VOICE BASED EMAIL SYSTEM FOR VISUALLY CHALLENGED PEOPLEUSING NATURAL LANGUAGE PROCESSING (NLP)

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ABSTRACT

Internet is one of the introductory Luxury for daily living. Every person is using the data and information on internet. The advancement in computer grounded accessible systems has opened up numerous avenues for the visually bloodied across a wide maturity of the globe. Audio feedback grounded virtual terrain like, the screen compendiums have helped visually paired people to pierce internet operations immensely. still, the visually challenged people find it veritably delicate to use this technology because of the fact that using them requires visual perception. Indeed though numerous new advancements have been enforced to help them use the computers efficiently no naïve stoner who's visually challenged can use this technology as efficiently as a normal naïve stoner can do that's unlike normal druggies they bear some practice for using the available technologies. In this design, the voicemail system armature that can be used by a eyeless person to pierce-mails fluently and efficiently. The donation made by design has enabled the eyeless people to shoot and admit voice-grounded-mail communication. The proposed system GUI has been estimated against the GUI of a traditional correspondence garçon and set up that the proposed armature performs much better than that of the being GUIS. In this design, the use of voice to textbook and textbook to state fashion access for eyeless people. Also this system can be used by any normal person also for illustration the bone. who isn't suitable to read.The system is fully grounded on interactive voice response which will make it effective.

KEYWORDS: Visually impaired, Speech to text,Speech Recognition.

INTRODUCTION

We've seen that the preface of Internet has revolutionized numerous fields. Internet has made lifeof people so easy that people moment have access to any information they want fluently. Communication is one of the main fields largely changed by Internet. E- mails are the most reliable way of communication over Internet, for transferring and entering some important information. But there's a certain norm for humans to pierce the Internet and the norm is you must be suitable to see. But there are also else suitable peoplein our society who aren't blessed with what you have. There are some visually disabled people or eyeless people who can't see effects and therefore can't see the computer screen or keyboard. A check has shown that there are further than 240 million visually disabled people around the globe. That is, around 240 million people are ignorant of how to use Internet or E-mail. The only way by which a visually challenged person can shoot an E-mail is, they've to speak the entire content of the correspondence to another person(not visually challenged) and also that third person will compose the correspondence and shoot on the behalf of the visually challenged person. But this isn't a right way to deal with the problem. It's veritably doubtful that every time a visually disabled person can find someone for help. Although for these reasons the

visually disabled people are blamed by our society. So, for the betterment of society and giving an equal status to similar especially, suitable people we've come up with this design idea which provides the stoner with capability to shoot matters using voice commands without the need of keyboard or any other visual effects.

LITERATURE SURVEY

2.1 "Voice Based System in Desktop and MobileDevices for Blind People

International journal of Emerging Technologyand Advanced Engineering (IJETAE),2014.

The paper deals with "Voice Based System in Desktop and Mobile Bias for visually impaired People". Voice correspondence architecture helps vision less people to pierce e- correspondence and other multimedia functions of operating system(songs, text). Also, in mobile operation SMS can be read by system itself. Now a days the improvement made in computer technology opened platforms for visually impaired people across the world. It has been observed that nearly about 60 of total visionless population across the world is present in INDIA. In this paper, we describe the voice correspondence architecture used by visionless people to pierce E-mail and multimedia functions of operating system easily and efficiently. This architecture will also reduce cognitive weight taken by visionless to flash back and class characters using keyboard. There is a bulk of information available in technological advance for visually impaired people. This includes development of text to Braille systems, screen magnifiers and screen albums. recently, attempts have been made in order to develop tools and technologies to help visionless people to pierce internet technologies. visionless people. In IBM's Home runner the web runner is an easy- to- use interface and converts the text- to- speech having different gender voices for reading handbooks and links. still, the disadvantage of this is that the innovator has to design a complex new interface for the complex graphical web runners to be browsed and for the screen florilegium to fete. Simple browsing result, which divides a web runner into two confines. This greatly simplifies a web runner's structure and makes it easier to browse Voice Grounded Hunt Machine and Web runner anthology ".

In International Journal of ComputationalEngineering Research (IJCER)

This paper aims to develop a hunt machine which supports Man- Machine commerce purely in the form of voice. A new Voice grounded Hunt Machine and Web- runner anthology which allows the druggies to command and control the web cyber surfer through their voice, is introduced. The being Hunt Machines get request from the stoner in the form of textbook and respond by reacquiring the applicable documents from the garçon and displays in the form of textbook. Indeed though the being web cyber surfers are able of playing audios and vids, the stoner has to request by codifying some textbook in the hunt textbook box and also the stoner can play the interested audio/

videotape with the help of Graphical stoner Interfaces(GUI). The proposed Voice grounded Hunt Machine aspires to serve the druggies especially the eyeless in browsing the Internet. The stoner can speak with the computer and the computer will respond to the stoner in the form of voice. The computer will help the stoner in reading the documents as well. Voice- enabled interface with addition support for Gesturegrounded input and affair approaches are for the " Social Robot Maggie " converting it into an audibly anthology. This voice recognition and conflation can be affected by number of reasons similar as the voice pitch, its speed, its volume etc. It's grounded on the Loquendo ETTS(Emotional Text- To- Speech) software. Robot also expresses its mood through gesture that's grounded on geo stationary.

Speech recognition delicacy can be bettered by junkingof noise. In A Bayesian scheme is applied in a sea sphere to separate the speech and noise factors in a proposed iterative speech improvement algorithm. This proposed system is developed in the sea sphere to exploit the named features in the time frequence space representation. It involves two stages a noise estimate stage and another one signal separation stage. In the Principles Component Analysis (PCA) grounded HMM for the visual modality of audio-visual recordings is used. PCA (Principles element Analysis) and PDF (Probabilistic viscosity Analysis). Presents anapproach to speech recognition using fuzzy modelling and decision timber that ignores noise rather of its discovery and junking. In the speech spectrogram is converted into a fuzzy verbal description and this description is used rather of precise aural features. In Voice recognition fashion combined with facial point commerce to help virtual artist with upper branch disabilities to produce visual cut in a digital medium, save the individuality and authenticity of the art work. ways to recover marvels similar as judgment Boundaries, padding words and Disfluencies appertained to as structural Metadata are bandied in and describe the approach that automatically adds information about the position of judgment boundaries and speech disfluencies in order to enrich speech recognition affair.

EXISTING SYSTEM

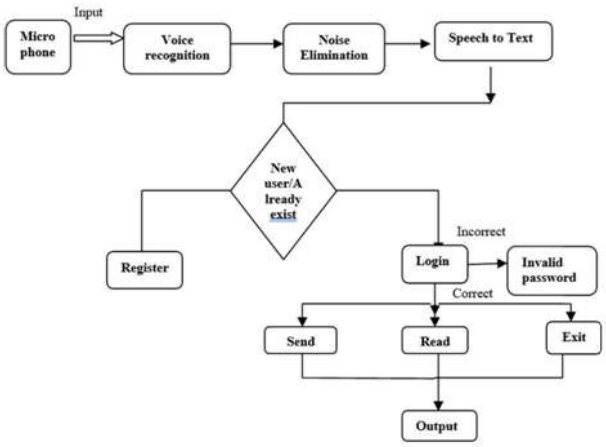
There are a complete number of 4.1 billion email accounts made until 2014 and a there will be evaluated 5.2 billion records by end of 2018. This makes messages the most utilized type of correspondence. The most generally perceived mail benefits that we use in our regular day to day existence can't be used by ostensibly tried people. This is on the grounds that theydon't give any office so the individual in front can hear out the substance of the screen. As they can't imagine what is now present on screen they can't make out where to click so as to play out the necessary tasks. For an outwardly tested individual utilizing a PC just because isn't that helpful for what it's worth for an ordinary client despite the fact that it is easy to understand. In spite of the fact that there are many screen readers accessible then likewise these individuals face some minor troubles. Screen readers read out whatever substance is there on the screen and to play out those activities the individual should utilize console alternate routes as mouse area can't be followed by the screen reader. This implies two things; one that the client can't utilize mouse pointer as it is totally awkward if the pointer area can't be followed and second that client ought to be knowledgeable with the console concerning where every single key is found. A client is new to PC can accordingly not utilizethis administration as they don't know about the key areas. Another disadvantage that sets in is that screen reader read out the substance in successive way and subsequently client can make out the substance of the screen just on the off chance that they are in essential HTML position. Therefore the new propelled pageswhich don't follow this worldview so as to make thesite more easy to use just make additional issues for these individuals. Moreover the systems that do use only voice for interaction between the user and

the system don’t have good voice transcription. All these are a few downsides of the present framework which we will defeat in the framework we are creating.

PROPOSED SYSTEM

The proposed system is grounded on a fully new idea and is nowhere like the being correspondence systems. The most important aspect that has been kept in mind while developing the proposed system is availability. Aweb system is said to be impeccably accessible only ifit can be used efficiently by all types of people whether suitable or disable. The current systems don't give this availability. therefore, the system we're developing is fully different from the current system. Unlike current system which emphasizes further on stonerbenevolence of normal druggies, our system focuses more on stoner benevolence of all types of people including normal people visually disabled people as well as illiterate people. The complete system is grounded on IVR- interactive voice response. When using this System the computer will be egging the stoner to perform specific operations to mileageseparate services and if the stoner needs to pierce the separate services also he she needs to perform that operation. One of the major advantages of this systemis that stoner won’t bear to use the keyboard. All operations will be grounded on voice commands. This system will be impeccably accessible to all types of druggies as it's just grounded on simple speech inputs and there's no need to flash back keyboard lanes. Also because of IVR installation those who cannot read need not worry as they can hear to the egging done bythe system and perform separate conduct.

Block Diagram:



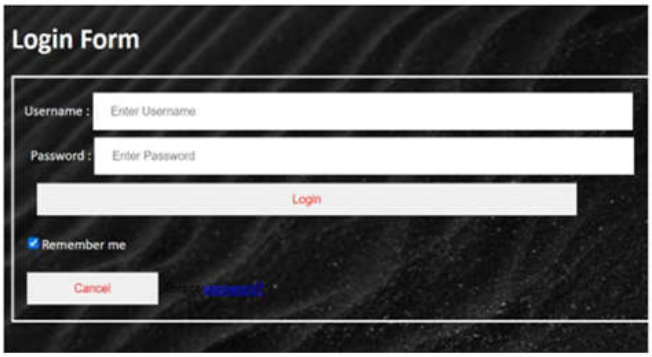
ADVANTAGES

1. Without eyes the voice based email system is helpful since it enables them to understand their location.

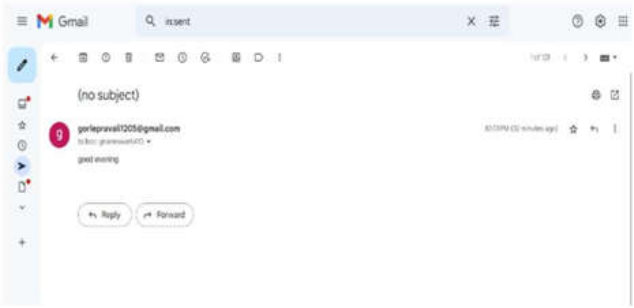
2. It becomes difficult for the blind people to access email since the screen reader is containing noisy audio interface.

3. Automatic speech recognizer performance degrades if it contains noisy environment.

RESULT



OUTPUT



CONCLUSION

This paper is the proposed Voice grounded Dispatch system for visually disabled people, which is developed as an operation which helps the eyeless and hindered people to pierce matters fluently and efficiently. It provides a voice grounded mailing service where the visually disabled person could read and shoot correspondence by their own without the help of others. It requires introductory information about keyboard lanes. System has excluded all these generalities and overcome all difficulties faced by the visually bloodied. It uses a speech recognition operation which provides an effective voice input system for mailing bias for eyeless. It's also useful for handicapped and illiterate people.

In future, we essay to make the system keyboard free and completely voice grounded. So it's easy for the visually disabled people to pierce the services. The system developed now it is working only on desktops. As use of mobile phones is arising as a trend moment, there's a compass to incorporate this installation as an operation in mobile phones also. Also, security measures to be enforced during the login phase can be revised to form the system safer.

FUTURE SCOPE

It is a observation that about 70% of total blind population across the world is present in INDIA. This depict the voice message engineering utilized by daze individuals to get to E-mail and multimedia elements of working framework effectively and efficiently. Separated from this the uneducated, crippled and daze individuals will too be able to send sends in their local dialects. This design will likewise decrease intellectual burden taken by blinds to recall and type characters utilizing console.

Advances in technology will allow consumers and business to implement speech recognition.

REFERENCES

1. Sharma, J. and Sharma, J., 2016. Voice Based Mail System. [online] Scribd. Available at: [Accessed 29 June 2020].
2. Amritha Suresh, Binny Paulose, Reshma Jagan and Joby George, "Voice Based Email for Blind". International Journal of Scientific Research in Science, Engineering and Technology (IJSRSET) - Volume 2, Issue 3, 2016, pp. 93-97.
3. Milan Badigar, Nikita Dias, Jemima Dias and Mario Pinto, "Voice Based Email Application For Visually Impaired. International Journal of Science Technology & Engineering (IJSTE) - Volume 4, Issue 12, June 2018, pp. 166-170.
4. Pranjal Ingle, Harshada Kanade and Arti Lanke, "Voice Based email System for Blinds". International Journal of Research Studies in Computer Science and Engineering (IJRSCSE)- Volume 3, Issue 1, 2016, pp. 25-30.
5. Bishal Kalita and Santosh Kumar Mahto, "Voice Based Email for Blind People". International Journal of Engineering Science and Computing (IJESC) - Volume 9, Issue 10, October-2019, pp. 23789-23799.
6. Saurabh Sawant, Amankumar Wani, Sangharsh Sagar, Rucha Vanjari and Dhage.
7. Dudhbale, P., Wankhede, J.S., Ghyar, C.J., and Narawade, P.S., "Voice Based System in Desktop and Mobile Devices for Blind People". International Journal of Scientific Research in Science and Technology, 4, 2018, pp.188-193.
8. Akif Khan, Shah Khusro, Badam Niazi, Jamil Ahmad, Iftikhar Alam and Inayat Khan, "Tetra Mail: A usable email client for blind people". Universal Access in the Information Society-04 September 2018.
9. Jagtap Nilesh, Pavan Alai, Chavhan Swapnil, Bendre M.R.," Voice Based System in Desktop and Mobile Devices for Blind People". International Journal of Engineering Technology and Advanced Engineering (IJETAE) - Volume 4, Issue 2, February-2014, pp. 404- 407.
10. Prof. Umesh A. Patil, Pranouti B. Patil, Teja P. Magdum, Shweta K. Goud and Latika R. Bhosale, "A Survey on Voice Based Mail System for Physically Impaired Peoples". International Journal of Innovative Research in Computer and Communication Engineering (IJIRCCE) Volume