

Email Services Based on Voices for People with Visual Disabilities

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Abstract: Everybody gets closer to the world through digital communication and the way of life, as in this era of technology. Everyone communicates and most of them use an email system in different ways. There are so many people in this world who cannot use email as they are illiterate and some are blind. In order to modify this, a web-based email system can be used to make the system more efficient by visually disabled people.

Keywords: IVR, Text Converter Speech, Speech Converter Text.

1. Introduction

The Internet is one of the most important things in contemporary times. A survey found that over 250 million people worldwide have visually difficulties. In other words, approximately 250 million people do not know how to use the Internet or e-mail. The only way to send an e-mail to a visually impaired person is to dictate a third person (not visually impaired) the entire mail content, then the third person composes and sends an e-mail on behalf of the visually impaired person. But this isn't the right way to address this issue. Every time a visually impaired person can come across somebody for help it is very unlikely. Even if for.

2. Literature Survey

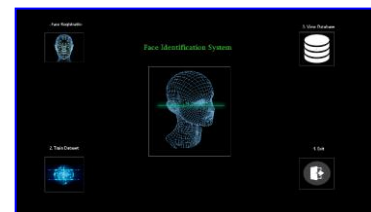
Several contributions were made in the field of communication via e-mails to visually impaired individuals. Full area of communication via e-mail to persons with visual challenges. The technologies of every paper are as follows: A recent proposal to overcome inconveniences of traditional ASR and sc was made for Voice based email systems in 2020. Systems of Screen Lecture. The system includes advanced features to make it easy for blind people to use. It consists of the first module login module and the login credentials are validated. Afterwards, the client moves to the home module.

3. Methodological Methodology

1) Module of Login

User can log in to the system by face authentication in this module in this module, we go to the integrated facial login authentication system so that the user email and password will

be retrieved automated by validating the face of the system. Login Module is a portal module for logging in. On any module tab you can add this module so that the user can connect to the system.



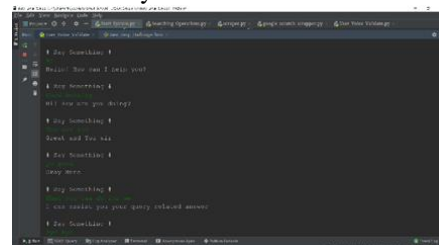
2) Module of Registration

With this module, the registration of new users is possible if the new user wants to send a g-mail and therefore they have to register with our system at the register stage.



3) Chat Module of Bot

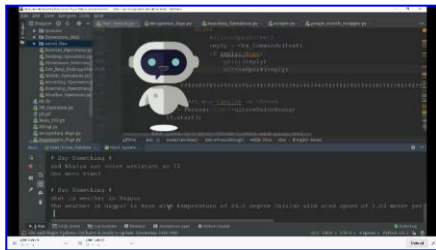
With the ability of this module user to communicate with the system to enable users to communicate on a daily basis with system and system, they will respond to incoming messages using the Artificial Intelligence system as voice. Chat Bots is a huge step to turn CMS into a digital experience and commitment for the next generation. This Module supports the configuration of Voice and Text Based Chat Bot interacting with NLP as common layer.



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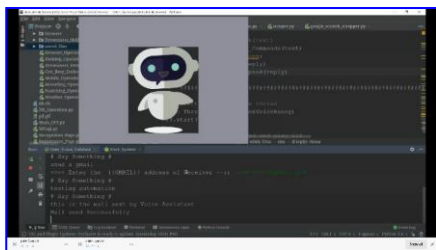
4) *Module of search*

This module is used to use the search service using a voice command to permit Google Search, Wikipedia Search, YouTube Search, Whether to cast.



5) *Module of Email*

This module is used for everyday tasks. It allows users to log in and send GMAIL messages automatically through face authentication and from and with this module we can send a g-Mail message to receive voice entries for the subject and body of Gmail.



6) *Desktop Modules for Automation*

This module is used for the automation of your PC, such as opening applications, time and time, locking desktop, shutdown, restarting, locking tab, window minimization, maximizing tabs, TTS, etc.

4. Implementing Algorithms

1) *Markov Hidden Models (HMMs) algorithm*

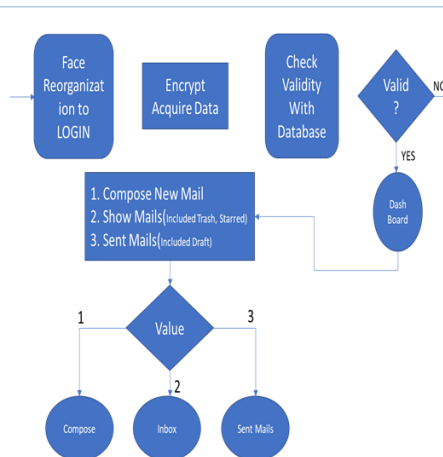
The Hidden Markov Models are based on modern general-purpose speech recognition systems. These are statistical models producing a symbol or quantity sequence. In speech recognition HMMs are used as a parts stationary or short stationary signal, since a voice signal may be viewed as a piece by piece. Speaking could be approximated as a stationary process in a short time scale (e.g. 10 milliseconds). Speech could be considered as a Markov model for a wide range of stores.

2) *Local Binary Patterns Face reconnaissance histogram (LBPH) algorithm*

Face recognition: the face recognition algorithm is responsible for identifying the characteristics that best describe the image with facial imagery already extracted, cropped, resized and usually converted into gray size. In principle, facial recognition systems can work in two modes: Verification or authentication of a face image: it compares the face image of

the entrance with the face image of the user requiring authentication. It is a 1x1 comparison.

3) *Diagram Flow*



4) *Exit*



5. Future Works

This email system based on voice is very useful because blind people understand where they are. For instance, when the cursor moves to an icon on the website, it sounds like "Button register." Many readers are available on the screen. But people had mouse clicks to remember. Instead, this project will reduce the problem by reading where it lies by the mouse pointer. This system focuses more on the usability of all types of people, including ordinary people, people with visual disabilities and illiterates.

6. Conclusion

This is done mainly for the blind and the uneducated so that the email system can also be used because this digital world has been necessary.

References

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