iJRASET
International Journal For Research in Applied Science and Engineering Technology

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 9 **Issue:** VI **Month of publication:** June 2021

DOI: https://doi.org/10.22214/ijraset.2021.34855

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 VI Jun 2021- Available at www.ijraset.com

Online Exam Portal

V. J. Chaudhari[1], Rushikesh Zoting[2], Gauri Mahale[3], Snehal Kale[4], Angel Benny[5]
[1]*Assistant Professor,* [2, 3, 4, 5] *Student, Department of Information Technology Engineering, Polytechnic, Nashik, Maharashtra,India*

Abstract: ***"Online Exam Portal" is an on-line test simulator is to take online examination, test in an efficient manner and no time wasting for manually checking of the test paper. The main objective of this web based online exam portal is to efficiently evaluate the student thoroughly through a fully automated system that not only saves lot of time but also gives fast and accurate results. For students they give papers according to their convenience from any location by using internet and time and there is no need of using extra thing like paper, pen etc. Online exam portal helps students to offer a quick and easy way to appear for the test. It also provides the results immediately after the examination with 100% accuracy and security. Student can enter to perform exam only with their valid username and password. This examination contains multiple choice questions and appropriate number of options. There are no limitations on number of options and it can be randomized so same set of question will not appear to all student so it prevent manipulation. More than one option can be correct but the user can select only one option. This provides time limit. The user can see their results after completing the exam. This helps the students to write the exam from far distance and which can provide security and simplicity and other beneficial features to the user.***
Keywords: PHP, Web Application, Examination System, Database, Web Server.

I. INTRODUCTION

Examination, they say is not a true test of knowledge. In our contemporary society, this axiom holds only in theory but not in practice. Examination that is supposed to be conducted and evaluated in confidence is now seen with students even before the date and time the examination is scheduled to take place.

History has it that ancient China; was the first country in the world that implemented a nationwide standardized examination, which was called the "imperial examination". The main purpose of this examination was to select able candidates for specific governmental positions. The imperial examination was established by the Sui Dynasty in 605 AD and was later abolished by the Qing Dynasty 1300 years later at 1905. England adopted this examination system in 1806 to select specific candidates for positions in Her Majesty's Civil Service.

This examination system was later applied to education and it started to influence other parts of the world as it became a prominent standard (e.g. regulations to prevent the markers from knowing the identity of candidates), of delivering standardized tests. There are three methods of examination: written examinations, oral examinations and physical fitness examination. In written examinations we have the multiple choice questions. Multiple choice questions have two sub categories. The first category is called True/False.

This requires the student to choose all answers that are appropriate. True/False questions present candidates with a binary choice - a statement is either true or false. This method presents problems, as depending on the number of questions, a significant number of candidates could get one hundred percent (100%) just by guesswork, and should on average get fifty percent (50%). The second category is called Best-Answer question.

II. LITERATURE REVIEW

A. Based on the research of domestic and foreign research situation, the paper analyses the importance of examination system in university and puts forward the development of examination that is based on .net technology. The system can set different authorities for different user groups by various university environments. It realizes automatically on paper setting and exam completely. Besides, the system adopts analytic hierarchy process to distribute difficulty coefficient and chooses questions randomly which makes the exam reach a fixed value and ensure the exam standard and scientific. The system includes exam library collecting subsystem, paper generating subsystem, online evaluation subsystem and exam generating automatically subsystem. Not only does it complete the whole examination process which includes setting test papers, online exam, checking test papers and analyzing, the system also simplifies the existing exam process and promotes the efficiency of exam. Therefore, this system can separate teaching from exam and is able to be widely used for investigating teaching and studying effect and separating teaching from exam.

©IJRASET: All Rights are Reserved

B. The online exam system which integrates with Struts2, Spring and Hibernate has been researched here. Based on completion of essential function of online exam system, the thought of S2SH (Struts2+Spring+Hibernate) framework has been adopted in our system which separates view tier, control tier, business logic tier and data accessing tier into different components, as well as utilizes MVC pattern (Model View Controller) of web system development to accomplish loose coupling between tiers. Furthermore, direct accessing to database has been prevented by delaminating the system that reinforces the security control of the system along with the technologies of Login validation and role authority. Theoretical analysis and practical application verify that our proposed design strategy can increase the reusability of code and strengthen the flexibility and maintainability of online exam system.

C. With the development of modern education, and considering the shortcoming of current online exam system, a new projection of online exam system based on data mining is given, and the key implementation techniques and methods are also described.

D. Nowadays, the online exam is become popular because the examination often have multiple-choice questions that can be quickly automated evaluation and graded by automated test scoring machines known as online exams. This paper proposed the secure online exams on thin client. The client in this system can be used older computer to reduced total cost of ownership. The proposed system used the Ubuntu operating system; the LTSP and the LXDE desktop manager to provide the thin client infrastructure in a dedicated exam room. The quiz activity was managed by Moodle that is a popular course management system.

E. Technology raises new innovations, technology can make learning systems easier and more flexible to access. Online exam platforms is one example of technological impact in learning system that facilitate the implementation of learning evaluations both from student and teacher side. However, in practice the implementation of a flexible online examinations is still not well implemented. About 73.6% of students think that it is easier to cheat on online exams than conventional exams, this fact raises fears of cheating such as impersonating and answer copying if online exams are conducted remotely. Therefore, to make implementation of the online exam more effective, an authentication system is needed to minimize possible fraud. This system was created as a continuous authentication implemented on online exam system so that exam activities can be monitored even if done remotely. In general, the system consists of two modules, namely the authentication module and the supervision module. The combination of the two modules can realize an examination system that can authenticate test participants and monitor the conditions during the exam. Thus, online exam activities can be carried out more flexibly anywhere without worrying about fraud due to lack of supervision

III.SYSTEM ARCHITECTURE

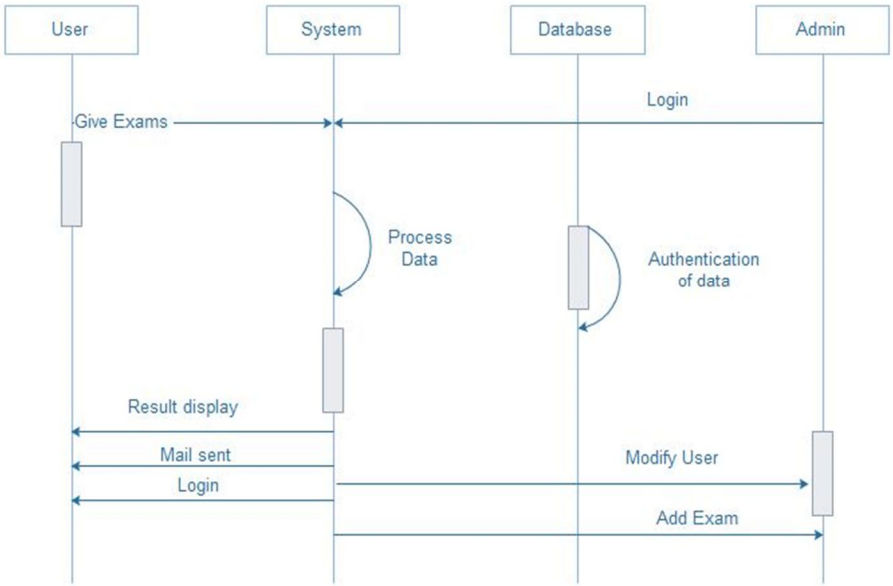


Fig. System Diagram

©IJRASET: All Rights are Reserved

A sequence diagram shows object interactions arranged in time sequence. It depicts the objects and classes involved in the scenario and the sequence of messages exchanged between the objects needed to carry out the functionality of the scenario. Sequence diagrams are typically associated with use case realizations in the Logical View of the system under development. Sequence diagrams are sometimes called event diagrams or event scenarios.

A sequence diagram shows, as parallel vertical lines (lifelines), different processes or objects that live simultaneously, and, as horizontal arrows, the messages exchanged between them, in the order in which they occur. This allows the specification of simple runtime scenarios in a graphical manner.

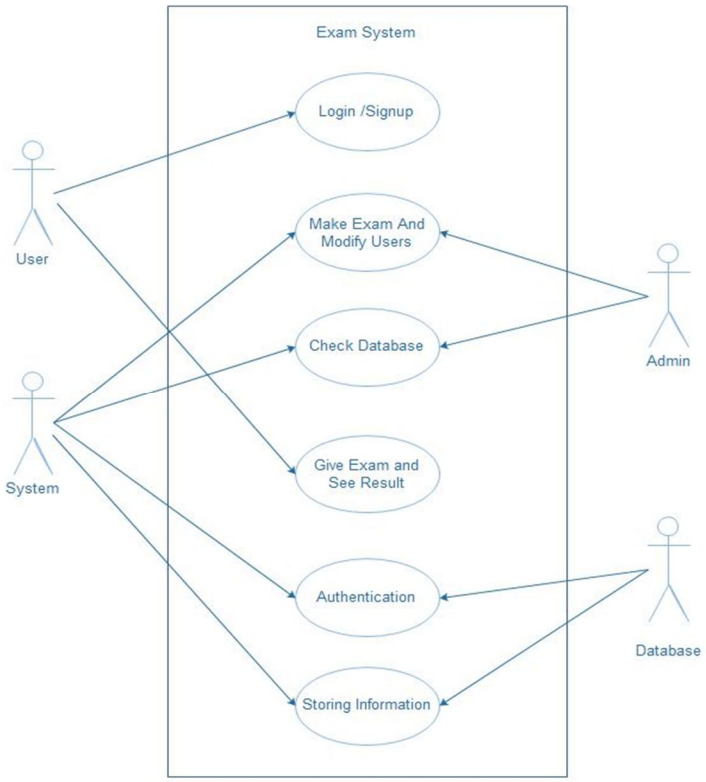


Fig. Use Case Diagram

A use case diagram at its simplest is a representation of a user's interaction with the system that shows the relationship between the user and the different use cases in which the user is involved

IV. PROPOSED METHODOLOG

1) Provides complete online web based solution, including student registration, giving tests, storing of results.
2) Complete web based administration, administrator can manage examination and question bank from web interface.
3) No geographical boundary
4) Student can give examination from anywhere of the world by 24X7
5) 100% accuracy in result calculation
6) Randomization of question set

A. Hardware and Software Requirements

1) PHP
2) MySQL Server
3) NetBeans / FrontPage / NotePad
4) Intel 3.0 ghz or higher processor
5) 2 GB RAM or above
6) 80 GB HDD Space

©IJRASET: All Rights are Reserved

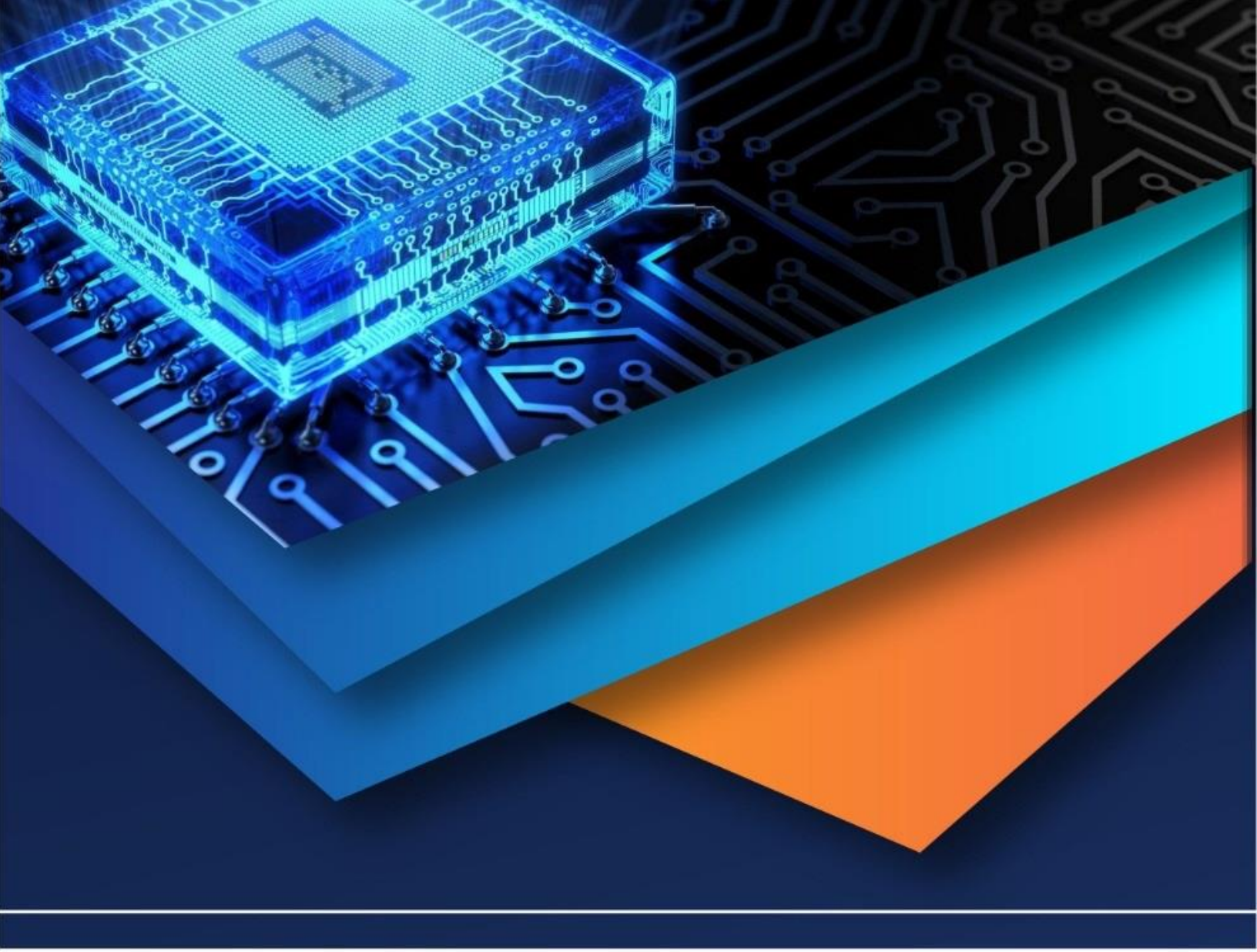
V. CONCLUSION

In this research work, we have developed an overall solution to the examination administration problem in collage. It provides a user friendly platform of multiple choice questions examination. It can be used for academic purpose, professional certifications, staff promotion examination, Post UTME entrance examination, etc. The online examination system is developed using notepad++ with a linking technology called Java We have used SQL Server for the database design. The actual coding was done using php and java. The system has reached a steady state where all bugs have been eliminated. The system would be operated at a high level of efficiency and all the teachers and user associated with the system understands its advantage. The system solves the problem it was intended to solve as requirement specification.

REFERENCES

[1] D. Alonso, K. Norman, "Forms of control and interaction as determinants of lecture effectiveness in the electronic classroom", Computers & Education, vol. 27, no. 3–4, pp. 205-214, 1996.
[2] D. Singh, Z. Abu Bakar, "Mobile Learning In Wireless Classrooms", Malaysian Daring Journal of Instructional Technology (MOJIT), vol. 3, no. 2, pp. 26-42, 2006.
[3] R. Bawarith, D. Abdullah, D. Anas, P., "E-exam Cheating Detection System", International Journal of Advanced Computer Science and Applications, vol. 8, no. 4, 2017.
[4] C. King, R. Guyette, C. Piotrowski, "Daring Exams and Cheating: An Empirical Analysis of Business Students' Views", The Journal of Educators Daring, vol. 6, no. 1, 2009.
[5] C. Quinn, "LiNE Zine - mLearning: Mobile Wireless In-Your-Pocket Learning", 2000, [online] Available: http://www.linezine.com/2.1/features/cqmmwiyp.htm.
[6] S. Charmonman, N. Chorpothong, "Digital Lifestyle and the Road Ahead", The Fourth International Conference on eBusiness, 2005.
[7] "What is authentication? - Definition from WhatIs.com", 2018, [online] Available: http://searchsecurity.techtarget.com/definition/authentication.
[8] P. Bouts, H. Barghouthi, "Continuous authentication using biometric keystroke dynamics", Norwegian Information Security Conference (NISK), November 2009.
[9] N. Abdel Karim, Z. Shukur, "Review of User Authentication Methods in Daring Examination", Asian Journal of Information Technology, vol. 14, no. 5, pp. 166-175, 2015.
[10] M. Zviran, Z. Erlich, "Identification and Authentication: Technology and Implementation Issues", Communications of Association for Information Systems, vol. 17, 2006.

©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)