

Online Exam Portal

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Abstract - The online Examination System project could be a web portal that is developed or implemented in the java domain or platform. This project is helpful for students to practice different mock examinations from this site. In the current generation, lots of the examinations like GRE, CAT, and MAT...etc. are conducted through the online system. This project will help students to get practiced in the online examination method by taking mock exams from this web portal. Online Examination System portal is implemented in 2 modules student examination module and examination admin module. Admin module will add multiple courses under different branches so students can easily know about exam details. Student examination module students ought to register with application and choose interesting courses and participate in the online exam.

Keyword - java, web server, database, web application, examination system (Exam).

1. Introduction -

Online Examination System is a technology-driven way to simplify examination activities like defining exam patterns with question banks, defining exam timer, objective/ subjective question sections, conducting exams using the computer or mobile devices in a paperless manner. Online Examination System is a cost-effective, scalable way to convert traditional pen and paper-based exams to online and paperless mode. Candidates can appear for the exam using any desktop, laptop, or mobile device with a browser. Exam results can be generated instantly for the objective type of questions. It can simplify overall examination management and result in generation activity.

It is used by Coaching, institutes, colleges, universities, government, and corporate to conduct online assessments with ease. In the exam portal, invigilation becomes a high priority requirement as it ensures the exam reliability and credibility of the exam.

The administrator has got multiple options to create an online exam that is interactive as well as effective. Online exam creation platform provides a variety of question types using which a subjective, objective, or MCQ type exam can be easily created. Also, the choice of questions can be done from an existing exam library or the exam creator can create an all-new set of questions by uploading them with just a click. Conducting a large-scale exam is not an issue when it comes to the online exam. Online exam software has got the feature to accommodate even a large pool of students at once. The additional feature of "candidate management" increases the feasibility to conduct an exam for a large group of candidates in a systematic manner. It allows the exam taker to categorize the candidates in their respective groups and at the time of conducting the exam, the exam taker can assign individual exams to every group, conducting multiple exams at once.

2. LITERATURE SURVEY -

A literature review revealed research and studies based on the implementation of a variety of technologies in college/School courses. "The internet has opened many possibilities for the classroom instruction but it can also be a barrier to teaching as well". The new innovative technologies provide opportunities to improve learning and create a more exciting and motivating environment.

A study by Hay (2002) reports that an online exam is one in which questions are answered on, stored on, and often marked by computers. Hay discovered the following keys to taking an online exam:

1. Do not be tempted to access software other than that prescribed during the exam

2. Sometimes attempting to use other packages interferes with the exam software, thereby jeopardizing your answers

3. Even if you have finished your exam and are waiting to leave it is unwise to use the computer in any ways other than those required for the exam.

3. System Objective –

- User-friendly system.
- Responsive design
- Offering several types of questions
- Auto exam publish
- Reports and performance analysis

4. System Architecture -

A system architecture is a conceptual model that defines the structure, behaviour, and more views of a system, OR A system architecture is the concept model that defines the structure, behaviour, and more views of a system. An architecture description is a formal description and representation of a system, organized in a way that supports reasoning about the structures and behaviours of the system.

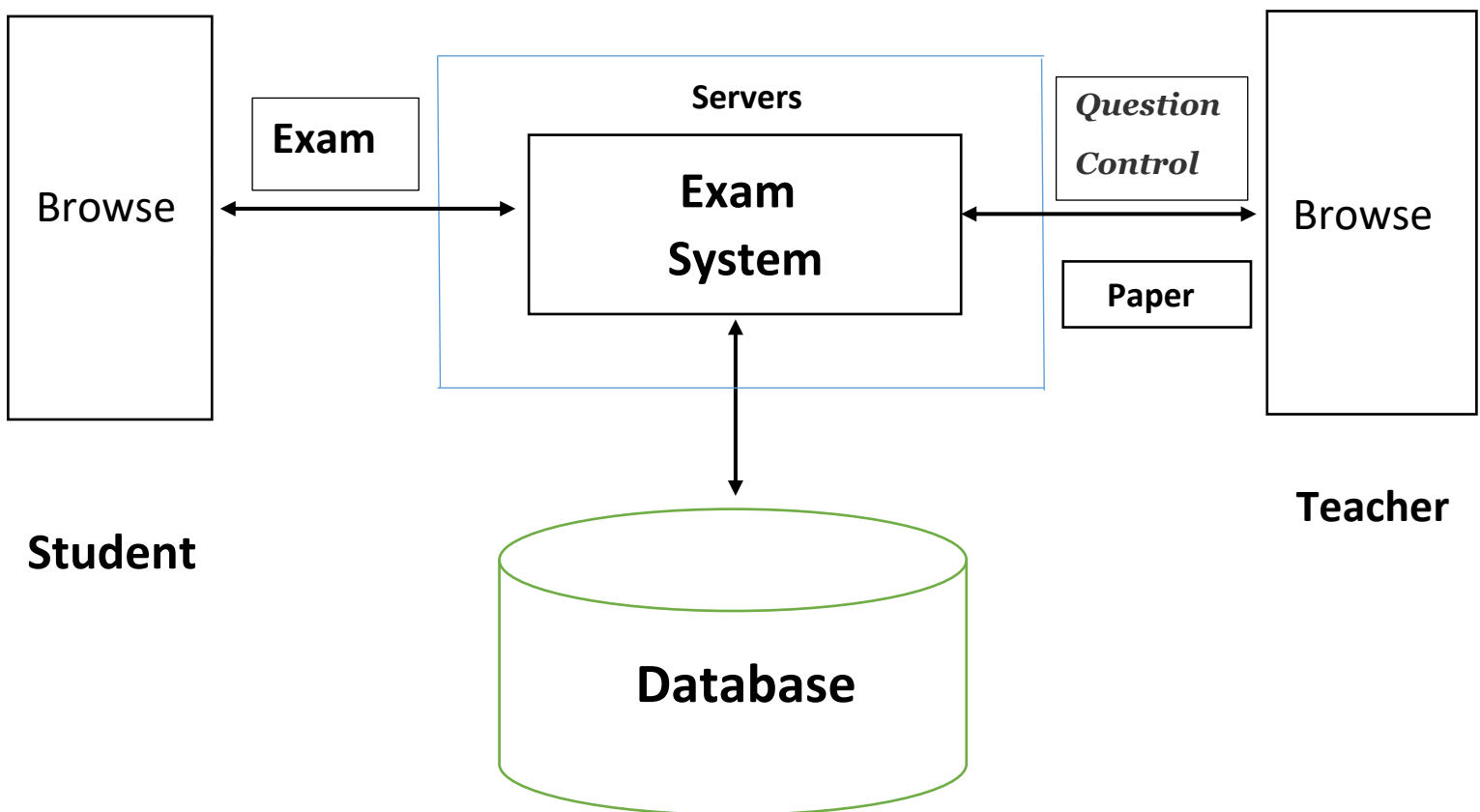


Fig1-System architecture

Step 1: The testing environment is set up, and the question sets are uploaded to the environment by the test conductors. LMS integration occurs at this stage, and the results are configured.

Step 2: Bulk candidate data is uploaded onto the platform, time slots are selected, and the test-takers are sent the test link and follow-up emails.

Step 3: The test-takers use the link to log in and attempt the test via three-step authentication. The tests are usually recorded and can be proctored for high-stakes examinations via AI-based or human proctors.

Step 4: Once the user submits the test, it is auto-evaluated for real-time report generation. The results can be customized and shared in PDF or HTML formats.

Step 5: An in-depth analysis of the overall online examination test can be done in the form of group-level analysis and can be customized as needed.

5. FEATURES -

1. It saves time as it allows multiple students to give their exams at the same time and displays the result immediately as the test gets over.
2. It will reduce paper wastage.
3. System will check responses given by the students automatically and immediately.
4. Question papers are automatically generated by the server.
5. Administrator has the administrative power to create, modify and delete the exam.
6. Users can log in with a specific id and give the test and can see the result as well.
7. It will reduce the work of accessing the answers given by the candidates.
8. The android app will help share the images of the questions and the practice papers created by the administrator.
9. Questions can include diagrams, graphical representations, etc.
10. The online examination system has a password-based authentication.
11. Students and faculty details are stored in the database.

6. Conclusion -

Online examination tests are unquestionably turning into a medium of assessing candidates' knowledge and aptitude. They provide flexibility to educational institutes to create, manage and evaluate examinees effortlessly. With quick assessment and real-time report generation, results can be declared immediately after the students have completed the test. Online examination tests have revolutionized the education industry by automating manual, tedious, and cumbersome processes.

7. References -

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