

Voice Based Email System For Blinds

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ABSTRACT

Creating emailing platform for visually impaired people that helps people send email's without relying on anyone and mammonite formally or informally freely, securely and effectively without any barrier. The proposed system is an emailing system made with latest and cutting-edge technologies based on artificial intelligence like speech recognition, pyaudio using python as the coding language.

Keywords: Visually impaired, email, email assist, speech to text.

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I. INTRODUCTION

In today's fast-paced world, not only the Internet, but one of the basic facilities can be called a blessing. This has changed many new platforms such as people interaction, interaction, WhatsApp, Facebook, Instagram, Twitter and more. We also accept over-the-counter services. People are becoming more and more reliable on these platforms. One of the main reasons for their popularity is that there are no restrictions on people like ordinary people, people with physical or visual disabilities, and even illiterate people who can communicate with each other on these platforms. about it. One of the main functions that is useful for communication is voice message or voice message. Apart from the various platforms, there is another platform, which is the traditional email system. This is one of the most used platforms for formal messaging. However, it lacks common features available on today's advanced platforms such as WhatsApp and Facebook. Email needs to be typed very easily for the average person, but for people with various disabilities, either you need to find someone who can type it, or you can't communicate by email.

The solution to overcome this problem is to be able to create a platform for sending email using voice commands using mouse clicks without using the keyboard. Problems can be solved, people with disabilities can work easily and safely on their own, independent of anyone.

II. METHODOLOGY

The main idea for implementing the project is to make people with disabilities independent and to contribute to the improvement of society when registration is successful.

There are various options such as compose, read sent mail, trash, and logout. Easier and safer for special people.

With existing frameworks, outwardly impeded individuals can't send email without the assistance of another person. It is feasible to help a visually impaired with braille console, however it is modest and some may not be reasonable. Screen perusers may not be valuable to certain clients by the same token. This is on the grounds that you will be unable to see the whole screen outwardly.

The proposed system eliminates problems with traditional or existing systems. In the system, people can easily use the mail function with the help of the instructions provided by the system and be guided to ensure that the mail ID and password of every step are secure. You need no help and become self-sufficient and self-sufficient.

III. Requirement and Module Description

A. Hardware requirements*:

- > Processor: intel corei3/pentium or any advanced version
- > Ram: 4 GB(min)
- > Speakers
- > Earphone/Headphones

B. Software requirements*:

- > Operating System: Any version of windows NT family (4.0 &above)
- > Language: Python

> Framework: Django

C. Python libraries*:

> Speech Recognition, gtts, pyaudio, playsound ,smtplib, imaplib, email.

- i. **Voice recognition:** The headphone / earphone microphone is used to provide the voice information requested by the system, such as email ID, password, and messages to send. The voice that passes through the microphone is processed by Python's speech_recognition module, and the googletexttospeech module supports speech recognition.
- ii. **Pyaudio:** Pyaudio is a library used for audio input and output. Pyaudio is also used for recording and playing the audio. The use of this module in the system is that the system repeats the commands that are given by the user so as to confirm that the command or message is correct or not.
- iii. **Smtplib:** SMTP stands for `simple mail transfer protocol`.Smtplib is a python library for sending emails. It is one of the main libraries for implementing the functionality of the system.
- iv. **Imaplib:** IMAP stands for `internet mail access protocol`. It is a clientside library for accessing emails using imap protocol.
- v. **Email:** The email package used in the system is used for managing email messages. It is not designed to send messages over the SMTP protocol. This is just a support library.

IV. RESULTS AND DISCUSSION

The project is successfully completed in the python language and the web application is made using HTML/CSS and JS. Django and Flask are the two frameworks used to implement the project.

V. CONCLUSION

This voice-enabled email system can be used by anyone of any age. The instructions are provided by a system such as the IVR system and the user follows the instructions. Its main function is to have both voice text and text voice. This allows visually impaired and visually impaired people to use the features of traditional mail systems safely and painlessly.

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