DEPARTMENT OF CSE-AIML & CSE-DS

Voice based e-mail for visually impaired people

The voice based e-mail system is for blind persons and it also help handicapped and illiterate peoples to access email without using keyboard.

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INTRODUCTION

As the name implies, the programme will be a web-based tool for visually impaired people that uses interactive voice response (IVR), allowing everyone to manage their mail accounts with just their voice in addition to being able to read, send, and complete all other useful functions. The user will reply to voice orders from the system asking them to take particular actions. The fundamental advantage of this system is that the user just needs to answer by speaking and clicking a mouse; the keyboard is entirely eliminated.

REQUIREMENTS

coding language-python version 3.8

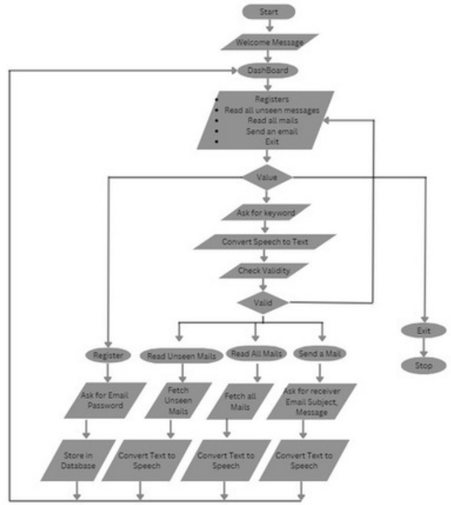
operating system-windows10

technology used-Text-to-speech, Speech-to-text, Interactive voice response

PROJECT OUTCOME

We presented a Voice Based E-mail System to bring e-mail technology closer to visually impaired individuals. They have the ability to communicate thanks to this system, which also increases their strength and independence. This architecture will make it easier for blind persons to use multimedia features like email. This voice-based email system will replace outdated methods with fresh innovations that persons with visual impairments can readily adopt.

METHODOLOGY



SCOPE

E-mailing is not a significant difficulty for those who have the gift of sight, but for those who do not, it poses a serious problem because it overlaps with many professional tasks. In the future, voice could be used to improve systems by adding features like support for more languages and the ability to view deleted and spam emails.

LITERATURE SURVEY

1) A voice-based email system was recently proposed for 2020 as a way to get beyond the limitations of conventional ASR and screen reading systems. The system has sophisticated features that make it simple for blind individuals to use. It starts with the Login module, which validates the login information. After logging in, the client goes to the home module, where the following options are available: Inbox, Create, Sent mail, and Junk. In addition to STT (Speech-to-message) and TTS (Text-to-discourse), IVR technology is used in PC programme creation. The suggested approach uses mouse click events as well.

2)The authors of a paper proposed a voice-based email system by connecting the application with Google's Gmail.
The email services offered by traditional systems were user-developed. The system is made up of the following components:
(a) Speech-to-text Converter
(b) Text-to-speech Converter.
The application utilises the POP3 protocol for email delivery and the SMTP standard for email transmission. Speech-to-text systems need to be trained, hence their accuracy is low. It is a desktop application that is accessible to those with disabilities and limited reading skills. The suggested solution gives users a sensation of secure mailing while simultaneously guaranteeing the security of the user's data.

CONCLUSION

This paroject outlines a voice-based email system for persons who are blind or visually impaired. It was created as a tool to make it easier and more effective for them to access emails. It offers a voice-based postal service so that people who are blind can read and send letters on their own, without assistance. The system has done away with all of these ideas and solved every issue the visually handicapped have. It makes use of a speech recognition programme to give blind users of gadgets an effective voice input technique. People who are handicapped or uneducated can also benefit from it.

PROJECT LEARNING

In this project, we learn how to implement the Voice Recognition and Speech
Synthesis idea using a speech recognition system and interactive voice response .