



# Review on Voice Based Email System for Visually Impaired

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**Abstract:** Internet extensively used in almost all communication applications because of its integrity and availability. Recently, several applications built on the net has evolved to build transmission inherently further authentic and systematic. Many applications, email is popular and dependable means of communication with everyone. Using email is very simple and easy to understand for the average user, but using the system for the visually impaired is still very difficult. The ongoing system is not useful for visually impaired people. This is because the systems available are based on visual perception. However, the current email system has not yet been upgraded for use by the visually impaired. In this regard, there is a need to modernize existing systems to make this system most pract. Therefore, this paper, we commenced the Voice Activated E-mail System to provide simple and easy approach to the E-mail System for people with visual impairments. The rescue will also benefit people with other disabilities, along with blind people.

## I. INTRODUCTION

With the advent of internet technology, communication has become more common very easy. The internet is considered a warehouse innovation, technology and information. Many social networking sites and forums. The most common method for online communication email. It is approximated that they exist to a greater extent than 4.6 million electronic mail version. At the close of 2022, an estimated 5.9 billion, and that is better than 29.3%. In that respect there are 3.56 billion electronic mail customers generally and work and consumer user as per their claims. Email remains the standard of acceptance to bring about significant communication. To use these online offices each person needs the ability to see. Since in the visual separation to understand what the essence is available on screen. From now on this type of framework is no use for visually impaired people. To make this framework useful for these visuals individuals challenged. there are different upgrades on offer as an automatic voice recognition, screen editor, word to voice and voice to word, braille comfort . However, development is not so important those people as it can give the best answer as a general framework. Using the above elements visually individuals face many challenges.

## II. LITERATURE REVIEW

This creates a realistic and natural way for the system to convey the message. The system uses interactive voice feedback to interact with users and does not use keywords. This is done through text-to-speech and automatic speech recognition. This is a program that gives the user email control over the voice rather than touch control. This uses voice feedback to communicate with the user. When a user interacts with the system it will generate action words automatically. In this program only mouse click operations are performed to start tasks. [1] The current update is aimed at features that are accessible in high light and applications and applications, which include instruction, and access to smart phones as a visual aid for visual impairment and blindness. This has been an important milestone in the development of the latest mobile technology, which includes computer technology related to electronic information, and touch screen access.[2].

Introduces an email system that works on the principle of voice control such as interactive voice response (IVR) that makes PC to communicate with people using their voice, and automatic speech recognition (ASR) also known as speech-to-text converter. Technology that allows people to apply their voices to communicate with a computer in a way similar to normal human conversation. Voice messaging engineering encourages blind people to access emails and other interactive media features as well as other functional framework functions. Here the author shows the design of a voice message used by blind people to access the emails and media features of an effective and efficient framework.[3] The proposed activity aims to improve the application that recognizes the voice of the user and executes a given command through speech to text to compose email and text to speech to read emails. Uses the google web kite interface for editing. This app is designed to simplify the process of writing emails not only to visually impaired people but



everyone. Therefore, the additional skills required for typing type will no longer be required. The proposed program aims to develop a method that converts speech into text to compose email and converts text into speech to read emails.[4]

A vision app aimed at helping and developing the visually impaired. The app is designed to focus on a friendly audience and is customized to make it fun for users. In addition, development as an adult voice recognition to alleviate difficulties. [5].

This helps to understand various technologies such as word to voice converter, voice to word converter, braille touches and free text input and provides comparisons with different types of applications currently available. These access apps provide messaging access, drive, text input, and help with medication identification. Touch screen phones are inaccessible to visually impaired users due to the absence of any portable key and insufficient accessibility features.[6] This means developing smart watches that allow users to send emails to desired recipients using speech recognition. The user presses the disk to start the email program. The clock generates a response to indicate to the user that the application is open. The user then searches for the intended recipient's name and email content. The email is then sent using the send command. This program will not allow the user to use the keyboard, instead it will work on speech recognition.[7]

The proposed system it helps in understanding the way blind user uses a mobile device that is necessary to design accessible gestures that can be utilized visually impaired in their daily life. The current screen readers is IOS and Android can be enhanced to include multi model gesture that are natural to users. Gestures is designed to include personification factors such as using speech recognition, touch and motion sensing gestures instead of touch gesture only. This is to minimize the visually impaired smart phone user from performing too much taps to perform the desired task[8].

### III. PROPOSED WORK

#### A. INTERACTIVE VOICE RESPONSE

Interactive voice response (IVR) is a new invention enable Personal computer to connect with people using voice and keys. In transmit communication, IVR allows customer to communicate with the owner of the organization outline by using the console or by voice, the management could be questioned about it by IVR interchange. IVR Frame can respond to it regarding recorded sound or power output to customers on the good path forward. IVR frames posted network measurement to deal with big amount of calls. Moreover it is used to make outgoing calls, such as IVR frameworks are better than most experienced drivers structures.

The IVR framework can be used for physical purchases, balances and management, sales orders, resources, and weather conditions. Common misconceptions refers to a robotic worker as IVR. The terms say especially and means a variety of things in the general broadcast communication professionals. The reason for IVR taking load, procedure, and the final result, although a expert automated course calls. Touch tones decoding and acknowledgment speech are used specify how the visitor responds to voice commands. Touch tones are available installed with the phone keypad. Different developments combine the use of text-to-speech (TTS) to communicate compound amazing and powerful information, like weather information. IVR renaming is underway delivered to the auto parts of the sans hands work. TTS a the PC created an integrated, non-robotic expression the voice is usually connected to PCs. The words of truth makes it talk into pieces that are put together (connected) and smooth before the guest is played.

Other technologies that can be used to use text to go advanced and powerful data communication technology, such as emails. IVR used in automotive systems to make it easier to operate again. Text to Speech the arrangement developed an integrated expression that is not a computer-related robot voice historically. The first words produce the speech is a series of verses that are grouped together and circular before caller play.

#### B. SPEECH RECOGNITION

Voice recognition is a controlled pasture for diachrony that develops strategies as well progress to enable admission once translation of language transfer to text by pcs. It also known as "automatic voice recognition" (avr), "computer voice recognition", or simply "word-to-voice". Integrates understanding and learning from language courses, Some sr structures need "instruction" in which each speaker understands a single piece of information or vocabulary in outline. This frame dissipates as human a word and use it to recognize to acknowledge that person's speech, to fulfill it extended accuracy. Frames that do not use the preparation exist called "frames" of an independent speaker. Frameworks that usage adjustment is called "speaker-dependent." SR applications include voice , like voice dialing, telephone line, home appliance controller, search (e.g. find recordings on the web where specific words were spoken disclosed), inclusion of primary information, preparedness of draft reports eg radiology detail, speech management to satisfy for example name processors or messages, and airplane. Voice recognition or visual evidence of a speaker refers to identifying the speaker, rather than what it is seeing a speaker can improve the performance of to clarify speech in structured structures within the voice of a certain person or accustomed to it verify or examine the identity of the voice



as a vital part of the safety process. Coming out of the perspective of new inventions, voice recognition has a lengthy record and some important gesture development. Majority the industry has made a profit out of it improves big facts and deep learning (dl). Progress it does not just confirm the overflow of education papers being distributed in the sector, however with much criticism around the world industry allocation array of dl strategies to plan and transfer sr structures.

SR execution is measured with precision and speed. Accuracy is measured by the level of word error (WER). The WER operates at the word level and separates errors from the description, despite the fact that he could not see how the error occurred. Speed is limited to a real-time object. An assortment of items may affect PC SR performance, pronunciation method, including pronunciation, length, background sound and volume. An icon is important to see speech recognition words and a voice that acknowledges some of the verbs used in contrast. Or maybe, these two words mean different things. SR is used to determine terms spoken in a language. speech recognition is a new emerging technology system used to recognize someone's voice or to identify a speaker.

#### IV. CONCLUSION

Analytical activities helped people with the visual acuity of email access to the real problem of highway an all-inclusive communication system in the modern earth. The suggested frame helps to reduced barrier, for example, by memorizing and using mouse and keypad snap popup pre-owned by the optically impaired while accepting electronic mail. We have therefore raised our voice to ensure support as a replacement of the usual sign-in name and word of identification. The present frame would link the required work with its outcome about task. By studying all the ways to make this frame easier to utilize, and more firm. The growing structure currently depends on private device only. Also the operation of smartphones with modern technology, corresponding programs and requests have the potential have being used as a app on cellphones. So on that point is a range that uses drafts in other different languages than using it in English only.

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