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Online Exam Web Portal

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Abstract: *This online examination should concentrate on developing effective assessment questions and providing students with exam feedback. The strategies that are relevant to the aspects of the assessment process: response submission, computerised grading, and post-submission feedback in this study. Because modern companies are automated and computers follow instructions, it is necessary for humans, commodities, and computers to operate together in a modern organisation. Through this paper, administrators, instructors, and students who are taking an online examination can communicate with the system, allowing for more effective implementation and monitoring of various activities related to online examinations, such as conducting exams on a scheduled basis and delivering results to that specific user or student. Additionally, the information of students who took the Online Examination is kept on file.*

Keywords: *Online Exam, Web Portal, Database, PHP, Application, Server.*

I. INTRODUCTION

Test tasks such as designing exam patterns with question banks, defining exam timer, objective/ subjective question sections, and administering exams using the computer or mobile devices in a paperless manner can all be simplified utilising an online examination Web Portal. Traditional pen and paper-based tests can be converted to online and paperless exams using the Online Examination Web Portal, which is a cost-effective and scalable solution. Candidates can take the exam using any browser-enabled desktop, laptop, or mobile device.

For objective questions, exam results can be generated instantaneously. It has the potential to simplify overall examination management and generate activity. Design is the initial step in the development phase for any methodologies and ideas used to define a device, a process, or a system in enough detail to allow physical implementation. Following the analysis and specification of software requirements, software design entails three technical activities: design, coding, implementation, and testing, all of which are necessary to develop and verify the software.

The design activities are critical in this phase since they are where decisions are made that will ultimately effect the success of the software implementation and its ease of maintenance. These choices have the most impact on the system's dependability and maintainability. Only via design can the customer's requirements be accurately translated into finished software or a system. In development, design is where quality is fostered. Software design is the process of converting requirements into a visual representation of software. There are two stages to software development. The transformation of requirements into data is the focus of preliminary design.

Almost all organisations now use an online evaluation framework to examine their employees, which reduces the amount of time an understudy spends on exams. Organizations could also effectively monitor the progress of the understudy to whom they have given a thorough test. Following that, the outcome is determined in a short period of time. It also aids in the reduction of paper demand, resulting in the destruction of fewer trees. A PHP-based online evaluation project is incredibly beneficial for learning. Because of its precision and speed, the Online Examination System is now regarded a rapidly emerging examination method. In addition, less staff is required to conduct the examination. Assessment tests, aptitude tests, psychometric tests, personality tests, entrance exams, and campus examinations are all conducted with it. Organizations can also simply track a student's development by administering an examination. As a result, the result takes less time to calculate. It also helps to reduce the use of paper. According to today's requirements, an online examination project in PHP is highly good to study. The educational institution's online examination system is critical for preparing exams, since it saves time and effort in checking exam papers and grading them.

II. LITERATURE REVIEW

A. What is an Online Exam Portal?

A computer-based test system that may be used to conduct computer-based tests online is known as an online examination system. This test method requires fewer resources and eliminates the need for question papers and answer scripts, as well as exam room scheduling, invigilator coordination, and more.

B. About Online Exam Web Portal

Education is currently the most thriving industry, and corporations are recognising it as the most profitable field in which to invest and reap large returns. With the increase in money, educational institutions began to devise a few techy strategies to keep ahead of the competition. which is also good for students to analyse their performance prior to tests and decrease the strain in real exams. The importance and flexibility of online examination in the current educational system has been emphasised by evidently consistent R&D. It automates the old traditional technique of administering assessments by using a Web-based online exam that is completely transparent. It also includes the "separation of powers." It also includes the "separation of teaching and evaluating" and automation management, as well as the effective execution of campus network software and hardware resources for teaching, research, and management services.

C. What are the Benefits of an Online Exam Portal?

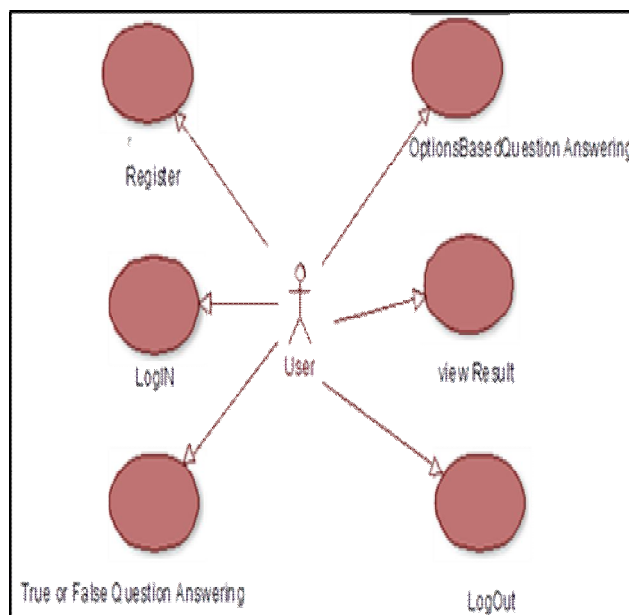
One of the key benefits of adopting online examination platforms is that they provide a clear and complete analysis of a student's performance based on knowledge or learning analytics in a graphical and tabular style. It also allows the administrator to customise the exam to his own needs, which eliminates the tedious manual work. Evidently, it has transformed an obsolete educational model by providing a user-friendly, multi-featured, and completely customizable online assessment platform with great dependability, usability, and cost-effectiveness. Apart from these basic benefits, below are some other key benefits provided by an education app development firm; let's take a look at them: Confidentiality and security, Flexibility and accessibility, Cost-cutting, Organize your time. Analytical statistics, Confidentiality and security. The standard, security, and confidentiality of a scheduled exam are all well-served by online testing.

D. Flexibility and accessibility:

Due to the gradual implementation of online testing platforms by institutions, students no longer need to travel large distances to the examination centre. Examiners also don't have to worry about the time-consuming procedure of marking tests, manual omissions, or time constraints. They also have the option of customising exams in numerous courses and disciplines with 24/7 availability for students' convenience.

E. Usecase Diagram

A Usecase diagram is a description of a series of actions in a sequence. It is represented graphically as an ellipse with a solid line containing simply its name. A use case diagram is a behavioural diagram that depicts the relationship between a group of use cases and actors. It's a link between the use cases and the actors. An actor takes on the role of a real-life object. Sender is the primary actor, and Receiver is the secondary actor.

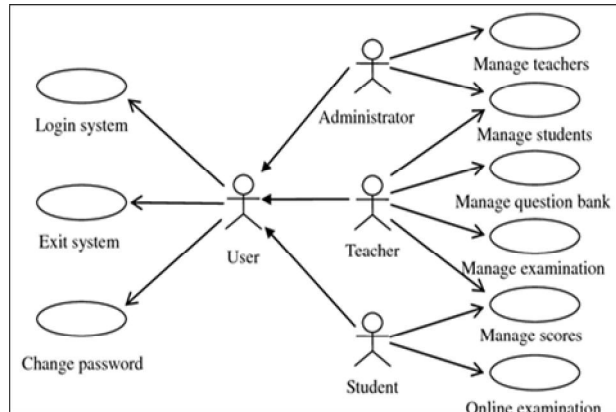


(Figure 1 Usecase Diagram)

III. PROPOSED SYSTEM

A. What Is Modules

A module is a set of source files and build options that allows you to break down your project into discrete functional components. Your project may have one or more modules, and one module may rely on another module. The test data is kept in the data set via the online assessment framework. Instructors can add/remove questions, determine and display the final outcomes for understudies, adjust the test duration, register understudies, erase understudies, present inquiries for understudies at random, and add/remove questions. The suggested system, which the user can access, is classified as



(Figure 2 Modules Diagram)

B. Modules

1) Admin Module

- a) *Register*: To be authenticated first have to be registered.
- b) *Login*: The Registered User Can be Allowed to view inner details for which he Permitted
- c) *Change Password & Forgot Password*: User has rights to modify his login details& also be informed through mails if he is unable to login.
- d) *Student -Modifying Details*: User can be modified to change status of each User.
- e) *Departments-Entering/Modifying Details*: New departments adding and old department deletions are spend by this user.
- f) *Instructor Details-Modifying Details*: According to staff he can add or delete Instructors for specific platforms.

2) Instructor Module

- a) *Register*: To be authenticated first have to be registered.
- b) *Login*: The Registered User Can be Allowed to view inner details for which he Permitted
- c) *Change Password & Forgot Password*: User has rights to modify his login details& also be informed through mails if he is unable to login
- d) *Add Questions-Departments Verifing*: According to flow of questions & Technology he can add questions into the database.
- e) *Update Questions -Departments Verifing*: If any corrections in data of questions he can modify them
- f) *Create Exams*: He will be prepared schedule for exams periodically.
- g) *Update Exams*: He has rights to modify exam schedule.
- h) *View Exam Details: View No Of Registered Students, View No Of Attended Students*: Can view at attended students who has registered.
- i) *Evaluate Question: Multiple Choice True/False*: Evaluation of marks based on his initiations when adding questions.

3) Student Details

- a) *Register*: To be authenticated first have to be registered
- b) *Login*: The Registered User Can be allowed to view inner details for which he Permitted
- c) *Take Exam- Multiple Choice, True/False*: The register student allowed to start the exam
- d) *See Exam Results*: After Completion of exam he can view at his result.
- e) *Logout*: After the process of examination he turned to Logout page

IV. METHODOLOGY

Despite the fact that an increasing number of applications (such as decision support systems) should be produced utilizing an experimental process strategy such as prototyping, a large portion of new development work continues to focus on big operational applications with vast reach. The application systems are massive and well-organized. In most cases, user task comprehension and developer task proficiency are excellent. These variables point to a linear or iterative approach to assurance. A system development life cycle mode, in which each step of development is fully defined and has straightforward requirements for deliverables, feedback, and sign off, is the most typical technique for this stage class of problems. The system development life cycle is detailed because it remains an appropriate methodology for a large portion of new development activity. The core premise of the system development life cycle is that an application is conceived, developed, and implemented through a well-defined procedure. A creative process is structured by the life cycle. It is vital to know what should have been done, what has been done, and what remains to be done in order to manage and oversee the development effort. Because the phrases in the system development life cycle establish segments of the work flow that can be identified for managerial purposes and specify the papers or other deliverables to be produced in each phase, they provide a foundation for management and control. Different writers characterize the phases of the information system development life cycle differently, although the distinctions are mostly in the level of necessity and categorization method. The flow of development processes and the importance of control methods at each level are widely agreed upon.

V. FUTURE SCOPE

This application eliminates the need for human labour and the challenges that come with it. It is a simple way to receive information about the various planned examinations that are now being offered. Well, my team and I have worked hard to create a website that is superior than the previous ones in terms of providing information about numerous activities. Nonetheless, we discovered that the project might be completed more efficiently. When we request information about a specific schedule, it usually only displays the exam date and platform. So, after we get the information, we can take the online exam. The search feature is an upgrade that we can make. We can use this site to search for specific student information.

VI. CONCLUSION

This research study describes a safe solution for internet-based exam invigilation that ensures academic integrity in Online Educations. The package was created in such a way that future modifications are simple to implement. The following conclusions can be drawn from the project's progress. The efficiency of the entire system is improved by automating it. It has a user-friendly graphical user interface that outperforms the current system. It grants authorized users appropriate access based on their permissions. It substantially eliminates communication delays. It has never been easier to keep information up to date. The most notable features are system security, data security, and dependability. If necessary, the System has enough flexibility to be modified in the future.

REFERENCES

- [1] Bobde S, Chaudhari S, Golguri J, Shahane R (2017) Web based online examination system. *Global Res Develop J Eng* 2(5):58-61
- [2] Younis MI, Hussein MS (2015) Construction of an online examination system with resumption and randomization capabilities. *Int J Comput* 4(2):62-82
- [3] Li Yueru. Algorithmic Online Examination System Design[J]. *Fujian computer*.2009,1:66-67
- [4] Erdem E., & Sandikkaya M. T. (2019). Otp as—one time password as a service. *IEEE Transactions on Information Forensics and Security*, 14(3), 743-756. Doi:10.1109/tifs.2018.2866025
- [5] Warin B., Talbi O., Kolsk, C., & Hoogstoel, F. (2016). Multi-Role project (MRP): A New project-based learning method for STEM. *IEEE Transactions on Education*, 59(2), 137-146. Doi:10.1109/te.2015.2462809
- [6] Tinoco L., Fox E. and Barnette D: Online evaluation in WWW-based the courseware, In *Proceedings of the 28 SIGCSE Technical Symposium* (1997), pp. 194-198.
- [7] Pan C-C, Yang K-H, Lee T-L (2004) Secure online examination architecture based on distributed firewall. In: *Proceedings in the IEEE international conference on e-technology, e-commerce and e-service (EEE'04)*, Taipei, Taiwan
- [8] Wei L., Cong Z., & Zhiwei Y. (2010). Fingerprint based identity authentication for online examination system. *2010 Second International Workshop on Education Technology and Computer Science*. Doi:10.1109/etsc.2010.409



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