iJRASET
International Journal For Research in Applied Science and Engineering Technology

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 9 **Issue:** V **Month of publication:** May 2021

DOI: https://doi.org/10.22214/ijraset.2021.34287

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429
Volume 9 Issue V May 2021- Available at www.ijraset.com

Online Examination System [OLES]

Mr. Pawan Kr Saini[1], Mr. Puneet Batra[2], Mr. Ayush Kr Roy[3], Mr. Shekhar Singh[4]
[1, 2, 3]*PIET, Samalkha*
[4]*Assistant Professor, PIET*

Abstract: online examination is conducting a test online to measure the knowledge of the participants on a given topic. In the olden days, everybody had together in a classroom at the same time to take an exam. With online examination students can do the exam online, in their own time, with their own device, regardless of where they live. You only need a browser and an internet connection..
Keywords: OLES, PIET

I. INTRODUCTION

Online Examination System is a web based application totally focused on student's progress Evaluation. While studying in PIET, we experienced that manage and conduct examination for all batches of all departments is a major headache for Examination Controller. So we decided to design a platform with examination controller perspective with all rights like edit, update, create and delete student's information. As we also see covid-19 impact all over the world and it affect badly all the system of any Organization or any kind of business like transport sector, IT sector, education sector and many More in field of education conducting examination during lockdown is one difficult task for every educational institute so our online exam system ["OLES"] will help us to tackle this problem. Basically we are going to develop this system for educational institutes like schools, universities, colleges, all educational institutions.so that problem as we see in period of lockdown conducting examination for students is a difficult task for education institutions as well as giving exam for students during such pandemic also a difficult task or problem for students and institutions also so through this system we try to conflict this problem so in future we should such kind of system to conflict this kind of problem if occur in future also[1].

II. BACKGROUND

Such kind of system will be beneficial in a number of ways. This system will help the students and teachers to conduct the examination from different locations. Online examation frameworks is intended for instructive foundations like schools, colleges, and colleges and universities to direct rationale trial of their understudies or representative on normal premise. No limitation that analyst must be available when the up-and-comer steps through the exam. Configuration to encourage administrator and client Can be utilized anyplace any time as it is an electronic application [5].

As we likewise observe Coronavirus sway everywhere on the world and it influence seriously all the arrangement of any association or any sort of systematic vehicle area, IT area, instruction area and a lot more in field of schooling leading assessment during lockdown is one troublesome undertaking for each instructive establishment so our online test system ["OLES"] will assist us with handling this issue .The issues that are followed should be thought of and the developers has chosen to develop such a web application that would zero in on giving answers for the previously mentioned issues.

Susceptible to Cheating One of the foremost negative aspects of an online exam machine is dishonest. Especially in high-stakes checks, students frequently lodge to impersonation, making universities suspect take a look at-takers' identification. Students can also get outside help thru smartphones or smartwatches. The systems utilized by applicants additionally provide more than one dishonest possibilities, which include connecting outside garage gadgets, display screen sharing, etc. [6].

Difficulty in Grading Long Answer-kind Even even though on line examinations have eased the invigilators' job, the problem arises generally with long solution-kind questions. Subjective answers require guide grading, for which examiners want to make investments extra time. This is where the current system overlaps with the conventional one. As technology inside the training quarter maintains to adapt, the grading of subjective solutions could grow to be less difficult [6].

Challenges in Technology Adoption Implementing a new system can also create a minor disruption and require a duration of familiarization through the users. Any transition from conventional method to the web mode would require a few funding from academic institutions to improve the structures. However, familiarizing both college students and instructors with the transition is an appropriate way forward. Such training would teach college students and teachers about the new features and benefits of a web exam device [6].

©IJRASET: All Rights are Reserved

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429
Volume 9 Issue V May 2021- Available at www.ijraset.com

III. PURPOSED SYSTEM

The purpose of online test simulator is to take online test in an efficient manner and no time wasting for checking the paper. The main objective of online test Simulator is to efficiently evaluate the candidate thoroughly through a fully automated system that not only saves lot of time but also gives fast results. For students they give papers according to their convenience and time and there is no need of using extra thing like paper, pen etc [3].

This application is capable enough to save time of students and faculty. It not only replace paperwork but also release the workload of faculty.

It give reliability, flexibility and robustness to examination by modern computer technology and during lockdown in entire country we facing problem regarding conduction of examination so if we made such kind of system which is able to conduct online examination in advance then we able to tackle such any kind of problem if occur in future Target User :Whenever any product is planning to be made there is always a background study on the target users.

Most people find it very difficult to manage exams. This system (web app) is for all those users who want to schedule their exam accurately and efficiently [3].

A. *Features*

1) *Sign-In:* All users will get a unique username and password through which they will be able to log – in into the web app
2) *Schedule Exam:* Teacher can schedule the exam by using this functionality
3) *Manage Student Records:* Teacher will manage the record or manage the record of students using this functionality.
4) *View Active Students:* This functionality will show current no. of active students.
5) *Disable Tab Toggling:* It prohibits tab switching
6) *Authentication:* This functionality match the image of the student with the image fetch from the database
7) *Message Generated:* Message will be sent to the student: When a teacher schedule the exam. Before half an hour of the exam.
8) *Time on Screen:* Left time will be shown at each page of exam.
9) *Slow Network Detection:* If the student is facing some network issue, then the teacher will receive the notification regarding the slow/poor network.
10) *Pop up Message for Slow Network Connection:* Warning pop up message will be generate on the screen of the teacher if student facing the slow network connectivity
11) *Result on Email:* We provide a feature by which result of a student will send on their email.

B. *Benefits of the System*

1) *Cost Effective:* Users don't have to pay anything for using this system. Everything in this system is free of cost. The cost to travelling which is student paid for to exam centre from our system it will save travelling expenses, and the cost of conducting of examination will also reduce [6].
2) *Accessibility of System:* This system can be accessible anywhere if the user got the laptop/desktop. If any case happens that the system is not with him/her then he/she can access his account to any other system by just entering his/her email and password[6].
3) *Generate Exams by Different Categories:* Exams will be categorized according to the branch of the student [6].
4) *Marks Comparison:* If the same exam will be bought again then the difference between the marks will be shown [6].
5) *Success Rate:* The users will be able to get to know whether they would be able to achieve their target marks [6].
6) *Reduces Effort:* It reduces educational institution effort to conduct exam at a great extent [6].
7) *Time Saving:* This system will be a time saving
8) *Friendly User Interface:* The application that is developed would facilitate its end users with interactive graphical interfaces that would be easily adaptable [6].
9) *User Satisfaction:* The user interface will be user-friendly and easy to use which will result in improved satisfaction of the users [6].
10) *Maintainability:* Maintaining of result or keeping record of result is a difficult task for intuition. But it will more easy to maintain result in our oles [6].
11) *Ease of learning and Usability:* Keeping in mind the target audience, the app will be designed for the generalized audience and hence will be easy to use [6].

©IJRASET: All Rights are Reserved

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429
Volume 9 Issue V May 2021- Available at www.ijraset.com

C. Working

Online Exam Software is a platform to conduct examination online in which a examiner as well as student creates an acc ount within the software program and create a take a look at and upload for examination. Examiner additionally chooses couple of desire question or subjective as well as objective question format.

1) *Setup Online Examination:* As an Examiner, first login within the software program and add the problem of exam. After that, you may select any sort of question layout then upload topics.
2) *Conduct Exam:* Second step is you could choose the exam date and (which include hours) to your college students to have get right of entry to the examination. After you have created the examination, positioned it on-line. By sharing URL, individuals can supply an exam.
3) *Track Result Analysis:* After of entirety of the examination, the examiner is able to see the progress document of the participant and understand the go with the flow of scores and end result. This software program gives a graphical evaluate music progress of the organization.[2]

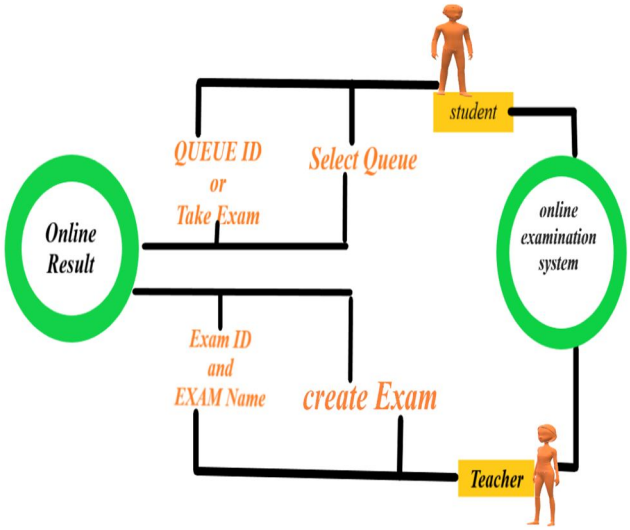


Figure.1.working of online examination system

IV. RESULT AND RESULT ANALYSIS

For Online Exams you can do the analysis of individuals as well as of the groups using the following Data points.

1) *Individual Ranking of the Exam Result:* System generate individual ranks based on total score of the candidate.
2) *Pass and Fail Status:* You can see the status of individual candidate based on Examination Scoring Criteria.
3) *Minimum and Maximum and Average Score:* You can see the minimum, maximum and average score of the batch of the particular online exam.
4) *Topic-wise performance of the Candidates:* Particular exam may have one or more topics, candidate result can be analyzed based on the performance of individual topic, total questions attempted, total correct questions, total incorrect questions, etc.
5) *Question Wise Performance Of The Whole Batch:* You can see overall performance related to an individual question. e.g. if in the batch of 100 particular questions is wrongly answered by more than 90 candidates then it can be an indicator that topic is not clear with the batch or question is incorrect.

Originally online examination system mostly aims at special courses, which can only assess objective tests and automatically work out results. This examination system can meet smart groups of various question types, whose advantages include: (**a**). It can separately generate examination paper and automatically generate examination paper A and B, which can be used in online examination and written examination; (**b**). It can manage client-side to design special procedures and ensure the safety of the test questions and test paper. (**c**) It can automatically save the examine answers during the online examination process and guarantee the reliability of the test by lost connection. (**d**) It can analyze examination results and update the difficulty coefficient of examination questions; (**e**). The examine can test themselves at any time after teachers set up the simulation tests, which can realize the basic data, question bank, examination management and other three main functions.

©IJRASET: All Rights are Reserved

A. Intelligent Algorithm

One of the core of online examination system is the automatic generation of the examination paper, therefore, it is important to choose a fast and effective algorithm of generating test paper.

Paper constructing algorithm based on genetic algorithm is adopted in this paper. Genetic algorithm is a parallel and effective optimized algorithm, which possesses the characteristics of global optimization and fast convergence speed. Paper constructing algorithm based on genetic algorithm has all the advantages of genetic algorithm, which can well meet the requirement of automatically generating paper and effectively solve the disadvantages of random function selection method and backtracking heuristic method in paper constructing [7].

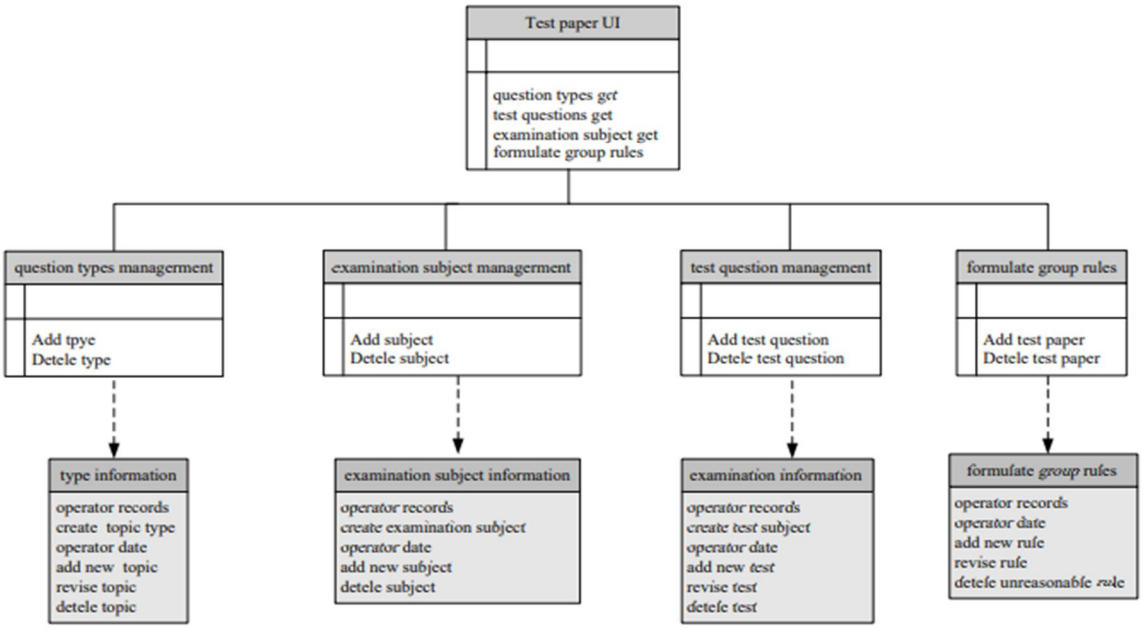
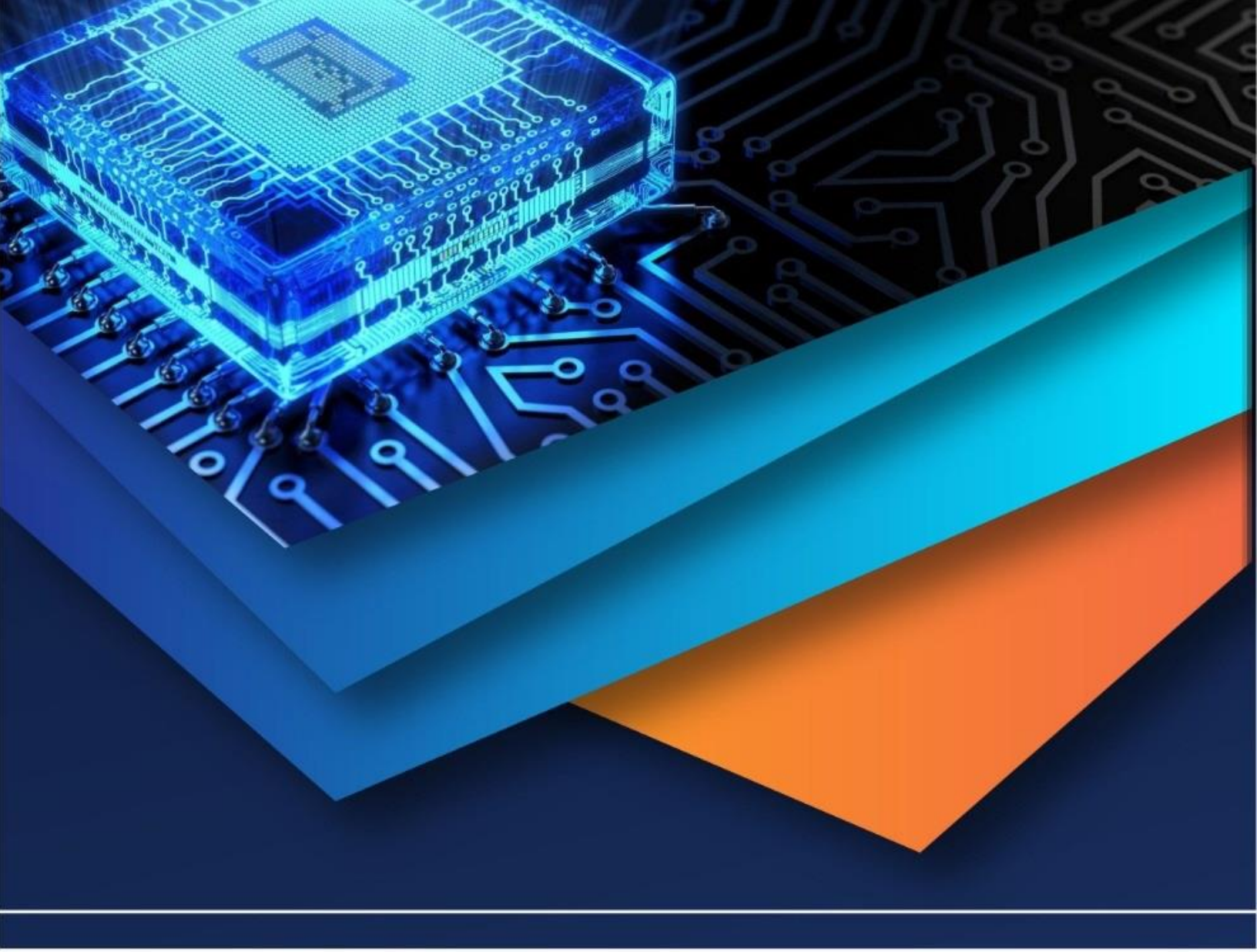


Figure 2. Test Base Management

REFERENCES

[1] A Trivedi, “A Relevant Online Examination System”, Proceedings of the 1st IEEE International Conference on Technology for Education (IEEE T4E), Mumbai, India, pp.32-35,July 2010.
[2] K.Henke, “Web-Based Test, Examination and Assessment System”, Advanced Technology for Learning, Vol. 4, No. 3, pp. 140-145, June 2007.
[3] T. M.Fagbola, A. A.Adigun and A. O.Oke,“Computer-Based Test (CBT) System for University Academic Enterprise Examination”, International Journal of Scientific & Technology Research (IJSTR), Vol. 2, No. 8, pp.336-342,August 2013.
[4] WebCT,“WebCoursesTolls”,http://www.webCT.com.
[5] https://www.quora.com/How-online-examination-system-works
[6] https://blog.mettl.com/advantages-disadvantages-online-examination/
[7] www.nbdhyu.edu.cn

©IJRASET: All Rights are Reserved



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)