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MCQ QUIZ PORTAL

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ABSTRACT

The 'MCQ Quiz Portal project will be developed to overcome the time-consuming problem of the manual system. Apart from that in the current system, checking the answer sheets after taking the test, waste the examiner's time, so this portal will check the correct answer and save the examiner time and carry out the examination effectively. Apart from this, data that exist in this system will exist for a long period and will be easily accessible.

This project aims to computerize the existing manual system and helps the examiners to save their valuable time and important data. The objective of this project is to manage the details of students, examinations, marks, and courses in a good manner. The performance of the portal will be fully controlled by the administrator. The project will reduce the manual process of managing examinations and all issues regarding that.

This portal mainly includes:

1. Registration and login form

2. Admin panel to send all the required notifications to the students

3. User panel

4. Ranking the students based on their marks

5. We include all the exceptions like - Single sign-in, disabling the right click mechanism, and no access for the opening of another tab.

6. Live video monitoring during the exam.

1. INTRODUCTION

The 'MCQ Quiz Portal project will be developed to overcome the time-consuming problem of the manual system. Apart from that in the current system, checking the answer sheets after taking the test, waste the examiner's time, so this application will check the correct answer and save the examiner time and carry out the examination effectively. The users which are using this system don't need high computing knowledge and also the system will inform them while entering invalid data. This project aims to computerize the existing manual system and help the examiners to save their valuable time and important data. Apart from this, data that exists in this system will exist for a long period and will be easily accessible. This project helps the examiners to manage their services in a good way and provide a better service to their users. The objective of this project is to manage the details of students, examinations, marks, courses, and papers in a good manner. The performance of the application will be fully controlled by the administrator and the administrator can guarantee anyone to access it. The project will reduce the manual process of managing examinations and all issues regarding that. Functionalities of the project will be as follows:

- Able the examiners to punch the MCQ questions online;

- Able the users to solve the questions online;

- Examiners can manage the exam information;

- Correct answers will be evaluated by the system (First it should be determined by the examiner);

- Users can see their results after submitting the test.

To design and implement this project we plan that the project supports different types of users apart from its administrative part. When the project is run for the first time it allowed the user to select who he/she wants to login into the system. Project support login as a teacher and login as a student. If a user is a student, try to log in as the teacher system will not allow him and vice versa. The user who adds a teacher to the system will be able to punch tests and questions into the system and also will be able to observe the result of the student who attempts tests. The user who logs in to the system as a student will be able to select a particular test and attempt questions depending on this test. After attempting the test and submitting that user will receive a message that you have attempted the test successfully and if the user tries to attempt the same test, the system will not allow him/her. Also, a user who login to the system as a student will be able to observe the result of the test he/she attempted.

To conclude the introduction, we have used these modules to follow the objectives of our project and each of these modules has logical connections to other modules on which they are dependent.

- **Index**: This allows users to select their type of login to the system;

- **Teacher Login**: Able the teachers to log in to the system with a valid user name and password. If a teacher is successfully logged in to the system, he/she will have access to the following pages:

- **Teacher Home:** Which has information about the Online MCQ Quiz and issues supported by this system for the teachers;
- **Punch Test:** This able the teacher to punch a test and after entering the test name and clicking on 'Submit to Enter Questions', the teacher will be able to add questions to the particular test.
- **Students Marks:** This able the teacher to observe the result of all students who have attempted the tests;

- **Student Login:** Able the students to log in to the system with a valid user name and password. If a student is successfully logged in to the system, he/she will have access to the following pages:

- **Student Home:** Which has information about the Online MCQ Quiz and issues supported by this system for students;
- **Attempt Test:** This able the student to select a particular test for attempting from the existing test in the system from the drop-down list, and after clicking on 'go to the selected test', the questions of the selected test will be displayed for the student to attempt. Then the student will be able to attempt the questions and after submitting, the student will receive a message that the test is successfully attempted.

- **Marks:** This will allows the particular student to have access to the result of the test which he/she attempts.

1.1 Project Objectives

The main objective of the project MCQ Quiz Application is to manage the details of students, examinations, marks, courses, and papers. The project is totally at the administrative end and thus only the administrator is granted access. The purpose of the project is to build an application to reduce the manual work of managing the MCQ quiz and we will follow to achieve these objectives in this project.

- To create an appropriate platform for best managing of MCQ test;

- To overcome the time-consuming issues and taking MCQ tests;

- To release the marks of the test taker as soon as possible;

- To manage the information of different tests.

1.2 SCOPE

This project will be most beneficial to the students who are interested in taking an MCQ test.

This site gives students a visual representation of their test scores as well as the number of questions they answered in graphical form.

This site gives students all the required information, not only about the test details, but also about the student's personal information, air ranks, upcoming examinations, and much more, and students may take the exam from anywhere by accessing this portal.

1.3 Advantages

Quick and easy to score, by hand or electronically

Can be written so that they test a wide range of higher-order thinking skills

Can cover lots of content areas on a single exam and still be answered in a class period.

1.4 Disadvantages

Provide unprepared students the opportunity to guess, and with the right guesses, they get credit for things they don’t know

Expose students to misinformation that can influence subsequent thinking about the content

Take time and skill to construct.

2. TECHNICAL DETAILS

2.1 HARDWARE REQUIREMENTS:

Processor: 8th generation Intel core i5

Motherboard: Intel motherboard

Ram: 8 GB

Storage: 1TB HDD

Hard drive size: 1024 GB

Processor count: 4

Operating system: Windows 10

Display3: 14-inch HD display

Processor Speed: 3.9 GHz

2.2 SOFTWARE REQUIREMENTS :

Front end: React JS, ML(CNN Algorithm)

Backend: Java / PHP

Database: Mongo DB

Framework: Angular

3. LITERATURE SURVEY

3.1 Existing Systems

Various MCQ quiz applications exist on the internet with different criteria. Each of the existing applications has its goodness and problems. In this MCQ quiz application which is designed and implemented in JSP based we try to overcome the existing problems with the following features:

- Remove the source to confuse the issue;

- Better management;

- Connection to the database for better storing of data;

- Better frontend management;

- Better backend management;

- Try to decrease error issuer during runtime

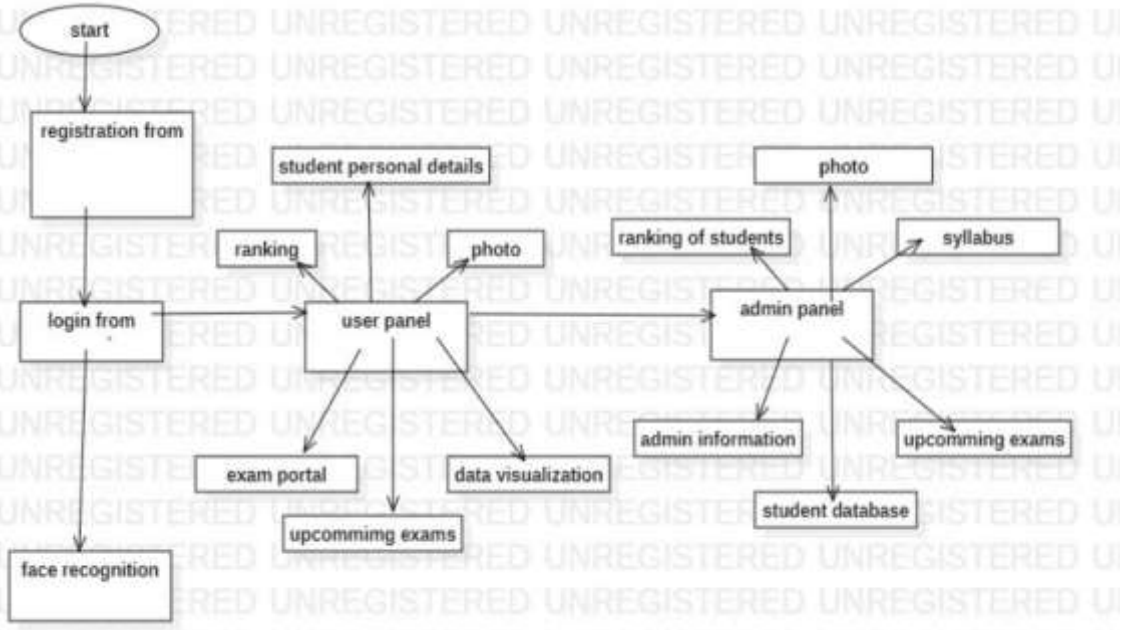
3.2 PROPOSED SYSTEM

This web application allows you to conduct online exams from anywhere around the globe. This application mainly includes face recognition technology which identifies the authorized student to attempt the exams.

It saves time by allowing a large number of students to take the exam at once and display the results as soon as the test is completed, eliminating the need to wait for the results.

The server generates it automatically. The administrator can create, alter and remove exam papers and questions. The user may register, log in, and take the test using his unique id, as well as view the results.

4. Flowchart



5. Project Requirements Specification

By project requirements specifications we can analyze the tasks which going to be done by the system. The function and performance of allocated software as part of system engineering are refined by establishing a complete information description. A detailed functional and behavioral description of the project and concentrating on requirements and constraints of that will provide and good product. The proposed system should follow these requirements:

- System must store information about users (Students and Teachers), tests, questions, and results;

- System should able the teacher to punch tests;

- Each teacher should be able to punch many tests;

- System should do not allow unauthorized users to enter the system;

- Each student should be able to attempt many tests;

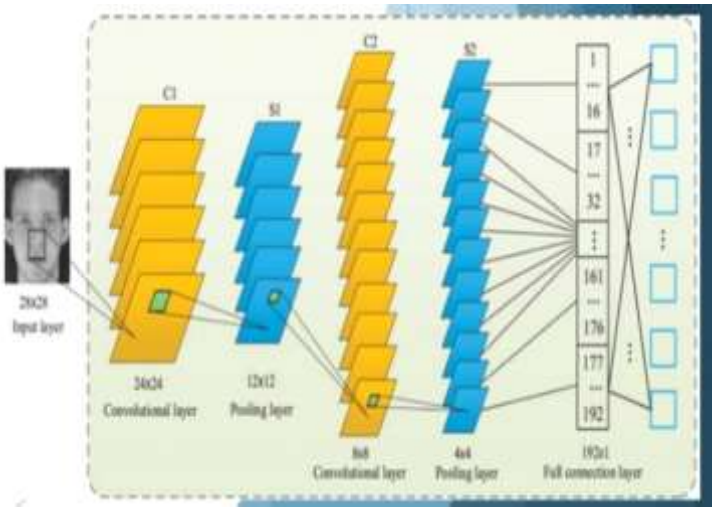
- System should keep and display the results of Students;

- System should support tests in which one or more questions are dependent on it;

- System should allow the administrator to delete and update tests and questions dependent on it.

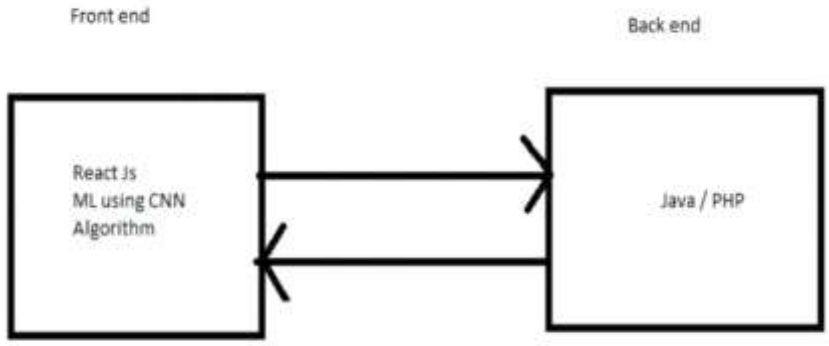
5.1 CONVOLUTION NEURAL NETWORK ALGORITHM

CNN model is developed to improve the accuracy of face image classifications. The structure of the model is similar to the classical LeNet-5 model, such as different in some parameters of the model, such as input data, network width, and full connection layer. The developed CNN is composed of two convolutional Layers (C1 and C2) and two pooling Layers (S1 and S2). These layers are arranged alternately in the form of C1-S1_c2-S2 as sketched in the figure.



6. Project Design

For designing and implementing of Online MCQ Quiz application we used HTML, CSS, JavaScript, and SQL Server with the context of Java and JSP. The following pages have been designed using HTML, CSS, and JavaScript to handle the defined objective of this project.



1. Index: This is the first page that which user observes after running the project. This page will able the user to select the type of login. Selecting "Login as Teacher" will direct the user to Teacher Login Page and selecting "Login as Student" will direct the user to Student Login Page.

2. Login Pages: The login pages exist for both teachers and students. After the user selects the type of log in the login page of the particular user will be displayed. Users enter their user name and password and after clicking on login first system will check if they are valid users or not. If the user is authenticated by the system, will be directed to a particular Home Page and if not authenticated by the system the message "Either user name or password is incorrect" will be displayed to the user.

3. Home Pages: After users successfully log in to the system. Each particular user will be directed to their particular Home Page which are "Teacher Home" and "Student Home". Teacher Home will able the teachers to observe information about the Online MCQ Quiz and punch a test by clicking on "Punch Test" and observe student results by clicking on "Student Marks". Student Home will be able the student to observe the information about the Online MCQ Quiz, attempt a test by clicking on "Attempt Test" and observe his/her result by clicking on "Marks".

4. Punch Test: Clicking on the punch test in Teacher Home will direct the teacher to a page that allows the teacher to write the name of the test he/she wants to punch. When the teacher types the name of the test and clicks on "Submit to Questions", the system will be directed to the Insert Question page.

By clicking on the "Submit to entering Question" button, the teacher will be able to insert a question for the particular test in which he/she enters its name. As the teacher enters the test name, an automatic ID will be generated for this test in the Test Table of the database and all a session will be created, all questions entered will be stored for the particular test according to the Test ID and session which has been created. The teacher will receive "Question Successfully Sored" each time when he/she writes the questions and its answer and click on the "Submit Question" button.

5. Student Marks: Clicking on "Student Marks" will direct the teacher to a page that displays the result of all students who attempt the test.

6. Attempt Test: Clicking on "Attempt Test" on Student Home will direct the student to the page which able the student to select the test he/she wishes to attempt. After the student selects the test from the drop-down list and clicks on "Go to Selected Test", the system will be directed to the questions of a particular test.

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When students select the test and click on “Go to Selected Test” the page will be directed to questions about the selected test. Students can attempt all questions of that test and after clicking on “Submit Test”, will receive a message that “You Have Successfully Attempted” the test. If the particular student has already attempted the test before, he/she will receive the message “Sorry, You Have Already Attempted this Test”.

7. Marks: Clicking on “Marks” in Student Home will direct the system to the page which will show the result of a particular student for all tests he/she attempts.

7. OUTPUT SCREENS

Fig 1: Fig 1 shows the registration page

fig 2: Fig 2 shows the login page

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fig 3: Fig 3 shows the face recognition

fig 4: fig 4 shows the assignment window where the student needs to take the test

fig 5: fig 5 shows the window which displays the test questions

fig 6: fig 6 shows the inside view of the portal

Sl. no.	Name	Batch	Admn no	Marks	Rank
1	Hari	BA - 2014	10E	84.5	1
2	Ajith Kumar	BL - 2014	10R	82.67	2
3	Sreevidya	BL - 2014	10T	82.5	3
4	Vikil	C1 - A	TTW	81.5	4
5	Anjitha k	C1 - A	AL-128	79.2	5
6	Aishwarya	BL - 2014	10X	77.5	6
7	Samson	C1 - A	11B	76.7	7
8	Vineesh	BL - 2014	10O	76.17	8
9	Lakshmi	BL - 2014	11A	74.83	9
10	Varun	BL - 2014	10N	73.83	10
11	Jafar	BL - 2014	10V	72.17	11
12	Jijesh	BL - 2014	10P	68.5	12
13	Akshay	BL - 2014	10Z	67.67	13
14	Jamshi	BL - 2014	10U	67.5	14

« previous 1 2 3 4 next »

fig 7: fig 7 shows the student list along with with their marks scored

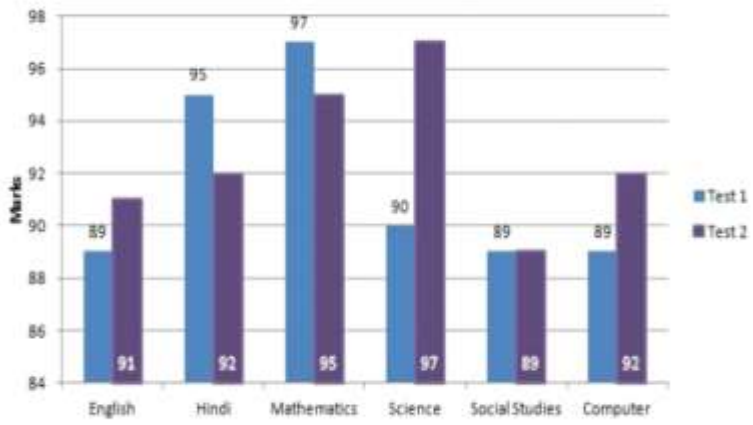

fig 8: fig 8 represents the scores in the graphical form

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