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Online Examination Portal

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Abstract: ***The aforementioned portal of Online Examination Portal is being featured in the document that will include all characteristics and procedures which are required. This document include acute details about objectives of the structure, portal scope restraint, portal action model, primary structure requirements, team burgeoning, probable devise perils, schedule of the inventory, and eventually surveying and divulging mechanisms for the entire portal structure. Online Examination Conducting Portal is very beneficial for Educational Institute's to formulate an entire exam, saving time to check the papers and concoct mark sheets. Online Examination Portal will help the Educational Institute to scrutinize students capabilities and develop their adroitness. But the flaws for Online Examination portal occur it takes excessive time when user formulates the exam for the first time. And to take the exam we prefer the same tally of set- ups as the number of students. The potent use of Online Examination Portal, the coordinator can use this portal to formulate the tests as their necessity, and for getting better results in less time.***
Keywords: Online Examination, system, attributes, computer, admins, students.

I. INTRODUCTION

Online Examination Portal nowadays on cyberspace has become a reality and utilisation of this has become very much voguish or in demand and there is stupendous increase in all over the globe for education causes. The Online Examination Portal is serene to use, full-characteristic and pliable Testing of the examination web portal. It allows the Admins to set different examinations and question sets for enrolled students. The Online Examination Portal provides total functionality of judging and assessing student's performance skills. The Online Examination Portal consists of unique question sets effectively merged with entire set of attributes. Using various traits of the Online Examination Portal an admin can set an exam name, select an exam, and allocate questions for exam. The question sets will be pillared to the automated process and it is an important role in random generation of unique question sets of question papers. More the number of questions better the randomization is achieved. Using advanced judgments settings giving included flexibility in database driven question with pooling, skipping, and randomization including time response to conduct online exam. It lubricates to make question paper based on a intact set of parameters. Online Examination Portal provides automated online assessment of objective type questions. In the Online Exanimation Portal, the answers are checked along with the regulation of the examination and the examinee can be made accessible the results instantly. Storage of all the answers pockets, scores of all the students, and results are done in database. Additional to the already available questions from the Question Bank, the Admins has the accessibility to add more questions in accordance to the subject. The Portal is built keeping in mind the security characteristics to handle different security threat like SQL injection, cross scripting, and spamming.

The portal entitled “Online Examination Portal” is an application software, which aims at allocating services to the institutes and providing them with an option of selecting the eligible students by themselves.

A. Objectives

Online Examination Portal is a complete end to end elucidation to cover all aspects of online examination portal. The cardinal intention of developing this project is:

1) Provides
a) Complete web site solution
b) Including admins and students registration.
c) Giving and taking tests.
d) Storing of results.
e) Complete web based administration.
2) The Online Examination Portal can automatically aggregate the marks allocated in each question to ascertain the total marks for the test.
3) Using this attribute the questions can be selected from the question bank, and also the appearance of questions can be formulated in a random order.

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4) Additional to the already available questions in the Question Bank, the Administrator has the ability to add more questions as per the subject.
5) The Admins also have the ability to modify the User defined Questions and not only the already Available Questions in the Question Bank.
6) No installation is required to run the application in client portal as the entire portal is web based.
7) In this project admins can take the test of students, formulate and insert the question set and provide the login for student after student registration.
8) The results of all the students must be saved and can be retrieved later on.
9) Questions in the tests must provide answer type alike multiple choice answer selection and one right answer selection. Test screen must provide options according to that.
10) The Portal is able to calculate the examination marks and display the result instantly after the completion of exam; student can also view the correct answer of the question after completing the test.
11) Portal has accurate logical access management in place where each user is identified by user email id and password and adding to that authentication policy is applied to solidify the examination portal.
12) The Online Examination Portal generate a number of reports for administration like, Total students/members registered for examination, number of available examination, test given by the student.

B. *Project Scope*

The Online Examination Portal will give the permission to take and give Online Exam while maintaining the information accurately and generating various reports of test. The principle users of the Online Examination project are Student, Admins and portal Administrator. From an end-user perspective, the Online Examination Portal has three functional module elements:

1) Enhanced Coordinator modules for enrolment.
2) Taking examination.
3) Managing user profile.
4) Give authority to the student to give examination,
5) Manage the exam,
6) Manage question papers and view the reports.

The subsequent functional module is the Student module which gives the exam, view their result, and register themselves. And the last functional module is Administration to Manage the Admins and Users, exams, question papers and view the reports.

C. *Modules*

1) *Student Module:* An amplified interface for students to register, edit personal profile, login in the portal, select preferred examination, give exam, view the exam results, view answers to the different questions following the modules pages which are available for the student.

a) *Home* – It is the default page for the entire site. All links are accessible in this page.
b) *Login* – Students are required to login in the portal to outlook his profile account. If a student forgets his password he/she can get a new password from Forget password link which is send to his/her mail id for the authentication. New student can enrol to the examination by clicking on the REGISTER button on the site.
c) *Register* – New Students are required to enrol themselves to give the exam on the portal. Student can enter all the details like their email id, their name, their address, contact details and submit these details. Online Examination Portal can corroborate the information from the student email id, which should be distinct for each student. For the login to the Online Examination Portal students are required to enter their correct email id and password. Students are required to enter valid email id because if he/she forgets the password of the account then a password link will be sent to the registered email address.
d) *My Account* – It shows the logged in student its details, previously performed and saved test results can be seen here and other links like Edit Profile, Logout from account and Change Password of the account.
e) *Edit Profile* – Students can edit his/her profile like personal details, address, contact number, user name, however student cannot edit email address once enrolled in the portal.
f) *Change Password* – If a student has forgot its password or wants to change it. It can be done via change password link. Student must enter his old password in order to change the password and replace it with a new one.
g) *Logout* – By clicking on this link the user gets logged out from the site and it will return to the login page.

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h) *Examination* – Student can see the available and upcoming exams by selecting any exam from the exam list. The portal displays details of the test like, the exam name, exam description, total questions available in the exam, number of questions in the test, total attempting time and total passing marks.

i) *Test* – It displays the test page, online examination portal selects the questions in a randomized form from the question set available and display this one by one to the student. Students can attempt the questions and select the right answer from the available options for the question. After the completion of the exam the online examination portal display the result of the exam instantly and save the test details in portal database for future reference.

2) *Administration and Coordinator Module:* Admin module is used to enter and edit the exam details, question papers, maintain the coordinator and the user and views the feedback of the user; The Admin module is the used to take the exam of the students but admin can access the online examination portal after the administrator permission. And admin cannot view the active user and feedback of the user. It cannot delete the user from the portal. The administration module and coordinator module will include the following attributes:

a) *Login* – Login page for the admins. All admins and coordinators are recognized by their unique username and password. Admins can create new examinations as per there need and can maintain question banks.

b) *Users* – It show list of users enrolled within the site.

c) *Examination* – It can add and edit the examination details.

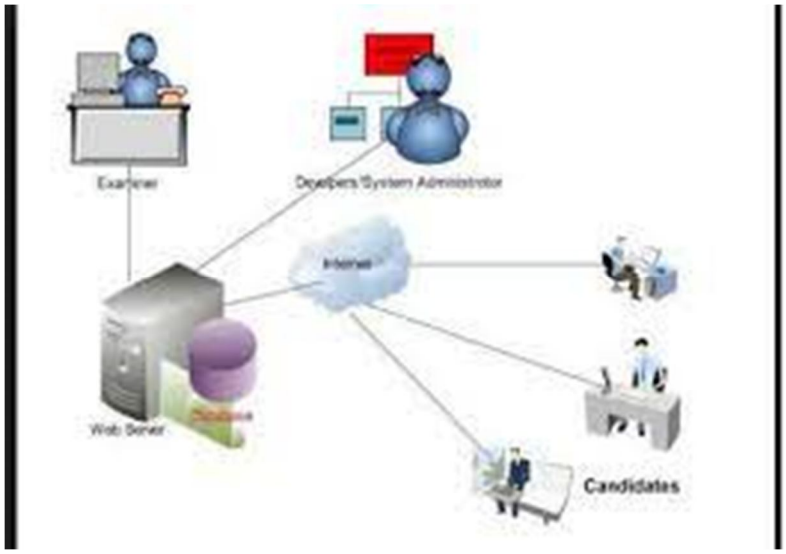
d) *Question Bank* – It maintains the question bank for selected exam. Admins can add an exam and edit its question and answers.

e) *Results* – It displays the list of test results of all the students.

f) *Logout* – By clicking this link admin user gets logged out from the site and all user session gets reset to default value. Both of these views of functionality to online examination portal will be delivered as the first version of the Online Examination Application for online examination portal is released.

II. PORTAL DESIGN

A. *System Architecture*



The administrator module and the student module include their roll of attributes to the online examination portal. The initialization of the online examination is done by the ADMIN, who gives pertinent account credentials to the users. The administrator adds registered information of the users to the online examination portal database and can edit or delete it if needed. The Admin adds the questions in the question paper of the online Exam in a subject wise manner. The question numbers are automatically generated. The complete subject wise result of all the students can be seen by the admin and administrator any time after the completion of exam. The sole purpose of student is to login in the portal to attend the exam and after it has completed and submitted the exam the result is generated instantly and can be viewed.

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B. Data Flow Diagram

A data flow diagram (DFD) is a combination of few primitive symbols to represent the functionality implemented by the project and the flow of data in between different functions of the project. The data flow diagram depicted in figure 2 below shows the relationship between the entities in the Online Examination Portal. The entity "STUDENT" is eligible to give the exam after he or she gains access to the portal. The entity "ADMIN" can generate and upload questions to be answered by the students in the Examination database using question format, formulate the exam instructions and configure the correct option or set of options for all the exam questions. The entity "ADMINISTRATOR" is encumbered with the responsibility of thrusting students, admins and setting the password for the users of the online examination portal. The entity "SERVER" is responsible for checking the authentication of the users logging into the portal and also provides the time slab facility for the exam. The portal logs out the entire lot of students when the time slab is over.

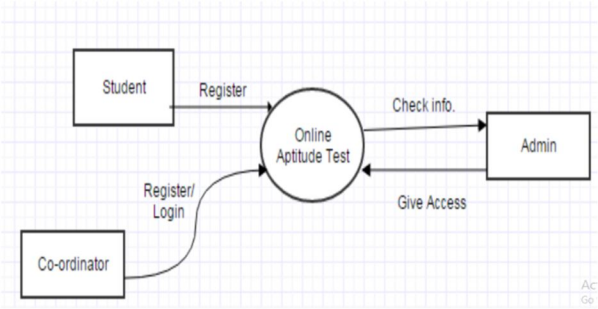
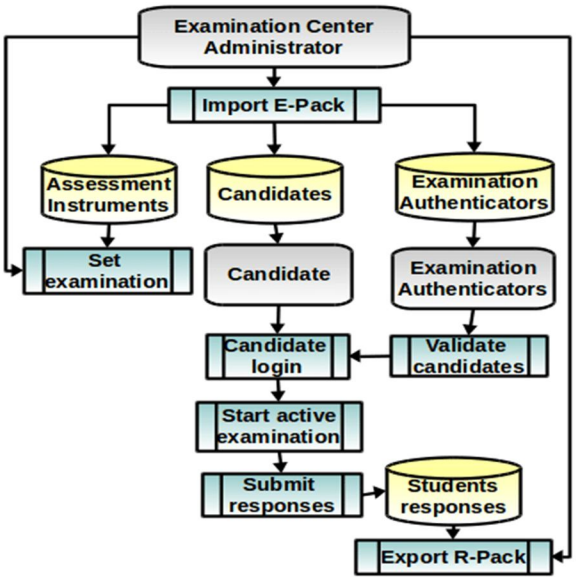


Figure 2: Data Flow Diagram

C. Algorithm

1) *Step 1:* Student Recognition: The portal will examine the identity of the student by using the registration database before entering the exam. This particular will also check eligibility of the student to give the exam.
2) *Step 2:* Admin Domain Login: The student will log into the domain of the admin with the help of the user name and the password provided by the admin domain login (Ex: username: xyz1234, Password: fabtech).
3) *Step 3:* Special login into exam: The user is required to write its user name and password. If the user id and password is correct then the student is allowed to give the exam.
4) *Step 4:* Give the Exam: The student will select the particular exam that is located in the exam portal desktop window (Online Exam) and then complete the exam.
5) *Step 6:* Random questions and Results: The questions are given to the students in a randomized manner, students submit the answers to the server; when the user session is completed, the online examination portal effectuates the result of the exam instantly.
6) *Step 7:* End..



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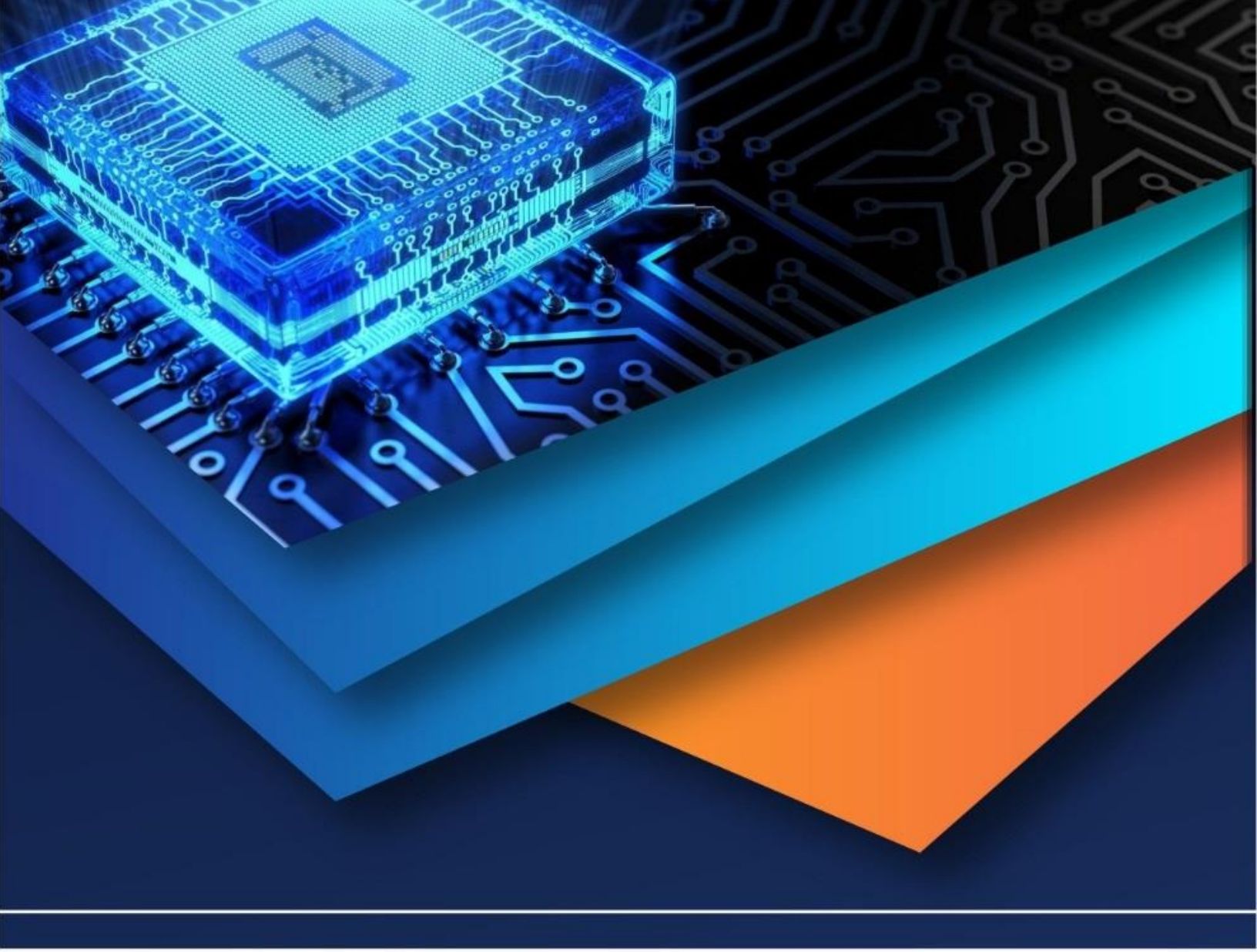
III. CONCLUSION

This Web Application provides provision to take online examination across the globe. It saves ample amount of time as it allows huge number of students to give the exam at the same time and display the results of the exam when it is completed, so there is no need to wait for the results. The results are automatically generated by the server. Admins have the privilege to create, modify and delete the test papers and its particulars that are the questions. User can enrol in the exam portal, login and give the exam with its specific id, and can foresee the results as well.

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