Online Examination System for Blinds

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Abstract: As long as in a common world, blind people cannot attend any exam in online. And none of any available Website provides such a facility. So far blind people have been in an internet for browsing and interacting with the help of such a technology which provide it, for example, website through voice recognition (Google voice). In our project we will be going to deliver an entire website for blind people which can provide an interface. The interface provides a voice facility to give the questions as well as options and the answer will be given by the blind people through limited buttons in the keyboard. So that a blind people can easily access like a common man without any difficulty. Due to this a blind people can also do an online exam. This will improve the current educational system for blinds career.

Index Term: Blind People, Finger Print Device, Earphone, QWERTY Keyboard,.

1. INTRODUCTION

The growth of the Internet, and in particular the World Wide Web, is already influencing the way science is taught and will undoubtedly do so to greater extent in the future. In areas of education it offers a medium that has the potential to be more responsive to students. To encourage greater participation in their own learning, and to give greater access to different sources of information than traditional methods offers**.** Web-based Examination system could be used via Internet or intranet for managing student examination[6]. In the future blind peoples also can do online exam like a normal human if our project is delivered in real time [7].

For the Supervising faculty:
Marking the test is done automatically and instantaneously; the faculty is relieved from these, time consuming duties, Questions can be easily recycled from the question bank, easily edited and changed, Different versions of the same question can be generated for different students.

For the Blinds:
Tests can be taken anytime. Tests can be taken anywhere. Blinds can login the exam using their finger verification. Questions can be attempted in a stress-less environment [1]. Test can be taken using a simple personal computer, a finger print device for login, keyboard and the minimal requirement is just a Web browser, Here Questions & options are through in Voice[2].The Answer will be get from the user through keyboard. The results also delivered through voice.

For the administration:
The marks are automatically collected, analyzed, and disseminated for purposes like evaluation of teaching and learning process.[3]

Existing System
In this world blind people's can get the knowledge using various interfaces. Such as one common method of the blind people have been intended to use is by voice recognition [4], that is which has a voice recording system. Where the content had recorded already in certain format, the blind people should be supposed to hear the recorded content in that recording system based on this way they can easily know the content and learn in a preferred way and also they can interact with that system by giving their voice

as an input. These common procedures have been used for the blind people to expose their talent in various platforms and to get compete with normal people through the help of many devices [5]. For example in iphone there is an facility which allows a blind people to get interact with that device as a normal man. If they touches any button or the display option in the iphone have been designed to react as soon as by giving voice output. So a blind people can use all the facility provided in that phone (they are able to access all the options like a normal man browsing, chatting, SMS, Music, streaming……etc).
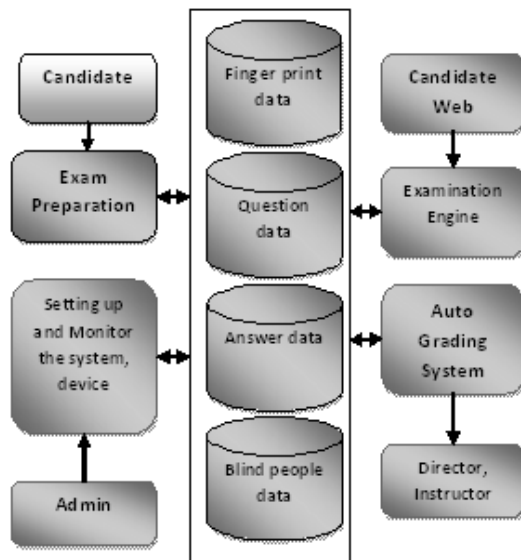
Disadvantage:
Major disadvantage is that they have to give a voice input in a clear manner, there should be some mismatch, while giving a long word as input, there may be noise suppression and also for different language other than English they should not feel comfortable.

Proposed System
There has been no proper website for providing online examination for blind people. By considering the above disadvantage we will be going to create an entire website for blind people to admit in online examination like a normal people without any difficulties. **(Here, all outputs through in voice)** Normally The Web-Based Exam Management System has been developed to support automatic grading, exam archiving, and exam administration using the WWW as a delivery vehicle. In most of them, the widely used questions are correspondence to Intended Learning Outcome (ILO) for the courses, and it should be easily judged and evaluated online by comparing with the correct answers. The typical questions include yes/no questions, multiple-choice/single-answer questions, multiple-choice/multiple-answer questions, matching questions, numeric questions, and essay questions. This system is built based on open source technology.

Proposed System Architecture:

Database Tier
Here data are stored as records in tables on the server side database.

Exam system data
This contains all question data; all answer data, all courses data and courses ILO'S, these data are explained as follows

Registration Data
This data have all the finger prints of the registered candidates.

Question data
This consists of data records about questions such as question chapter, and question type.

Answer data module
This consists of data records about question and its answers such as question number, question type, the correct answer, and the student answer.

Course and Courses ILOS
It consists of data about courses such as courses name, courses description, courses term and course Intended Learning Outcomes.

Login data
This contains all setup information data, all blind candidates with associated finger prints data. These data's are explained as follows:

Setup information
This consists of data records about system setup such as admin username, and password.

Blind candidate's data
This consists of data records about blinds such as finger prints to verify blind Id, blind username, and blind password.

Address data
This consists of data records about area such as Village name, and district name, blind's guardian address.

Exam Preparation:
It is used to manage and handle the course questions, exams. It also contains the logic behind instructor-course relation, instructor-term relation, course-term relation and the report behind these relations. This logic used to handle all the information stored in the database about course-instructor relation, instructor-exam relation. A detail of that logic is described as follows:

Add questions:
The instructor first could insert all the questions.

Create exam:
The instructor could create exam by selecting the questions that added before.

Update exam:
The instructor could update the exam that made before.

Setting up and monitoring the system:
It is used to set and handle the candidate information which is detailed as follows: The administrator login, he can insert or update candidate information. There are some scenarios for that event. The administrator login and he can insert or update instructor information he can check for the instructor first if the instructor does not exist the administrator can create new instructor record by adding instructor data.
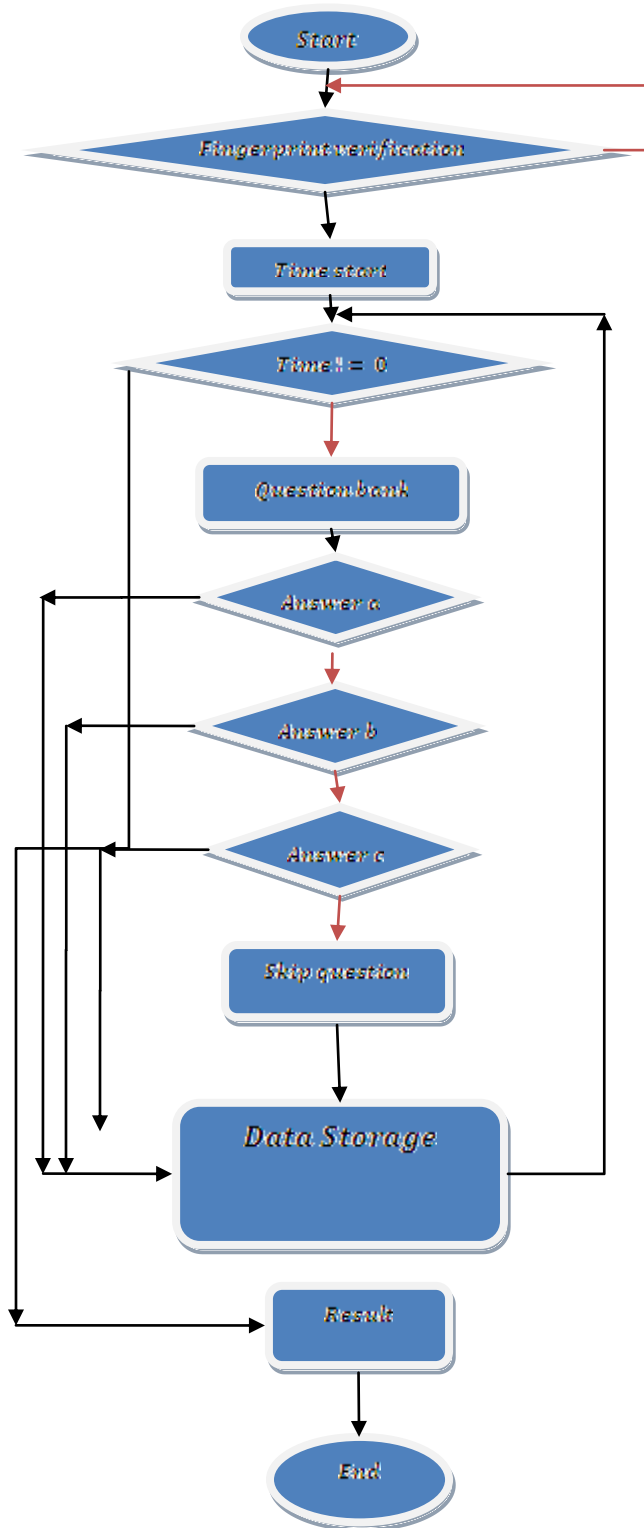
Auto grading:
With that logic system can automatically grade candidates' answers, which are collected by the examination system. The system compare the student answers with the correct answers which entered by the instructors.

Examination engine:
As shown in fig. 2 Examination Engine contains the logic used by the candidate to take exam and shows the results after they finish it. This logic is described as follows: The systems first match the fingers prints and verify the candidate details who have already registered. If they are

not correct the system starts again. If the finger prints and details of the candidate are correct then the system allows candidates to begin their exam. While the candidate answering the questions the system check for the time if the exam time expire or not. The systems end the exam if it is expired then save the answers in the database.

Working:
As in proposed system, we have seen that by giving voice as an input there are some disadvantages, By considering this we will be going to design a website in which an information (or) question have been delivered through voice as per the area and as per the language and we want the blind people to select their option through the arrow key and also providing many option by pressing an appropriate key provided that will be given in the instruction would be displayed in the website. The supervisor will read the appropriate instruction and based on that they should guide the blind candidates to admit.

Advantages:
They can easily give the answer by pressing a single key without get confused with the mismatching Words. It reduced candidates depressing.

Conclusion:
This project would be a very useful one for every blind people to admire their talent easily through online exam like other humans. And also we will try to do as much as improvement in future as per the collection of feedback. Through this they have been able to attend many exams in the future.

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