, such as Aeromexico's Aerobot on Facebook Messenger or Wechat Secretary on WeChat

- Within mobile apps from specific companies and other organizations, such as Dom from [Domino's Pizza](#)
- In appliances, cars, and [wearable technology](#),
- Previous generations of virtual assistants often worked on websites, such as [Alaska Airlines](#)' Ask Jenn,or on [interactive voice response](#) (IVR) systems such as [American Airlines](#)' IVR by Nu

Description

The waterfall Model is a linear sequential flow. In which progress is seen as flowing steadily downwards (like a waterfall) through the phases of software implementation. This means that any phase in the development process begins only if the previous phase is complete. The waterfall approach does not define the process to go back to the previous phase to handle changes in requirement. The waterfall approach is the earliest approach that was used for software development.
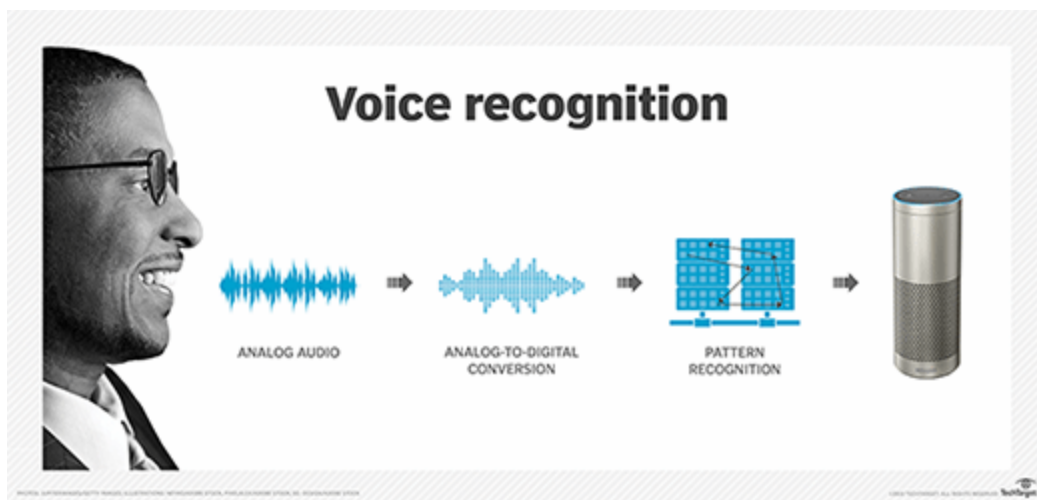
❖ *Hardware Requirement:*

i3 Processor Based Computer or higher

Memory: 1 GB

Hard Drive: 50 GB

Monitor

Internet Connection

❖ *Software Requirement*:

Windows 7 or higher

Visual Studio

SQL Server

Google Chrome Browser

❖ *Advantages*

- It converts text to speech
- It will assist you to find the applications easily.
- It can be used in windows 7.

❖ *Limitation*

- Data need to be entered properly otherwise; outcome may won't be accurate.

❖ *Application*

- This system can be used by the multiple peoples to get the counselling sessions online.

- Assigning repeated tasks to virtual voice assistants frees up the human time and resources.

- These digital voice-enabled assistants also make the operations hands-free.]

- 50% of those who were surveyed said that it is a better interaction medium and⌉ they find it easier than any other method of communication used.

Conclusion

Voice Search has now become a definitive mobile experience. An absence of knowledge and learning makes it especially tough for organizations to get a strategy on voice search. There is a ton of chance for a lot further and significantly more conversational experiences with users for AI in mobile app development

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