

DEPARTMENTAL MOODLE FOR ONLINE TEST

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Abstract— online objective exam system that allows user to take online test atomically generates results based on answers mark by user. The system can be use for various online test conducted by school, colleges and institutes. The system is design to handle thousands of students concurrently at the same time without getting lagged and maintaining the ACID properties. The major goal behind the innovation of this project was to introduce an eco-friendly technique which can replace the traditional use of papers. To handle a multiple users at the same time and to manage their timing according to their login time, so each student gets equal time to attend the exam and gets instant result as the exam ends at the departmental level.

Index Terms— Departmental Moodle, E-Learning, Exam Module, Offline Examination, Online Examination

INTRODUCTION

The scope of this project is to extend Moodle to provide an easy environment for faculty and examination controllers to form a database of questions over a Distributed Network which could thus be used to generate examination papers for conducting examinations for students. Moodle as of now is only related to E-Learning processes but does not deals with any activity regarding Examination processes. This extension also aims at automation and facilitation of interaction between students and faculty in regards to assignments, overall activity etc while providing robust infrastructure for examinations and other academic analytical activities. The whole process of assigning test and evaluating their scores after the test, was done manually till date. Processing the test paper i.e. checking and distributing respective scores used to take time when the software was not installed. The departmental Moodle for online test created for taking online test has following features In comparison to the present system the proposed system will be less time consuming and is more efficient. Analysis will be easily in proposed system as it generates automated data will be accurate and will be declared fast result. The logs of appeared candidates and their marks are stored and can be back up for future use.

LITERATURE REVIEW

There are several examination portals are present on internet today. We have studied several online examinations like eklavya online examination for ias, ips, irs etc. Hongmei Nie Math, Physics and Information Engineering College Online examination is the essential parts among online education. Online and Offline Examination system is Developed based on web and Server. This paper discovers the principle of the design system, that represents the main functions of the system, analyses the algorithm of generating question paper, and talk about the security of the system [1]. A Session variable is defined and set a certain initial value at user login module [2]. The Rashad et. al. [4]It proposed a web based online examination system that carries out the examination and auto-grading for students exams. The Hoffman et. al. [6] proposed an exam system for testing student in the software engineering courses and that system is used offline. Jelica protice et. al. [7] proposed a system that provides teachers with efficient means of generating and scoring tests with multiple choice answers. This system is inevitable in evaluating student's knowledge at massive examinations. Losada et. al. [8] addressed the combined use of automatic grading and the test-driven approach from a pedagogical view. Akinsanmi et. al. [5] seeks to solve a part of that problem by designing and developing a web application where tests inmultiple choice formats will be taken online and graded immediately.

PLANNING

3.1 EXPERIMENTAL SETUP AND RESULTS

Operating System: WINDOWS 2007 OR LATER.

Platform: .Net

Technology: Window.net

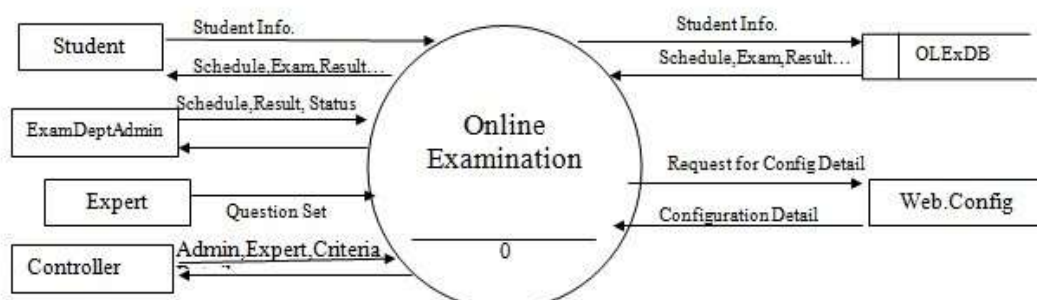
Language: C#(C sharp)

Backend: SQL server 2012

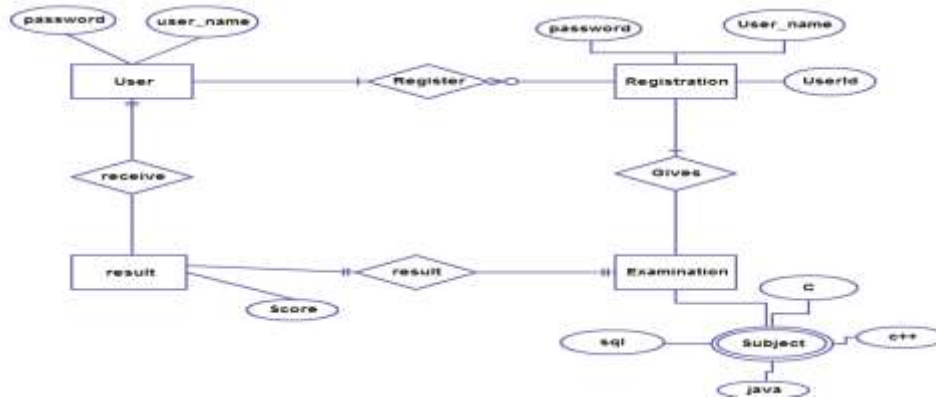
For Development: visual studio .Net setup tools

For Design: Visual studio designer

3.2 Data Flow Diagram



3.3 E-R Diagram:



IV. METHODOLOGY

4.1 MODULES :

Its consists of four modules:

a) General Module

User module consist of student and Faculty Here student first have to register into the system for registration they have to fill the registration form which consist of various filed such as user name, user Id ,password, semester, Roll no and so on. After login the student is able to view the no of paper they have given till or the current Exam or paper Id which going to conducted or and paper name. The faculty here also login into the system but they are like administrator to this system which have all access of this system, after login they can make a test or set a paper or they can view result or paper.

b) Exam Set Module

In this module faculty is going to prepare a paper respective to their subject for preparing the paper they have to mention first the subject name the number of questions and the marks of paper and the date when this exam paper is going to be conduct and also the semester and they have mention the start time and the end time of the exam test so that when the end time get reach the test paper gets automatically submitted after filling this information they insert the question type and according to the type they have to fit the question and options and also fit the correct answer for verifying the correct answer and also have to mention the marks for particular question and test get over and only the faculty have able to make papers and put in on system.

c) Exam Module

In this Module whenever the exam paper start time starts then the exam get started before that all the students have to login into the system after the test get started the test only visible to students till only the end time get reached which is set by the faculty so student have to complete the test before the end time and after selecting any answer of the question the answer must need to be submitted by using submit button also the student can backtrack or go to next question and after end of the by clicking on exit exam the student gets immediately the result of the test.

d) Reports

In this Module Reports are created for students after Completion of the test which consist of Number of question attempted and number of question un attempted and the Score of the test and also the student is able to view the Correct the answer of the Questions also the faculty have the privilege to view the results of all students according to the semester and subject wise.

4.2 Encryption for authentication by “Hashing and Salting” technique.

To achieve more secured authentication method for user, we have used hashing and salting algorithm which will improve traditional authentication method by adding a extra number to the encrypted password code by a adding a extra number to it, why means two different users can have same password but in encrypted .

Look at the following example:

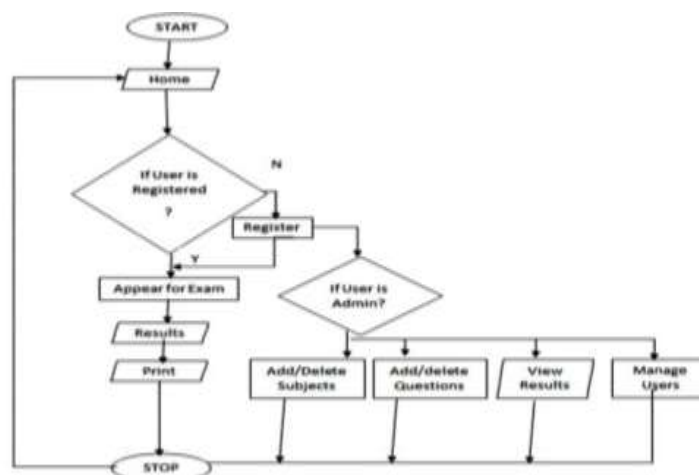
Original: 16341

1+6+3+4+1=15

1+5=6

Hash:6

4.3 Flow chart



V. FUTURE SCOPE

The system is best suited for the fulfillment of its title. Further functionalities can be added to this system to make it more scalable system by adding the activity graph, attendance system and grading chart. To create a college management system making the learning digitalized or creating a “E-learning “environment.

VI. CONCLUSION

Departmental moodle Examination system provides facility to conducts examination in LAN connected terminals. It allows many students to attend the exam at a same time and generate result, so spontaneous display of result. It is automatically generated by the server. Administrator/Faculty has a privilege to create, modify and delete the test papers and its particular questions. Also faculty may have ability to view the examination results of all students. Student can register, login and give the test with his specified, and can see the results as well.

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