A VOICE CONTROLLED WEB APPLICATON

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Abstract - Speech recognition is technology that can recognize spoken words, which can then be converted to text. A subset of speech recognition is voice recognition, which is the technology for identifying a person based on their voice. Facebook, Amazon, Microsoft, Google and Apple — five of the world's top tech companies — are already offering this feature on various devices through services like Google Home, Amazon Echo and Siri.

Speech recognition or speech to text includes capturing and digitizing the sound waves, transfor-mation of basic linguistic units or phonemes, constructing words from phonemes and contextually analyzing the words to ensure the correct spelling of words that sounds the same. Approach: Stud-ying the possibility of designing a software system using one of the techniques of artificAial intelli-gence applications neuron networks where this system is able to distinguish the sound signals and neural networks of irregular users. Fixed weights are trained on those forms first and then the system gives the output match for each of these formats and high speed. The proposed neural network study is based on solutions of speech recognition tasks, detecting signals using angular modulation and detection of modulated techniques.

Most of the works done till today on the field of IVR system has been primarily focused on the input mechanisms based on the keyboard or touch pad. In such cases it is tedious to provide the input command every time through typing of texts. This way of providing input to the computer system may be enhanced if we could provide direct speech input instead of typing. This enables in fast interaction between the system and user and therefore increases overall satisfaction of the customers. This also increases the speed of access of the information from the system.

1. INTRODUCTION

Using voice commands has become pretty ubiquitous nowadays, as more mobile phone users use voice assistants such as Siri and Cortana, and as devices such as Amazon Echo and Google Home have been invading our living rooms. These systems are built with speech recognition software that allows their users to issue voice commands. Now, our web browsers will become familiar with to Web Speech API, which allows users to integrate voice data in web apps.

With the current state of web apps, we can rely on various UI elements to interact with users. With the Web Speech API, we can develop rich web applications with natural user interactions and minimal visual interface, using voice commands. This enables countless use cases for richer web applications. Moreover, the API can make web apps accessible, helping people with physical or cognitive disabilities or injuries. The future web will be more conversational and accessible!

This project creates an artificial intelligence (AI) voice chat interface in the browser. The app will listen to the user's voice and reply with a synthetic voice.

2. EXISTING SYSTEM

The existing system is an E-COMMERCE website (voice controlled website). Which recognizes the voice of a user by saying a key word like "hey Google". And it acts for the user input. The drawbacks of this existing project was that user wants to call the assistant by its keyword every time. While giving the input.

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3. PROPOSED SYSTEM

Every other existing systems are want to say the keyword of the AI every time that we want to use it but on this project the user doesn't want to call the AI every single time. It recognizes the user in the first command of calling the AI. This feature helps the user time effectively and it shut down the AI in unwanted time using the other keyword.

4. COMPONENTS REQUIRED

Hardware Specifications
        1.Processer : Core i3
        2.Clock Speed : 2.8 GHz
        3.RAM : 4GB
        4.Hard disk Capacity : Minimum 500 GB
        5.DVDROM : 32x speed
Software Specifications
        1.Operating System : Windows 7 64-bit
Software :
        1. Notepad for html coding
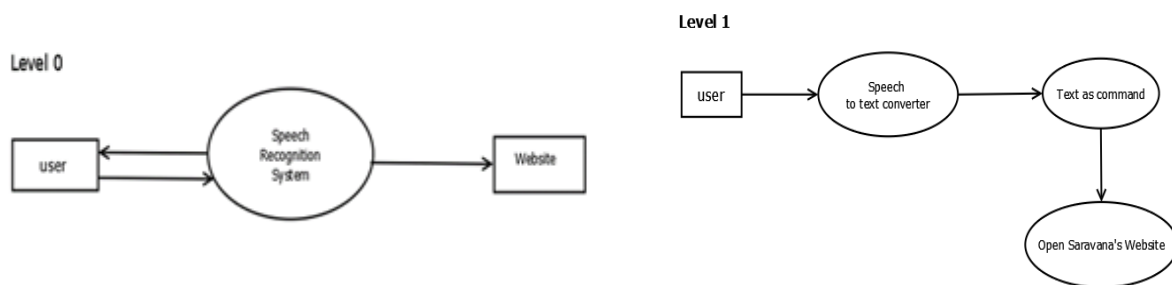   2. Browser for executing html coding
        3. Spyder IDE
Programming Languages :
        1. HTML
   2. PHYTHON

5. APPLICATION

It is used in supermarket for searching a particular product location without manpower and time efficiency. and also used in medical shop for searching a particular medicine location without manpower and time efficiency.

6. FLOW OF THE PROJECT

## 7. SCREENSHOTS AND EXECUTION

STEP1: Openanaconda prompt. STEP2: Set the pathto project folder.
STEP3: Then type pythonapp.pyand thenclick enter keyyouwillget anurl.
STEP4: Copyurland paste it onexplorerand youwillget the page like inthe figure.
STEP5: Thenclick onthe test here buttonand youredirect to the next page.
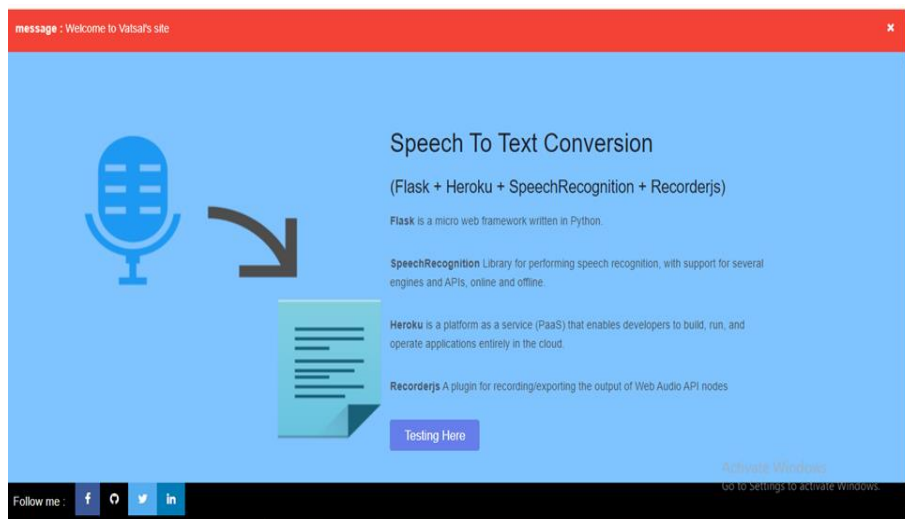
STEP6: Click the start button and say a keyword and click stop if the keyword matches to the value the host given it will redirect to the websites corresponding page.
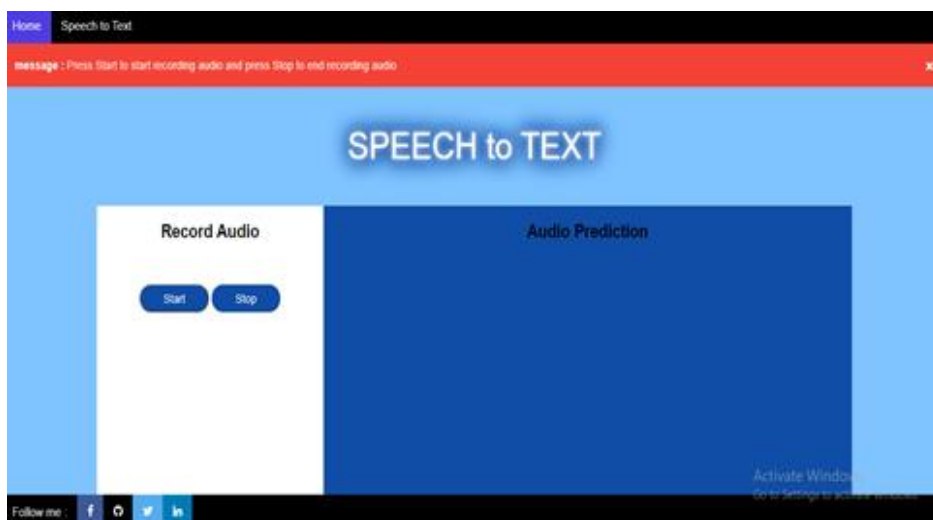
8. CONCLUTIONS

We present a study of some of the cutting edge SRSs in this research, a summary of performance comparisons of some of the popular SRSs from the literature, a taxonomy for categorizing SRSs based on their functionality, and a preliminary prototype of a voice-controlled e-commerce web application using IBM Watson STT and TTS services. Enhancing accessibility to commercial websites is crucial for today's e-commerce dependent economy. We implement a SRS-based e-commerce web application with a view to leverage accessibility to web applications for the visually-impaired users such that they can use their voice as a means to operate the application. SRS enabled applications can enhance usability for all users by promoting ease of interaction and multi-tasking, and support a lean environment where users can make requests using natural language.

For the future work, we plan to compare the performances of other cloud-based services such as Google and Amazon in the context of the same e-commerce application. The application can be extended to identify a specific speaker based on the voice. Furthermore, the application can also be equipped with the language translation APIs that will allow users to give commands to the application in their own native language. This can prove to be beneficial for the users who are restrained from using the websites because of the language barrier. The application can be designed in such a way, that it can render user-specific interfaces based on their interests. This means that the interface can be rendered distinctively for every user thus making the application more appealing and user-friendly. The application can also be extended to other domains such as for online education, providing services at government service kiosks, and for emergency online assistance.

REFERENCES

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