

e-ISSN: 2320-9801 | p-ISSN: 2320-9798



# INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

Volume 9, Issue 6, June 2021

INTERNATIONAL STANDARD SERIAL NUMBER INDIA

### Impact Factor: 7.542

9940 572 462

🕥 6381 907 438

🖂 ijircce@gmail.com

🛛 🧿 www.ijircce.com



|e-ISSN: 2320-9801, p-ISSN: 2320-9798| <u>www.ijircce.com</u> | |Impact Factor: 7.542 |

Volume 9, Issue 6, June 2021

| DOI: 10.15680/IJIRCCE.2021.0906307 |

## Design and Development of an Efficient Online Exam Management System

#### Sanket Vakil, Rashmi Dholwade, Gitesh Deshmukh, Shrutika Thotange, Aniket Shahade

UG Students, Dept. of IT, Shri Sant Gajanan Maharaj College of Engineering Shegaon, Maharashtra, India

Assistant Professor, Dept. of IT, Shri Sant Gajanan Maharaj College of Engineering Shegaon, Maharashtra, India

**ABSTRACT:** As the Information technology is growing day by day still we fail to supply proper IT assistance to education industry. Still we follow the same old method of taking Exams in Offline Mode, But Now Due to COVID Situations it is not possible to take Exams in Offline Mode With the help of proposed system user can able to take their Exams For the Safety of their Home or from anywhere as per their Comfort. The question of the web examination system are programmed and visually displayed on the system's screen in an interactive form. The student answers the question on the pc system, immediately the question is marked and notified. The result of this online examination are also displayed at the end of the examination which goes a long way to lessen the fears of students that they were marked down in the examination. Since theonline examination is examined by the pc , time cost of manual examination is saved.

#### **KEYWORDS**- Covid, Interactive, Exams

#### **I.INTRODUCTION**

The paper and pen (manual) method of writing examination, which has been alive for many years, might not be appealing to be used due to the issues usually experienced including examination venue capacity constraints, lack of comfort for examination candidates, delay within the release of results, examination malpractices, cost implication of printing examination materials and human error. This brings about the necessity for automation of the examination system. Over the years, there are various automated examination systems that are developed with one or more limitations. Some of these limitations include lack of scalability, near-realibility, lack of robustness, lack of flexible timing functionality to automatically log-off candidates upon expiration of allotted time as a challenge (Ipaye, 2009); malpractice due to questions not randomly generated (Ayo et al, 2007); not well secured application domain in terms of data security and integrity (Levy & Ramim, 2007); most existing computer based test (CBT) systems are deployed as stand- alone applications that run on distributed networks making access to such applications restricted to the networked geographical domain and are only suited for the application environment only (Huszti & Petho, 2008). The question of the web examination system are programmed and visually displayed on the system's screen in an interactive form. The student answers the question on the pc system, immediately the question is marked and notified. The result of this online examination are also displayed at the end of the examination which goes a long way to lessen the fears of students that they were marked down in the examination. Since the web examination is examined by the pc, time examination cost of manual saved. is Based on the virtues of internet amendment which are made to the examination system concept by constructing an internet site with online examination, online question setting and answer and online management by the administrator. Time analysis of responses to the question level to better discriminate between candidate



| e-ISSN: 2320-9801, p-ISSN: 2320-9798| <u>www.ijircce.com</u> | |Impact Factor: 7.542 |

### || Volume 9, Issue 6, June 2021 ||

| DOI: 10.15680/IJIRCCE.2021.0906307 |

#### **II.LITERATURE SURVEY**

Sr. no.	Paper Name	Author Name	Year	Outline	Advantages
1	System of Intelligence evaluation using tests for telecommuni cation (SIETTE)	Guzman and Conejo	2006	The Siette domain model is designed in this way for two reasons. Firstly, to allow integration with ITS hierarchical domain models. Siette is not an ITS, but an assessment system that can be integrated into an ITS, so it uses a domain model that can be overlaid with the ITS domain model and secondly to enhance adaptivity based on content selection.	<ol> <li>Secure Login</li> <li>Portability Service</li> </ol>
2	Rashad Et. L	Online Examination System	November 2015	Rashad Et. Al. proposed a web- based online examination system titled Exam Management System. EMS manages the examination and auto-grading for students' exams and supports conducting exams, collects the answers, auto mark the submissions, and produce the reports for the test. EMS supports secure login. However, the other features: resumption capability, coding environment, test generation by file upload, and random questions distribution are missing.	<ol> <li>Secure Login</li> <li>Portability Service</li> <li>Multi Instructor</li> <li>Conducts Exam</li> <li>Auto Grading</li> </ol>

International Journal of Innovative Research in Computer and Communication Engineering



| e-ISSN: 2320-9801, p-ISSN: 2320-9798| <u>www.ijircce.com</u> | |Impact Factor: 7.542 |

|| Volume 9, Issue 6, June 2021 ||

| DOI: 10.15680/IJIRCCE.2021.0906307 |

3	Computer- Based Test System	Fagbola Temitayo M.	January 2013	Fagbola et. al. developed a Computer Based Test System (CBTS). CBTS is a web-based online examination system developed to address issues such as Lack of timing flexibility for automation candidates log-off upon expiration of allowed time, result integrity, robustness, designed to support the examination processes and overcome challenges framing the conduct of examination, auto- marking, autosubmission, and auto-generation report of examination results.	<ol> <li>Flexibility in Time</li> <li>Result Integrity</li> <li>Auto Marking and Auto Submission</li> <li>Resumption Capability</li> <li>Auto Grading</li> </ol>
4	On Certain Integrals of Lipschitz- Hankel Type Involving Products of Bessel Functions	G. Eason, B. Noble and I. N. Sneddon		Two new regularization algorithms for solving the first- kind Volterra integral equation, which describes the pressure- rate deconvolution problem in well test data interpretation, are developed in this paper. The main features of the problem are the strong nonuniform scale of the solution and large errors (up to 15%) in the input data. In both algorithms, the solution is represented as decomposition on special basic functions, which satisfy given a priori information on solution, and this idea allow us significantly to improve the quality of approximate solution and simplify solving the minimization problem.	<ol> <li>Flexible</li> <li>Robust</li> </ol>

| e-ISSN: 2320-9801, p-ISSN: 2320-9798| <u>www.ijircce.com</u> | |Impact Factor: 7.542 |

|| Volume 9, Issue 6, June 2021 ||

| DOI: 10.15680/IJIRCCE.2021.0906307 |

#### **III.SYSTEM ARCHITECTURE**



#### Fig 1 USE CASE DIAGRAM

This use case diagram represents the overview of the website that how the Process of Online test is happened. It contains the features of adding ,deleting ,modifying the contents of the test. So the platform would be flexible for the use of Admin and students.

#### Flowchart for the Online Examination System:



International Journal of Innovative Research in Computer and Communication Engineering



|e-ISSN: 2320-9801, p-ISSN: 2320-9798| <u>www.ijircce.com</u> | |Impact Factor: 7.542 |

|| Volume 9, Issue 6, June 2021 ||

| DOI: 10.15680/IJIRCCE.2021.0906307 |

This above are the flowcharts for Student And Admin Login that how the authenticate admin and student are able to login in to the system.

#### **IV.CONCLUSION**

Online examination system is a user friendly system, which is very easy and convenient to use The Examination Management System is developed using PHP, MYSql fully meets the objectives of the system which it has been developed. The system design and analysis has reached a gentle state where all bugs are eliminated. The system is operated at a high level of efficiency and the Client and user associated with the system understands its advantage. The system solves the problem. It was intended to solve as requirement specification The system is complete in the sense that it is operational and it is tested by entering data and getting the reports in proper order. But there's always a scope for improvement and enhancement. During the event of this ,coding standards are followed for straightforward maintainability and extensibility.

#### REFERENCES

[1] Z. Yong-Sheng, F. Xiu-Mei and B. Ai-Qin, "The Research and Design of Online Examination System," 2015 7th International Conference on Information Technology in Medicine and Education (ITME), 2015, pp. 687-691, doi: 10.1109/ITME.2015.96.

[2] H. Wang and J. Yang, "Research and application of web development based on ASP.NET 2.0+Ajax," 2008 3rd IEEE Conference on Industrial Electronics and Applications, 2008, pp. 857-860, doi: 10.1109/ICIEA.2008.4582637

[3] S. Vasupongayya, T. Kamolphiwong, S. Kamolphiwong and S. Sae-Wong, "Interactive examination management system," 2010 2nd International Conference on Education Technology and Computer, 2010, pp. V2-55-V2-59, doi: 10.1109/ICETC.2010.5529435.

[4] N. Azim, I. Naqvi and K. u. Rehman, "Online Examination System and Assessment of Subjective Expression," 2009 International Conference on Education Technology and Computer, 2009, pp. 265-268, doi: 10.1109/ICETC.2009.28.

[5] H. Lu and Y. Hu, "The Design and Implementation of Online Examination System Based on J2EE," 2012 International Conference on Industrial Control and Electronics Engineering, 2012, pp. 93-95, doi: 10.1109/ICICEE.2012.33.

[6] Kartik Garg, Kushagra Rastogi and Raghvendra Pratap Singh., 2019, A Review Paper on Online Examination Portal. Int J Recent Sci Res. 10(04), pp. 31822-31824.

[7] M. Ghizlane, B. Hicham and F. H. Reda, "A New Model of Automatic and Continuous Online Exam Monitoring," 2019 International Conference on Systems of Collaboration Big Data, Internet of Things & Security (SysCoBIoTS), 2019, pp. 1-5, doi: 10.1109/SysCoBIoTS48768.2019.9028027.

[8] H. Wang and J. Yang, "Research and application of web development based on ASP.NET 2.0+Ajax," 2008 3rd IEEE Conference on Industrial Electronics and Applications, 2008, pp. 857-860, doi: 10.1109/ICIEA.2008.4582637











## INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

🚺 9940 572 462 应 6381 907 438 🖂 ijircce@gmail.com



www.ijircce.com