E-Exam: Online Examination System

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Abstract - This project is aimed at developing a web based & central examination portal where any student can give their exams disregarding the distance and other factors such as vigilance. I am developing E-Exam website in Python. This system includes online examination, quick result (In some cases), and feedback. This system is used by students, professors, teachers, admin, colleges, universities, educational institutes or any other coaching centers. This project — E-Exam" is an online website in which candidate can register themselves & then attend the exam like written test or any quizzes. Based on the outcome of the exam the candidate will be short listed and given the result, the exam will be conducted online and proper time duration for exam will be given. I am providing of the facility of aptitude test, any kind of exams online. Users have to connect their smartphones, laptops or computers while giving exam for video recording. When there is 5-10 minutes left, there will be time reminder. Once the exams ends or the time ends the answers will be sent to the server along with the result (If providing the result). It has wide scope of the using this website where students can appear for any exam at home or any other place. This - Online Examination System will conduct exam automatically on given time and as well as finish the exam than the system will release results on exact time which decided by the respective educational faculty.

Keywords: Web Application, Examination System, Database, Web Server, Python, Django-Framework

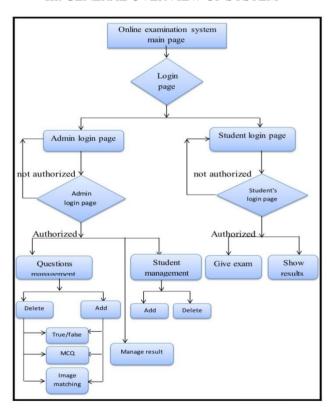
I. INTRODUCTION

The project described within this document is an online examination system designed with the specific goal of reducing the student's stress for exam paperwork and time-saving. Responses by the candidates are going to be checked automatically and instantly. Being an integrated online examination system will reduce paperwork. The result is going to be shown immediately to the participating students reducing the anxiety. It can generate a various analysis of the student's progressive report. It will also send mail notifications to the students about the detailed description of tests, their results and other information through a small message transfer protocol. The system is designed for educational institutes like colleges and private institutes to conduct logic tests of their students on a regular basis. Design to facilitate administrates and user-friendly interface complete and secure information is provided to use the scope. It would be really helpful for the critical situation such as Corona Pandemic.

II. PROBLEM STATEMENT

As the traditional system have so many drawbacks such as it takes much time to analyse the question papers, sometimes the handwriting is not visible clearly, accessing the question paper is difficult for the examiner and time-consuming. The contemporary system is manual and has so many limitations. Sometimes, there are chances of wrong marking as well.

III. GENERAL OVERVIEW OF SYSTEM



IV. LITERATURE REVIEW

- A. Currently, the existing system is somehow becoming inefficient as candidates can cheat and influence the examination process.
- B. Cheating was the most prevalent area among all the themes identified. Cheating in asynchronous, objective, and online assessments is argued by some to be at unconscionable levels. In one survey, 73.6 percent of students felt it was easier to cheat on online examinations than regular examinations. This is perhaps because students are monitored in paper and pencil examinations,

compared to online examinations where greater control of variables is required to mitigate cheating. Some instructors have used randomized examination batteries to minimize cheating potential through peer-to-peer sharing.

- C. Solving cheating is social also as technological. While technology is taken into account as the present norm for reducing cheating, these tools are mostly ineffective.
- D. Access to multiple question banks through effective quiz design and delivery may be a mechanism to scale back the propensity to cheat, by reducing the stakes through multiple delivery attempts. Question and answer randomization, continuous question development, multiple examination versions, open book options, time stamps, and variety in question formats, sequences, types, and frequency are wont to manage the perception and potential for cheating.
- E. In a review of bring-your-own-device examinations including:
 - Copying contents of USB to a tough drive to form a replica of the digital examination available to others,
 - Use of a virtual machine to take care of access to plain applications on their device,
 - USB keyboard hacks to permit quick access to other documents (e.g. personal notes),
 - Modifying software to take care of complete control of their own device, and
 - a chilly boot attack to take care of a replica of the examination.

V. STUDY FINDINGS

- A. Referring to the recent condition of COVID-19, online examination proved to be helpful and successful using various methods and platforms.
- B. By knowing the success ration of the online exam if used with appropriate methods, there is the possibility to improve the system.
- C. Now, there are so many examination portals and systems that are useful but somehow inefficient to resolve the real situation by adding some new features.

VI. CONCLUSION

This systematic literature review considered the current system and made some advancements that are necessary to resolve the recent problems. We discussed student, staff, and technological research because it was identified in our sample. The dominant focus of the literature remains oriented on preliminary evaluations of implementation. These include what processes changed at a technological level, and the way students and staff rated their preferences, there have been some early attempts to explore the effect of online examinations on student wellbeing and student performance, alongside how the changes affect the power for workers to realize.

Higher education needs this succinct summary of the literature on online examinations to know the barriers and

the way they will be overcome, encouraging greater uptake of online examinations in tertiary education. one among the most important barriers is perceptions of using online examinations. Once students have experienced online examinations, there's a preference for this format thanks to its simple use. The literature reported student performance didn't have a big difference in final exam scores across online and traditional examination modalities. Student anxiety decreased once they had used online examination software. This information must be provided to students to vary students' perceptions and reduce anxiety when implementing a web examination system. Similarly, the knowledge summarized during this paper must be provided to staff, like the info associated with cheating, reliability of the technology, simple use, and reduction in time for establishing and marking examinations. When selecting a system, institutions should seek one that has biometrics with a high level of precision, like user authentication, and movement, sound, and keystroke monitoring (reporting deviations therefore the recording are often reviewed). These features reduce the necessity for online examinations to be invigilated. Other system features should include locking the system or browser, cloud-based technology so local updates aren't required, and an interface design that creates using the web examination intuitive. Institutions should also consider how it'll address technological failures and digital disparities, like literacy and access to technology.

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