Online Exam Management System


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Abstract - Online Exam Management System is an online examination system aimed to help the academicians to conduct and evaluate the exam in Quick and effective manner. The key objective of this system is to offer user friendly environment to students and mainly to the faculty by reducing the time for evaluation. The main concept of this work is to develop a software that provides a framework to conduct online exam for students on any theme. This software affords 3 levels of user the role and purpose of the user are given as follows:

1. Admin, who is the super admin of the project who accomplish all the components and has full accuracy of the project.
2. Teacher, who is responsible for accretion the questions and answer, evaluation, generating report about the specific exam.
3. Student will be attending the exam
4. Full security will be provided regarding exam and about details of examination. Exam can be accompanied for huge number of students. Evaluation can be carried out in less time publishing results in accurate and easy manner. We put on all arithmetic metrics to engender report based on the pre-request of the user.

I. INTRODUCTION

Online exam is done quickly. Indeed, even though the detached exam is normally picked as assessment strategy for both on-line and detached exams. Online course examinations are helpful to assess the understudy the information exploiting present day PC invention with no significances for the customary college course exam that utilizations pens, papers and invigilators. Online exam can improve the norms of understudy’s examination though the conventional examination framework exploiting the pen and paper requires more effort with respect to understudies and invigilators. Online examination are viewed as an authoritative hotspot for college exam, and the advancement of system innovation strategies has given the likelihood to lead the exams on the web.

In this way, the college understudies can profit by these managements. University course exams, utilizing the altered decision questions also, approving the understudies to pick just a single reply from option answers or the true/false inquiries, are customarily utilizing the paper and pens and they have reliably been a substantial load for both understudies and lecturers. Computer’s new innovation has been helpful to the fields of instruction. In state of attentiveness and devices, thens new invention gives the educator the upside of a successful evaluation. The conventional method to be familiar with the understudies is checking the understudy card, driving pedriving permit, inhabitant card or international ID.

The online process and security of the online exam framework helps in taking out tricking. This paper proposes the use of biometrics which underpin the security control, verification and uprightness of online exam. E-observing of understudies utilizes fingerprints and cameras for avoiding cheating and substitution of the first understudy. This paper focuses on the online exam for Basic PC in college courses with understudies at specific areas, at an altered time and inquiries for all examinees at the limited physical designation of the examinees.

II. EXISTING SYSTEM

In the Existing System all the Candidates Writes their exam manually and their records are maintained on Papers. Conducting manual Examination has been good but so many problems in their management of exams handling question papersand declaring results and to maintain all records. Paper evaluation and publishing results is not so easy. More Possibilities for losing Question papers and answer sheets.

III. DESCRIPTION

The ability to anticipate the understudies academic execution is basic in foundation educational structure. Starting late a couple of masters have been
proposed data burrowing frameworks for cutting edge instruction. In this paper, Z.Ibrahim, D.Rusls consider two data mining frameworks which are: Artificial Neural Network (ANN) and the merger of bundling and decision tree gathering systems for predicting and labeling understudies' educational execution. The data set used as a piece of this enquiry is the understudy data of Computer Science Department, Faculty of Science and Defense Technology, National Defense University of Malaysia (NDUM).

IV. PROPOSED SYSTEM

In Proposed Approach it is based on online examination which works more effectively than existing system. It has very high security. The questions are given to the Candidates in random manner. Every Candidate will have a login with Unique Id and questions will be Shuffled for every Candidate. Keywords data will be updated to the server for each question as a answer. Candidates can type or select the answer from options. Server will be monitoring the answer based on the Keywords if answer is related to the keywords that are provided marks will be awarded based on the relatedness. Malpractise and Cheating can be reduced by this System. Evaluation becomes very easy when compares to other System. Time can be saved. Candidates can also view their results through online in ShortPeriod.

V. SYSTEM ARCHITECTURE

Fig. 1. System architecture
This diagram describes about the architecture of the system. Overall at first the questions will be saved in the server by the teachers students will be given the random questions from the server in the exam. The answers will be scrutinised by the keywords given by the teacher for that particular question. The server will display the result.

Fig 2. System design
The above diagram describes about the structure of the overall mechanism of the system in the form of design. In the flowchart, there are three main roles i.e., Student, Admin, Teacher. It tells that the student attends the exam and the admin will scrutinize the exam and generates the result for the questions given by teacher which will be viewed by the student. Atlast the student, teacher views the result.
VI. FLOW DIAGRAM:

The above describes about the overall concept of the system. Admin, plays a key role because he/she will be controlling the entire process i.e. about student record, updating questions, examination result. In this first, the student profile will be added and student will be provided with the regno and password. Secondly, the questions will be uploaded with subject code and id. Next, the exam will be given an id and students will be informed about the exam. Finally, the students attends the exam and results will be generated.

VII. FLOW DIAGRAM

This entity-relationship diagram tells the complete process of the system i.e., how the process is done and how they are related to each other. It has entities which are related with each other and it also has attributes for each entity and plays a major role in the process of the particular entity. Briefly,

- User has 1:N relation with Course. Because there will be number of courses for an user. The user can choose the course as per interest.
- Course has 1:N relation with Student and Subject. Because one course can be chosen by number of students and each course will have a number of subjects according to the course.
- Student has M:N relation with Exam. Because M number of students attends N number of exams.
- Subject has 1:N relation with Question while it has M:N relation with Exam. Because 1 Subject will have N number of questions whereas many subjects have N number of students.
- Exam has 1:1 relation with result. Because 1 exam will have only 1 result.

IX. SAMPLE QUESTIONS AND ANSWERS:

1. Write briefly about darkfield microscope?
   Ans: It describes [characterize, define, detail, distinguish] microscopy methods [process] in both light & electron microscopy, which [that] excludes [omit, prohibit, refuse, reject] the unscattered [not disturbed, not distracted] beam from the image [picture, display, result]. As a result, the field [area, circle, confines] around [surrounded] the specimen [part, model] is generally dark.
   Principle: It creates [produces, forms] a contrast [adverse, comparison, contradiction] between the object [specimen, sample] & the surrounding [around, enclosing] field [area, place] such that the background [around] is dark [black, dim, dull] & the object is bright [alight]. The objective [straight] & ocular [aye, optic, visual] lenses used in the dark background is same as light microscope but a special [unique, different] condenser which prevents [avoid, block, avert] the transmitted [dispatch] light from directly illuminating [luminescent, brighten, flash] the specimen [part, model], only scattered [diffuse, dispersed] light reaches the specimen [part, model] & passes onto the lens system causing [making, processing] the object [specimen, sample] to appear bright [alight] against a dark [black, dim, dull] background [around].

2. Define Normalization?
   Ans: Normalization of data is a process [procedure, action, operation] of
analyzing[resolve, examine, scrutinize] the given relation
schema[design, idea, making, blueprint] based on their
functional dependencies & primary keys to
achieve[acquire, attain, accomplish] the
desirable[wise, advantageous] properties.

X. CONCLUSION

In this approach analyzing the Candidates
performance and their results is easy and it is
helpful for the tutors and learners in improving their
learning and teaching procedure. By this approach
Candidates and evaluation time will be Saved . This Paper
has been reviewed with previous studies on expecting
candidates outcomes and Performance with various
analytical methods. Finally, viewing the exam result. By
this approach details will be highly secured and time
saving will be more than Existing System.

XI. RESULT

The students will be provided with unique login
and password in this online management system to avoid
malpractice. Once they enter the exam halls they use their
login and then the exam starts. The question papers will be
different for each login i.e., for each student. The answers
will be scrutinized based on the keywords provided by the
teacher. The marks will be automatically allotted based
on the relatedness of the keywords for each questions.

REFERENCES

1] M. of Education Malaysia, National higher education
strategic plan (2015), URL
http://www.moe.gov.my/v/pelan-pembangunan-pendidikan-
malaysia-2013-2025

[2] Z. Ibrahim, D. Rusli, Predicting students academic
performance: relating synthetic neural network, decision
tree and linear regression, in: 21st Annual SAS Malaysia

review of the state-owned of the art, Trans. Sys. Man
doi:10.1109/TSMCC.2010.2053532. URL
http://dx.doi.org/10.1109/TSMCC.2010.2053532

student concert analysis using apriori algorithm, The SIJ
Dealings on Computer

cost estimation for web applications.

[6] M. M. Quadri, N. Kalyankar, Drop out feature of
student data for academic performance using choice tree
techniques, Universal Journal of Computer Science and
Technology 10 (2).

[7] E. Osmanbegovi´c, M. Sulji´c, Data mining approach
for predicting student performance, Economic Review
10(1).

[8] W. H¨am¨al¨ainen, M. Vinni, Relationship of machine
learning methods for intelligent tutoring systems, in: