



A Novel Approach for Examination of Visually Challenged Candidates By E-Evaluation Techniques

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ABSTRACT

The evaluation of physically challenged is always a challenging task as any evaluation of them is compared with that of normal candidates. The case of visually challenged is still more difficult as vision is a nunerono sensor in the field of study and knowledge enhancement and evaluation of them on pair with another candidate is very difficult. The aim of this paper is to present an approach for E-evaluation model for the visually challenged students/candidates for the screening tests conducted by the different examination authorities.

The major attempt is made to use the personal computer and avoid the use of a scribe by the candidate so that candidate can take the exam independently with the help of voice recognition using Google Text To Speech Algorithm (GTTS). A portion of the PC keyboard is slightly modified in its software functionality to help them in undergoing the test using GTTS. Also described is the functioning of this model of E-Evaluation and its relative advantages.

Index terms: GTTS,PC,E-Evaluation, nunerouno sensor.

I. INTRODUCTION

Online Examination for visually challenged is a software solution, which allows a particular company or institute to arrange, conduct and manage examinations via online environment. This can be done through the Internet or Local Area Network Environment. Candidate can answer his/her examination paper on the computer and submit answers. The Examination Software evaluates the submitted answers and the results will be available immediately after completion of the examination.

The online examinations system provides the facility for the visually challenged students to interact with the system comfortably. Writing an online exam would be a big task for anybody if there is no proper Internet connection and when it comes to visually challenged students there would be a lot of issues for them to face while writing any exam. In order to avoid such issues and this project has come up with new features to facilitate the visually challenged with an ease. With the help of packages in python, the facility of text-to-

speech and speech-to-text conversion is implemented to provide more functional support for visually challenged students. In order to avoid such issues and this project has come up with new features to facilitate the visually challenged with an ease[9]. With the help of packages in python, the facility of text-to-speech and speech-to-text conversion is implemented to provide more functional support for visually challenged students. Also, by integrating with the keys of keyboard it was possible to enhance the functionalities provided. There are various systems which use Internet for utilizing packages / functions of speech-to-text for controlling the flow of the system The systems which using speech-to-text for maintaining the flow of system, will require the student voice as input.

II. EXISISTING SYSTEM

The system is a stand-alone application which uses Speech-To-Text (STT) and Text-To-Speech(TTS) technology to provide the users almost all of the capabilities of a conventional online examination.[3] The online examination system is adaptable to different types of questions pertaining to different subjects, different time limits and different marking schemes, and can be customized according to the needs of any organization[4]. All the data pertaining to the test is stored in a database which is linked to the application. The Voice Enabled Examination System is able to read aloud the questions and the different options available to the test taker. The candidate has to answer the question by pressing the option number. The system registers the answer given by the candidate and moves on to the next question when next question button or right arrow key is pressed[5]. At the end of the test, a report is generated by the system.

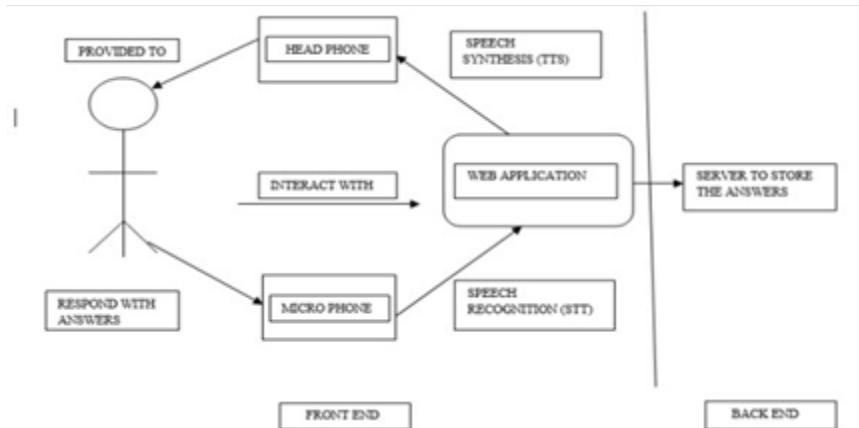
- Time delay due to speech-to-text usage for taking answers.
- Minimal accuracy.
- Manual process needs to be monitored.
- Blind students cannot access independently, rely on others.
- The noise suppression also arises for the lengthy word, entered by the student.
- The voice entered is even in a smooth method there could some mismatch occur.

III. PROPOSED SYSTEM

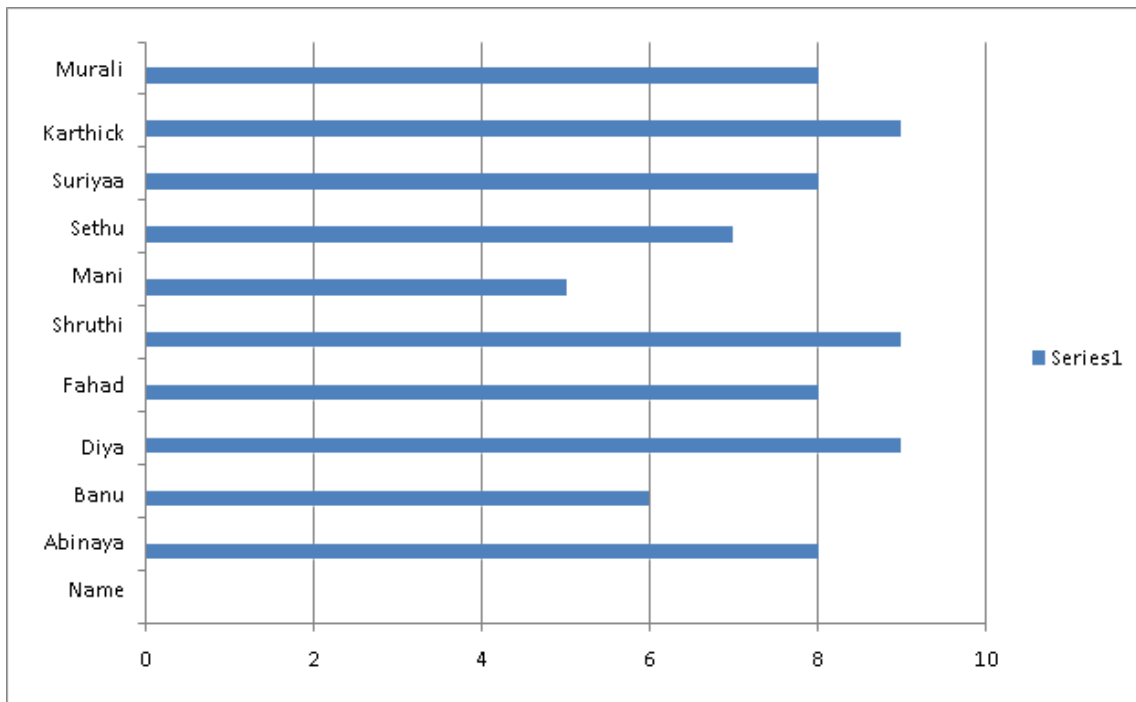
This system would be operating with the help of internet services which is useful for Speech-To-Text conversions and for database connections.[6] This system was being proposed with the sole purpose of reducing the pressure form upon the student while writing exam with the help of text to speech Students or candidates who are visually challenged can go through the online exams with ease

- There is no need for scribes while examination.
- Visually challenged students can do their work and go through the examination procedure independently by the help of this product.
- The user can comfortably recheck all the attempted questions as well as un-attempted questions at the end of the examination before submitting the examination.

- While the user attempting the examination, the user can also be able to hear the alert messages regarding time left.
- This system facilitates the efficiency to the user by providing minimal usage of keys on the keyboard such that it reduces the mismatch errors, noise suppression problems and voice synthesis problems.
- The user can answer the respective questions in the examination by using keys which are numbered as 1, 2, 3, and 4 on the keyboard. Therefore, mismatch errors which are caused by voice synthesis problems can be completely avoided.



IV. RESULT



- The above graph explains the marks obtained by the blind candidates who attended the examination using the software. By analyzing the graph, we can coach the students according to the marks scored by them .So that it could be easy for the institution or coaching center to train the blind people.

V. CONCLUSION

This project is a useful application for every visually challenged student to know their talent easily through online exams like other students. Visually challenged people could give an extra dedication to test their internal abilities by using web examination.

The user interface for individuals is the system keyboard. Thus, visually challenged people can easily take up the exam like a common man without much difficulty. This project facilitates a visually challenged person to attempt an online examination without any human assistance.

This project mainly focuses on the complete avoidance of voice synthesis, voice recognition & noise suppression problems and also deals with mismatch errors issues. This project aims to deliver a portal which provides minimal usage of the keyboard such that it reduces ambiguity which is caused while prompting through a microphone.

VI. REFERENCES

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