FORM 2

THE PATENTS ACT, 1970 (39 of 1970)

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THE PATENTS RULES, 2003 COMPLETE SPECIFICATION

1. **TITLE OF THE INVENTION**

**MODERN VOICE RECOGNITION TECHNIQUES BASED ONLINE QUIZZING SYSTEM FOR BLIND PEOPLE**

1. **APPLICANT(S)**

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1. **PREAMBLE TO DESCRIPTION**

COMPLETE SPECIFICATION -

The following specification particularly describes the invention and the manner in which it is to be performed.

**MODERN VOICE RECOGNITION TECHNIQUES BASED ONLINE QUIZZING SYSTEM FOR BLIND PEOPLE**

# Field of the Invention

**[0001]** The present invention is related to Computer Science field.

**[0002]** This innovation refers to a quiz website that is accessible to blind students and includes speech recognition. This is an important step in bridging the accessibility gap for visually impaired students to the online learning environment. The quiz code will be used by students to take the test and prevent spam entries from anonymous users.

# Background

**[0003]** The background description includes information that may be useful in understanding the present invention. It is not an admission that any of the information provided herein is prior art or relevant to the presently claimed invention, or that any publication specifically or implicitly referenced is prior art.

**[0004]** The idea of creating the website was conceived after relative observations of the real-life incidents that are happening in and around the globe. Online learning is now considered the future of education and is more cost-effective than traditional education. The increasing use of online modes for education and lack of proper monitoring of the progress made by students is a big threat to the education system of the nation. Manual evaluation is ineffective in terms of time management and is prone to mistakes.The website's primary goal is to develop a technique that would enable us to automate the entire evaluation process and assign scores to the responses in accordance. Moreover, the online mode cannot be accessed by visually impaired students which is also a gap in the online mode of learning. So, we have come up with an online quiz system that is fast and can be used by visually impaired students as well.

**[0005]** As used in the description herein and throughout the claims that follow, the meaning of “a,” “an,” and “the” includes plural reference unless the context clearly dictates otherwise. Also, as used in the description herein, the meaning of “in” includes “in” and “on” unless the context clearly dictates otherwise.

**[0006]** The recitation of ranges of values herein is merely intended to serve as a shorthand method of referring individually to each separate value falling within the range. Unless otherwise indicated herein, each individual value is incorporated into the specification as if it were individually recited herein. All methods described herein can be performed in any suitable order unless otherwise indicated herein or otherwise clearly contradicted by context. The use of any and all examples, or exemplary language (e.g. “such as”) provided with respect to certain embodiments herein is intended merely to better illuminate the invention and does not pose a limitation on the scope of the invention otherwise claimed. No language in the specification should be construed as indicating any non- claimed element essential to the practice of the invention.

**[0007]** Groupings of alternative elements or embodiments of the invention disclosed herein are not to be construed as limitations. Each group member can be referred to and claimed individually or in any combination with other members of the group or other elements found herein. One or more members of a group can be included in, or deleted from, a group for reasons of convenience and/or patentability. When any such inclusion or deletion occurs, the specification is herein deemed to contain the group as modified thus fulfilling the written description of all Markush groups used in the appended claims.

# Objects of the Invention

**[0008]** An objective of the present disclosure is :

* The teacher will be able to create quizzes, control access to quizzes, copy and share the quiz–code and view / delete the responses.
* The student will be able to attempt a quiz by using the quiz code, voice recognition and will be able to see their scores in the attempted quizzes.
* The Blind Quiz Module works with the limited Speech Commands to interact with application.

# Summary

**[0009]** A system and method has many end user:

* Quizzes can be created by teachers.
* Accessibility to quizzes can be restricted by teachers.
* Teachers will have access to the following:
  + - Viewing and deleting replies for the quiz.
    - copying and sharing the quiz code.

# Drawings



Fig.1-LOGIN FOR WEBSITE

Graphical user interface, application

Description automatically generated

Fig.2-ATTEMPTED QUIZZES

Graphical user interface, application

Description automatically generated

Fig.3-CREATING A QUIZ

Graphical user interface, application

Description automatically generated

Fig.4-CREATED QUIZZES

# Advantages of the Invention

**[0010]** An advantage of the present invention is

• The development of “QUIZI FOR MALVOYANT” for taking quizzes, test and assignments using React JS and Mongo DB accords benefits to the end users.

• Accessing the daily progress will no more be a problem as our website has taken care of that as well.

• The website is helpful for physically challenged people.

• Deployed website “QUIZIFORMALVOYANT” will be a great help for all kinds of students and teachers worldwide.

# Claims

We Claim:

1. A system and method for health monitoring through wearables comprising of:

# Front-end

* + - HTML-Hypertext Markup Language, or HTML.
    - CSS
    - Java script
    - ReactJS
    - Bootstrap

# Back-end

* + - Node.js
    - Express.js

1. A system in Claim 1, uses the voice recognition and voice commands for instructions.
2. A system in Claim 1, Candidate can login through their computers or mobile phones using the unique code provided to them for a particular test and then they can take the exam. & Teacher has authority to propose tests or papers
3. A system in Claim 1, Multiple Choice Questions (MCQs) or subjective questions are both acceptable formats for questions.
4. A system in Claim 1, There will be some speech commands provided that can be followed by visually impaired students to successfully complete their quizzes

# Abstract

The present invention is a system and method which Online assessment of students is a new challenge to the old education system. It's even more difficult to track the daily progress made by an individual student in online learning environment. To solve this problem, we need a novel approach for online assessments. “Quizi for Malvoyant” is a web-based application that not only provides solution to the above problem but also provides a platform that can also be used by visually impaired students. The increasing use of online system in our educational environment and lack of proper monitoring in student’s progress is a big threat to the education system. Moreover, the existing online modes cannot be easily accessed by any visually impaired student which is a prominent gap in online mode of learning. “Quizi for Malvoyant” is a web-based application which can be used by a normal person or visually impaired person. To use the proposed platform, a user can simply log in to be able to create and join quizzes via sharing the quiz code. For blind students, there will be some speech commands that can be followed for smooth conduction of online quizzes. This system will do automated marking which help teachers by saving their time. Teachers can also set up quizzes which will auto-grade itself. Students can answer the quiz from any location and get immediate results. This research paper will provide a unique web-based approach for online quizzing and assessment work which is implemented on MERN STACK technology.

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