Online Examination System e-Examination

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Abstract: This document will include all features and procedures which are required to develop the system. This document include special details about objectives of the system, system scope limitation, system process model, primary system requirements, team development, probable project risks, schedule of the, and finally monitoring and reporting mechanisms for the entire system. Online Examination Conducting System is very useful for Educational Institute's to prepare an entire exam, safe the time that will take to check the paper and prepare mark sheets. E-Examination system will help to the educational Institute to test students and development their skills. But the disadvantages for e-Examination system, it takes a more time when user prepares the exam at the first time for usage. And to take the exam we require the number of computers with the same number of students. The effective use of e- Examination System, the coordinator can use this system to develop the tests as their requirements, and for getting better results in less time.

Keywords: *E-Examination*

I. INTRODUCTION

This Project Today internet become reality and usage of this become very much popular and there is tremendous increase in all over the world for education purpose. The e-Examination System is easy to use, full-featured and flexible Testing, Examination web portal. It allows Administrators and Coordinator to set different examination and question sets for registered students. The e-Examination System provides complete functionality of judging and assessing student's performance skills. The e-Examination System comprises of Question Sets effectively blended with a whole set of Features. Using different features of the e-Examination System an administrator and coordinator can set an exam name, select an exam, and assign questions for exam.

The question sets will supported to the automated process and it is an important role in random generation of unique question sets of question papers. The maximum number of questions is better randomization is achieved.

Utilize advanced judgments settings, included flexibility in database driven question pooling, skipping, and randomization and include time response to conduct online exam. It facilitates in creation of question paper based on a set of parameters. E-Examination System provides automated online evaluation of Objective type questions. For the e- Exanimation, the answers are checked along with the conduction of the examination and the examinee can be made available the results instantly. Storage of answers, scores, and results in database. Additional to the already available questions in the Question Bank, the Administrator has the ability to add more questions as per the subject.

System should have built in security features to handle different security threat like SQL injection, cross scripting, spamming.

The system entitled "Online Aptitude Exams System" is application software, which aims at providing services to the institutes and providing them with an option of selecting the eligible students by themselves.

A. Objectives

Online Examination System – e-Examination is complete end to end solution to cover all aspects of online examination system.

The basic objective of developing this project is:

- Provides complete web site solution, including member registration, giving tests, storing of results. Complete web based administration.
- The online examination system can automatically add the marks allocated in each question to determine the total mark for the test.
- Using this feature the questions can be selected from the question Bank, and also the appearance of questions in the Random Order.
- Add multiple product to shopping card, automatic calculate the shipping price, calculate tax and calculate total amount.
- Additional to the already available questions in the Question Bank, the Administrator has the ability to add more questions as per the subject.
- The Administrator also has the ability to modify the User-defined Questions and not the already Available Questions in the Question Bank.
- Complete web based system no installation required to run the application in client system.
- In our project coordinator can take the test of student, insert the question set, and provide the login for student after student registration.
- Student and member result must be saved and can be retrieving later on.
- Question must provide answer type like multiple right answer selection and one right answer selection. Test screen must provide options accordingly.
- System must able to calculate the examination marks and display the result quickly after completing the exam; student must view the correct answer of the question after completing the test.
- System has powerful logical access management in place, each user must be identified by user email id and password authentication policy is applied to secure the examination system.
- the e-examination system Generate number of reports for administration like, Total students/members registered for examination, no of available examination, test given by the student.

B. Project Scope

The e-Examination System will give the permission to take and give e-Examination and maintaining information and generating various reports of test. The main users of the e-Examination project are Student, Coordinator and system Administrator.

From an end-user perspective, the e-Examination System Project have the three functional module elements: enhanced Coordinator modules for registration, taking examination, manage user profile, give authority to the student to give examination, manage the exam, question papers and view the reports. Second functional module is Student module which gives the exam, view the result, and register yourself. And third functional module is Administration to Manage the Coordinator and Users, exam, question papers and view the reports.

C. Modules

Student Module:

An enhanced interface for student to registration, edit profile, login, select examination, and give exam, view the exam results, view answers of the questions following modules pages are available for the student.

1: Home – It is the default page for the site. All links are available in this page.

2: Login – Student require to login to view his profile account. If student forgets his password he can get new password from Forget password link which is send to his/her mail id for the authentication. New student can register to the examination by click on the register button on the site.

3: Register – New Student require to register to give the exam on these site. Student can enter all the details like email id, name, address, contact details and submit. E-examination system can validate the information from the student email id, it should be unique for each student. for the login to the e-examination system student require to enter correct email id and password. Student require to enter valid email id because if he/she forget the password of the account password link will be sent to email address which is register to the e-examination system.

4: My Account – it show the logged student details, previously saved test results can be viewed here and other links like Edit Profile yourself, Logout form account and Change Password of the account.

5: Edit Profile – Student can edit his/her profile like personal information, home address, contact number, user name however student cannot edit email address once register.

6: Change Password – Student can change his account password from this change password link. Student must enter his old password to change the password with new password of his account.

7: Logout – By clicking this link user logout from this site all user is return to the login page.

8: Examination – Student can see the available exam by selecting any exam from list, system display details of test like, exam name, exam description, total question available in exam, number questions for test, total time, passing marks.

9: Test – It display the test page, e-examination system randomly select questions from question paper and display one by one to the student. Student can read the questions and select the right answer from available options for the question, after completing the exam e-examination system display the result of the exam instantly and save the test details in system database for future reference.

Administration and Coordinator Module:

Administration module used to enter and edit exam details, question papers, maintain the coordinator and the user and views the feedback of the user; The Coordinator module is the used for the take exam of the student but coordinator can access the e-examination system after the administrator permission. And coordinator cannot be view the activate user and feedback of the user. it cannot delete the user from the system. The administration module and coordinator module will include the following features:

1: Login – Login page for the administrator and coordinator. All admin and coordinators are identified by the username, password. Administrator and coordinator can create new examination maintain question banks.

2: Users – It show list of users registered in the site.

3: Examination – Add edit the examination details.

4: Question Bank – Maintain the question bank for selected exam, Administrator can add the exam, edit the question and answers of the exam.

5: Results – Display list of test results.

6: Logout – By clicking this link admin user and coordinator logged out from this site all users session will reset to default value.

Both of these views of functionality to e-examination system will be delivered as the first version of the e-Examination Application for e- examination system is released.

II. SYSTEM DESIGN
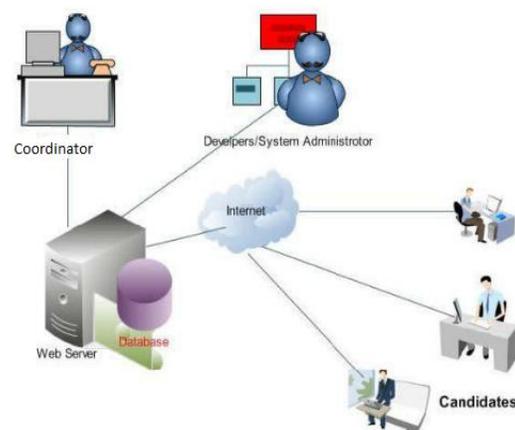
A. System Architecture

Figure 1: System Architecture

The administrator module, coordinator and student modules include their part of functions to the e-Examination. The initialization of the e-Examination is done by the ADMIN, who

gives appropriate account credentials to the users. The administrator adds registered information of the users to the e-Examination system database and edited or deletes it as needed. The Coordinator inserts the questions to the question paper of the e-Examination in subject wise manner. The question numbers are automatically generated. The complete subject wise results of students can be viewed by the exam coordinator and administrator at any time after the completing the exam. The student only has to login to attend the exam and after completing and submitting the exam the result is instantly generated.

B. Data Flow Diagram

A data flow diagram (DFD) is use a very small number of primitive symbols to represent the functionality performed by the project and the flow data among the different functions of the project. The data flow diagram depicted in figure B below shows the relationship among the entities in the e-Examination system. The entity "STUDENT" can give exam after he or she gains access to the system. The entity "COORDINATOR" can upload questions to be answered by student into the e-Examination database using question format, set the exam instructions and configure the correct options or set of options for the exam questions. The entity "ADMINISTRATOR" is saddled with the responsibility of inserting students, coordinator and setting the password for the users of the e-examination system. The entity "SERVER" is responsible for authenticating the users of the system and also provides the timing facility for the exam. The system logs off a student upon expiration of duration for the examination
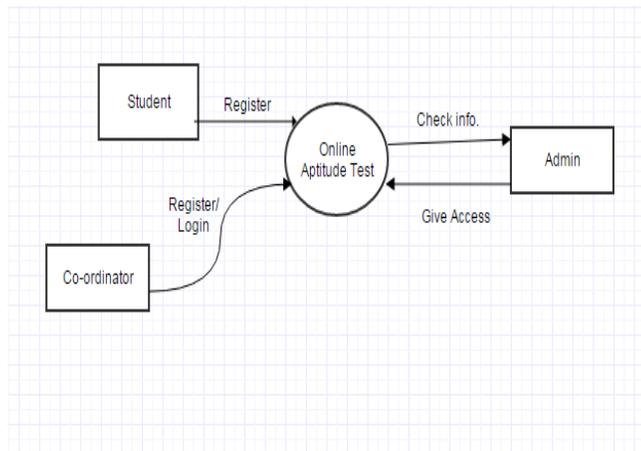

Figure 2: Data Flow Diagram

Algorithm:

Step 1: Student Identification: The system will check the identity of the student by using registration before entering the exam of taken by coordinator. This will also check eligibility of the student for exam.

Step 2: Coordinator Domain Login: The student will log into the domain of the coordinator with the user name and password provided by the coordinator domain login (Ex: username: fabtech, Password: fabtech).

Step 3: Special login into exam: The user is requiring writing the user name and password. if the user id and password is correct then the student is able to give the exam.

Step 4: Give the Exam: The student will complete the exam that is located in the exam system desktop window (Online Exam)

Step 5: Online e- Examination Coordinator Password: The Coordinator password is provided by the admin to the coordinator who are successfully login into the exam system. This gives them access to insert the questions.

Step 6: Random questions and Results: The questions are randomly given to the students, student submits the answers to the server; when the user session is completed, the e-examination system generates the result of the exam instantly.
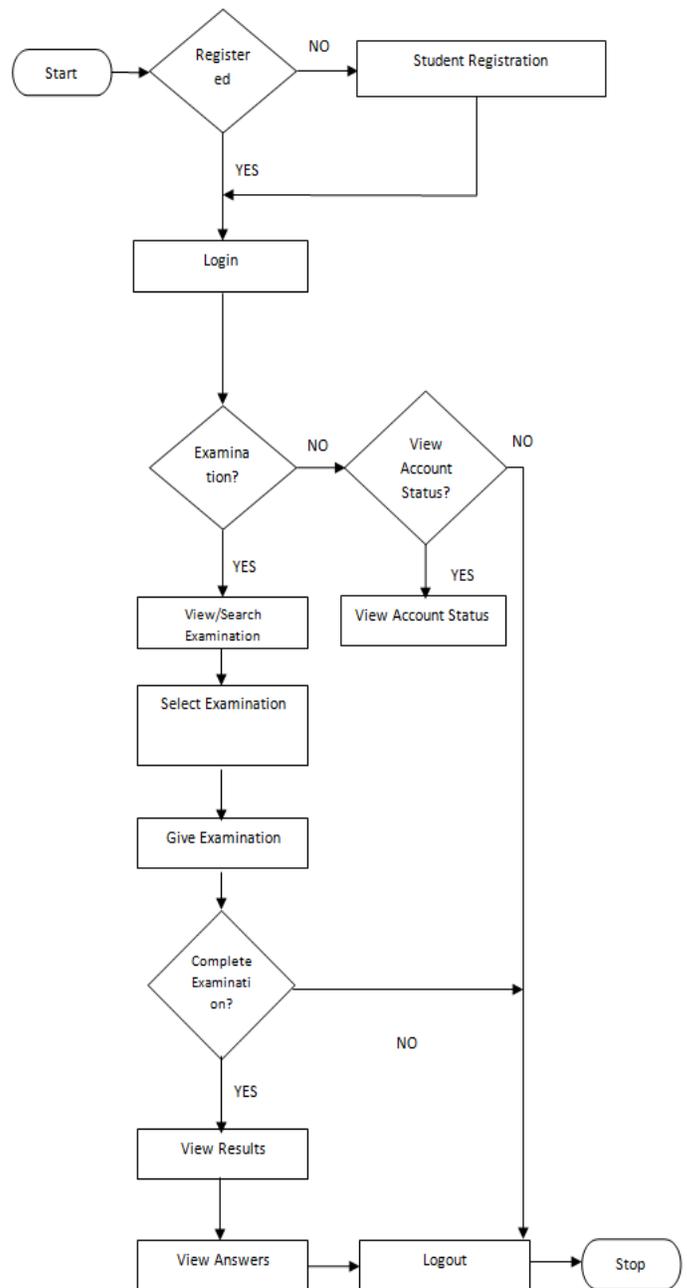
Step 7: End.

Figure 3: C Flow Chart

CONCLUSION

This Web Application provides facility to take online e-examination worldwide. It save the time as it allows number of students to give the exam at a time and displays the results of the exam when exam is completed, so no need to wait for the result. It is automatically generated by the server. Administrator &Coordinator has a privilege to create, modify and delete the test papers and its particular questions. User can register to exam system, login and give the exam with his specific id, and can see the results as well.

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