

“VOICE BASED EMAIL SYSTEM FOR BLINDS”

¹Er.Mohmmad Hanif Khan, ²Er. Bazilah Mehraj, ³Dr. Khair-ul- Nisa

¹H.O.D , ²LECTURER Author, ³LECTURER
COMPUTER ENGG

ROYAL POLYTECHNIC COLLEGE SRINAGAR KASHMIR INDIA

ABSTRACT

In this day and age correspondence has turned out to be so natural because of joining of correspondence advancements with web. Anyway the outwardly tested individuals think that its exceptionally hard to use this innovation in light of the way that utilizing them requires visual discernment. Despite the fact that numerous new progressions have been actualized to enable them to utilize the PCs proficiently no innocent client who is outwardly tested can utilize this innovation as effectively as an ordinary gullible client can do that is not at all like typical clients they require some training for utilizing the accessible advancements. This paper goes for building up an email framework that will help even an innocent outwardly weakened individual to utilize the administrations for correspondence without past preparing. The framework won't let the client make utilization of console rather will work just on mouse task and discourse transformation to content. Likewise this framework can be utilized by any typical individual additionally for instance the person who can't read. The framework is totally in view of intuitive voice reaction which will make it easy to understand and productive to utilize.

INTRODUCTION

Web is considered as a noteworthy storage facility of data in this day and age. No single work should be possible without its assistance. It has even turned out to be one of the accepted techniques utilized in correspondence. Furthermore, out of all techniques accessible email is a standout amongst the most widely recognized types of correspondence particularly in the business world. Anyway not all individuals can utilize the web. This is on account of keeping in mind the end goal to get to the web you would need to comprehend what is composed on the screen. On the off chance that that isn't unmistakable it is of no utilization. This makes web a totally pointless innovation for the outwardly hindered and uneducated individuals. Indeed, even the frameworks that are accessible at present like the screen perusers TTS and ASR don't give full effectiveness to the visually impaired individuals in order to utilize the web. As almost

285 million individuals worldwide are assessed outwardly impeded it end up important to make web offices for correspondence usable for them too. In this way we have concocted this undertaking in which we will build up a voice based email framework which will help the outwardly disabled individuals who are innocent to PC frameworks to utilize email offices in a problem free way. The clients of this framework would not need any fundamental data with respect to console alternate routes or where the keys are found. All capacities depend on basic mouse click tasks making it simple for a client to utilize this framework. Likewise the client require not stress over recalling which mouse click task he/she needs to perform keeping in mind the end goal to profit a given administration as the framework itself will provoke them concerning which snap will furnish them with what activities.

There are an aggregate number of 4.1 billion email accounts made until 2014 and a there will be assessed 5.2 billion records by end of 2018. this makes messages the most utilized type of correspondence. The most well-known mail benefits that we use in our everyday life can't be utilized by outwardly tested individuals. This is on the grounds that they don't give any office with the goal that the individual in front can hear out the substance of the screen. As they can't envision what is as of now show on screen they can't make out where to click so as to play out the required tasks. For an outwardly tested individual utilizing a PC out of the blue isn't that helpful as it is for a typical client despite the fact that it is easy to understand. In spite of the fact that there are many screen perusers accessible then additionally these individuals confront some minor challenges. Screen perusers 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 perusers. This implies two things; one that the client can't make utilization of mouse pointer as it is totally badly arranged if the pointer area can't be followed and second that client ought to be knowledgeable with the console about where every single key is found. A client is new to PC can in this manner not utilize this administration as they don't know about the key areas. Another downside that sets in is that screen perusers read out the substance in consecutive way and consequently client can make out the substance of the screen just on the off chance that they are in fundamental HTML design. Therefore the new propelled site pages which don't take after this worldview so as to make the site easier to understand just make additional issues for these individuals. All these are a few downsides of the present framework which we will defeat in the framework we are creating.

PROPOSED SYSTEM

The proposed framework depends on a totally clever thought and is no place like the current mail frameworks. The most critical viewpoint that has been remembered while building up the proposed framework is openness. A web framework is said to be superbly open just in the event that it tends to be utilized productively by a wide range of individuals whether capable or cripple. The present frameworks don't give this availability. In this way the framework we are creating is totally not the same as the present framework. Dissimilar to current framework which accentuates more on ease of use of ordinary clients, our framework concentrates more on ease of use of a wide range of individuals including typical individuals outwardly debilitated individuals and ignorant individuals. The entire framework depends on IVR-intuitive voice reaction. When utilizing this framework the PC will provoke the client to perform particular tasks to benefit separate administrations and if the client needs to get to the individual administrations then he/she needs to play out that activity. One of the real favourable circumstances of this framework is that client won't require to utilize the console. All activities will be founded on mouse click occasions. Presently the inquiry that emerges is that in what capacity the visually impaired clients will discover area of the mouse pointer. As specific area can't be followed by the visually impaired client the framework has given the client a through and through freedom to click tastelessly anyplace on the screen. Which sort of snap will perform which capacity will be determined by the IVR. Along these lines client require not stress over area of the mouse by any stretch of the imagination. This framework will be splendidly open to a wide range of clients as it is simply in view of straightforward mouse snaps and discourse inputs and there is no compelling reason to recollect console alternate routes. Likewise in view of IVR office the individuals who can't read require not stress as they can tune in to the provoking done by the framework and perform separate activities.

DESIGN

A. User Interface Design: The UI is composed utilizing Adobe Dreamweaver CS3. The entire site concentrates more on effectiveness in understanding the IVR instead of the look and feel of the framework as the framework is basically produced for the visually impaired individuals to whom the look and feel won't be of that essential significance as the productivity of understanding the inciting would be.

B. Database Design: Our framework keeps up a database for client approval and putting away sends of the client. There are an aggregate of five tables. The connection between them is allocated after much thought. The E-R outline of our total framework is delineated in Fig 1. The Inbox, Sent-Mail and Trash patterns will store all sends of the individual administration that has a place with that specific client.

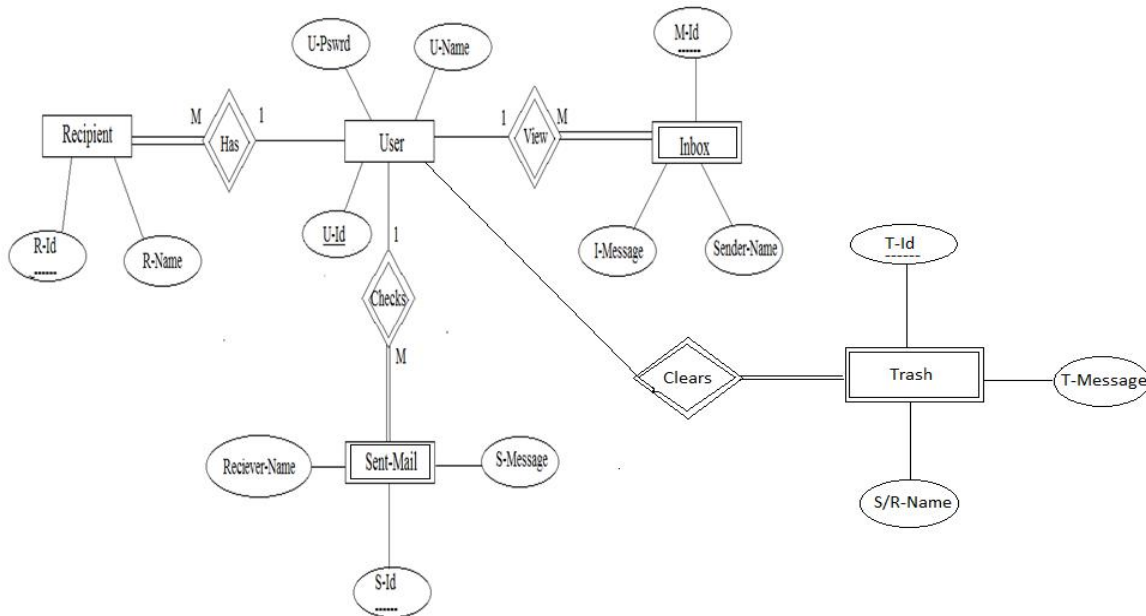


Fig. 1. ER DIAGRAM

C. System Design: Fig. 2 portrays the entire framework plan. It is the level-2 information stream graph which gives finish definite stream of occasions in the framework. As should be obvious all tasks are performed by mouse click occasions as it were. Likewise at a few spots voice input is required.

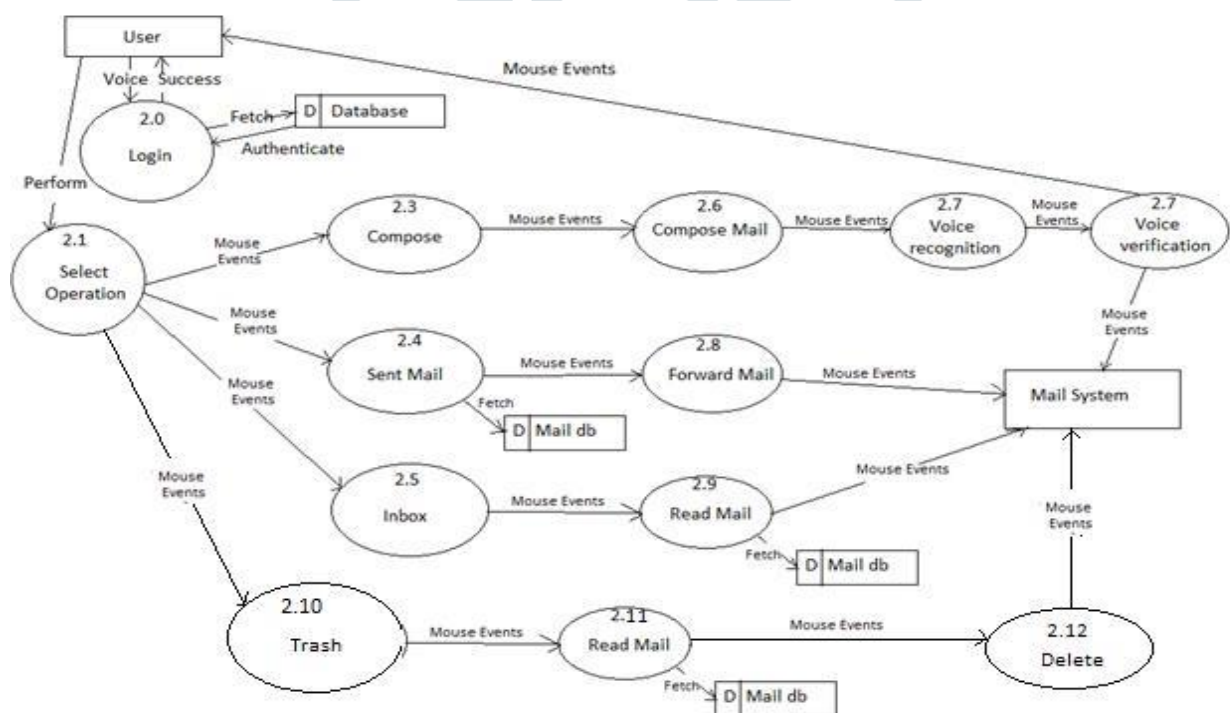


Fig. 2. Level-2 Data Flow Diagram of our system

IMPLEMENTATION (METHODOLOGY)

This framework is as of now being created by us. The accompanying are modules are the ones that are as of now created. Their working is as per the following:

A. Registration

This is the principal module of the framework. Any client who wishes to utilize the framework should first enrol to acquire username and secret key. This module will gather finish data of the client by provoking the client regarding what subtle elements should be entered. The client should talk up the points of interest to which the framework will again affirm by provoking one after another in order. On the off chance that the data isn't right client can return else the provoke will determine the activity to be performed to affirm.



Fig. 3. Registration Page

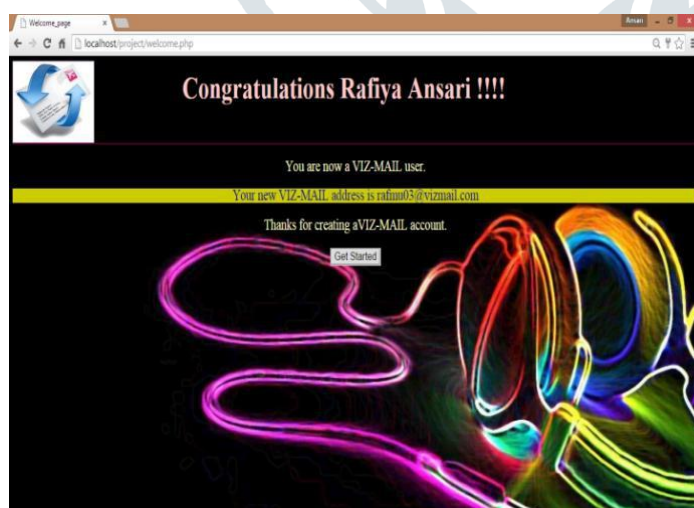


Fig. 4 Welcome Page

B. Login:

Once the enrolment is done the client can login to the framework. This module will request that the client give the username and secret key. This will be acknowledged in discourse. Discourse change will be done to content and client will be advised to approve whether the subtle elements are entered effectively or not. Once the section is done accurately database will be checked for passage. On the off chance that the client is approved it will be coordinated to landing page.



Fig. 5. Login Page

C. Forgot Password:

On the off chance that where an approved client overlooks the secret key and hence can't login he/she can choose overlooked password module. In this module the client will be first advised to enter username. As indicated by username the security question will be looked in database. This is the issue gave at time of enlistment. The inquiry will be stood up by the PC. The client ought to thusly indicate the appropriate response that was given by him/her amid enrollment. In the event that both get coordinated, client is offered alternative to change password.



Fig. 6. Forgot Password- accepting user name



Fig. 7. Forgot password- Asking security question



Fig. 8. Forgot Password- Asking new password

D. Home Page:

The user is redirected to this page once log in done successfully. From this page now the user can perform operations that the user wishes to perform. The options available are:

1. Inbox
2. Compose
3. Sent mail
4. Trash

Inciting will give the mouse click task that should be performed for the required administration. The twofold right snap occasion is particularly held to log out of the framework whenever the client needs to. This will be determined by the incite comfortable start after login.

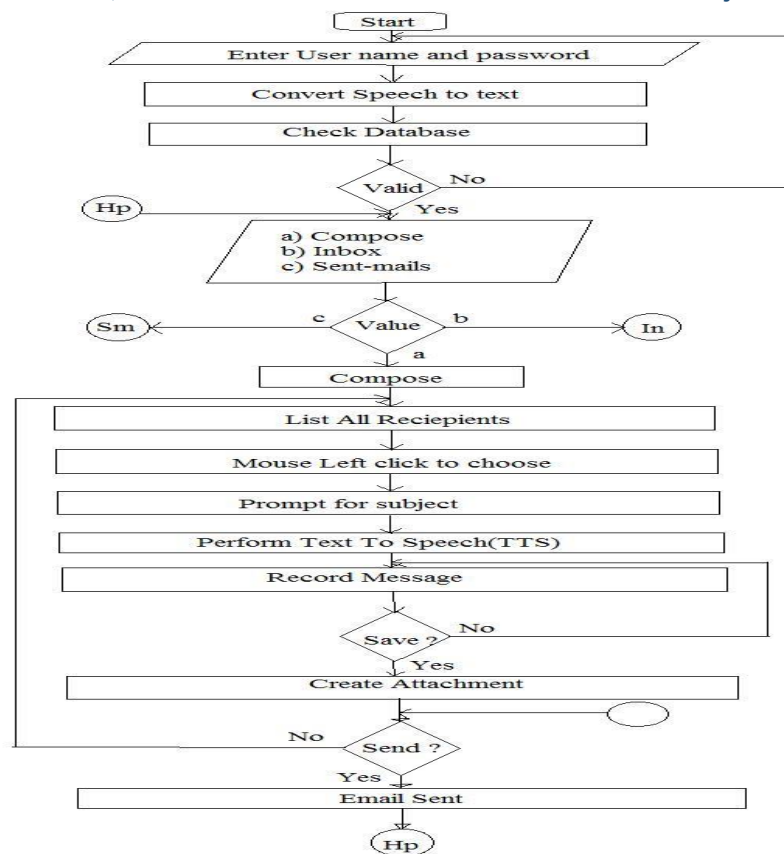


Fig. 9. Home Page

Every one of these functionalities has been executed. The modules given underneath are to be incorporated into the framework and will be actualized as a piece of the proposed framework. The entire walkthrough of this framework is given as takes after:

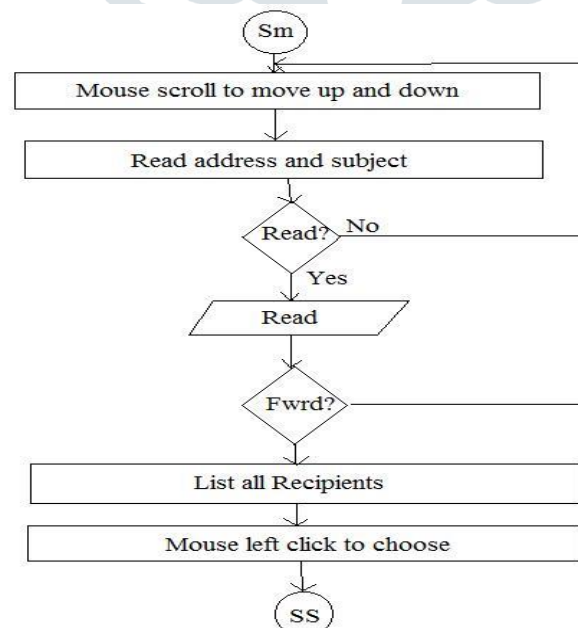
E. Compose mail:

This is a standout amongst the most imperative alternatives given by the mail administrations. The usefulness of create mail alternative would not coordinate the officially existing mail framework. Since the framework is for outwardly tested individuals and console tasks are totally abstained from forming mail would just be done on voice info and mouse activities. No composed information will be required. Client can specifically record message that should be proliferated and can send it. This voice back rub will go in type of connection. The collector can hear the account and get the message client needed to send. Client would not require joining the document. Record alternative will be given in the make window itself. Once recorded it will affirm whether the chronicle is flawless or not by giving the client a chance to hear it and if the client affirms it will be naturally connected to the mail.



F. Sent mail:

This choice will monitor every one of the sends sent by the client. On the off chance that the client needs to get to these sends, this choice will give them their necessities. So as to get to the sent sends client should play out the activities given by the incite to explore between sends. At the point when the control arrives on specific mail client will be incited as who the recipient was and what is the subject of the mail. This will help the client in productively understanding and removing the required mail.



G. Trash:

This choice will monitor every one of the sends erased by the client. Erased sends could be the ones from inbox or sent mail. On the off chance that whenever the client needs to recover a mail which was erased it very well may be done from this choice.

CONCLUSION

In this paper we have proposed a framework which will assist the outwardly disabled individuals with accessing email benefits effectively. This framework will help in conquering a few downsides that were prior looked by the visually impaired individuals in getting to messages. We have disposed of the idea of utilizing console alternate ways alongside screen perusers which will help decreasing the subjective heap of recollecting console easy routes. Likewise any innocent client who does not know the location of keys on the console require not stress as console utilization is disposed of. The client just needs to take after the directions given by the IVR and utilize mouse clicks likewise to get the separate administrations advertised. Other than this the client may need to sustain in data through voice inputs when indicate

REFERENCES

- [1] Jagtap Nilesh, Pawan Alai, Chavhan Swapnil and Bendre M.R.. "Voice Based System in Desktop and Mobile Devices for Blind People". In International Journal of Emerging Technology and Advanced Engineering (IJETAE)
- [2] Ummuhanysifa U., Nizar Banu P K , "Voice Based Search Engine and Web page Reader". In International Journal of Computational Engineering Research (IJCER).
- [3] G. Shoba, G. Anusha, V. Jeevitha, R. Shanmathi. "AN Interactive Email for Visually Impaired". In International Journal of Advanced Research in Computer and Communication Engineering (IJARCCE), 2014 on Pages 5089-5092. (Volume 3, Issue 1).
- [4] The Radicati website. [Online]. Available: <http://www.radicati.com/wp/wp-content/uploads/2014/01/Email-Statistics-Report-2014-2018-Executive-Summary.pdf>.
- [5] The WHO website. [Online]. Available: <http://www.who.int/mediacentre/factsheets/fs282/en/>.