Survey On Question Paper Generation For Online MCQ Test

Mayuri Bankar¹, Pranjal Bhalerao², Pratiksha Bhor³, Prof. A.K. Dere⁴

¹²³ Department Of Computer Engineering, Jaihind College Of Engineering, Kuran, Savitribai Phule Pune University, Pune, Maharashtra, India
⁴ Head Of Department of Computer Engineering, Jaihind College Of Engineering, Kuran, Savitribai Phule Pune University, Pune, Maharashtra, India

Abstract—Online MCQ test plays important role in checking the quality of students. Now a day there are many systems are available in the market which conduct the online examination of multiple choice questions. As these systems conduct the demo test and final test for student but while conducting demo test student doesn’t check their answers are right or wrong. Also the overall performance of students and teachers doesn’t show and result of test is display to the students after the specific time period by this systems. In education system examinations play a vital role in testing student’s performance and they want to see their result quickly after completion of exam and want to check their answers right or wrong in the demo test. So there is an need to have such a smart system for the development of question paper for MCQ test for growth of students as well as to test their learning skills by checking a student performance.

So in proposed system by using Search engine and shuffling techniques automatic generation of question paper for online MCQ test which will overcome these limitations of an existing system. Question is disable after each question is submitted by student. Teacher can also cancel the test if necessary and notification given to student. It will easy for the professor to generate the question papers as well as check the performance of himself and students.

Index Terms—Learning Objectives, MCQ Test, Cloud computing, Question paper, Question Repository, Answer selection

I.INTRODUCTION

Learning objectives plays an important role in educational system. Learning objectives defines that the expected goal of a course, lesson or any activity in terms of demonstrable skill or knowledge that will acquired by a student as a result of instruction.[5]

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Mayuri Bankar, Department of Computer Engg, Jaihind College of Engineering, Kuran, Savitribai Phule Pune University, Maharashtra, India
Pranjal Bhalerao, Department of Computer Engg, Jaihind College of Engineering, Kuran, Savitribai Phule Pune University, Maharashtra, India
Pratiksha Bhor, Department of Computer Engg, Jaihind College of Engineering, Kuran, Savitribai Phule Pune University, Maharashtra, India

Online MCQ test system will provide a basis for effective fulfillment of conducting online tests as a replacement for the paper based tests which are conducted during the internals in the college. This concept of online examination is spreading all over the world. Examination process is important activities for educational institutions to evaluate student’s performance. In examination hall there was no secrecy of the answer copy among all students. This system is based on multiple choice questions, and is focusing on controlling this problem. Also the student will required to select the best choice by mouse-clicking on it. Every student will get the questions in randomized order, so this approach will avoid the concept of copying to some extent.[2] Thus the quality of the exam questions would determine the quality of the students produced by the institutions. So there is need to develop such system that generating standard question paper that examine the overall growth of students.

This paper describes the uses of SEARCH ENGINE technique and SHUFFLING ALGORITHM for automatic generation of question paper for online MCQ test. Section II discusses the related literature survey. Motivation is discuss in section III. In section IV objectives are described. Existing system is discuss in section V. Section VI consists of the implementation aspects. Section VII describe the algorithm used in proposed system. Section VIII described conclusion.

II.LITERATURESURVEY

Noor Hasimah et.al explored Auto-Generator of Examination Questions (AGEQ) using genetic algorithm. Algorithm resolves the issues around generating examination questions based on OBE specification. But these explorations have inhibition as objective function i.e. user
specification for examination paper is less optimizable thus performance of system becomes less [1].

Kapil Naik et.al introduced Automated Question Paper Generation System using randomization algorithm. In this research objective function is optimizable but this exploration have limitation as question paper generator system support only question type tag. Thus question papers generated have only one difficulty level [2].

Rekha Ramesh et.al proposed Semi-Automatic Generation of Metadata for Items in a Question Repository using the concept of tagging and N-Grams algorithm for generation of question papers. In this research objective function is optimizable also it consists of difficulty levels. But this research have limitation as Inherent ambiguities present in the question framed also System can’t tag the question with cognitive level [3].

Mojitha Mohandas et.al planed the Automated Question Paper Generator System (AQPGS) using the Fuzzy logic algorithm. This system to generate question papers with randomly but even questions to cover most chapters of subject with difficulty level within seconds and mail them to colleges spontaneously by allow the universities. But this research have inhibition that it can’t able to detect vague data entry in the system also adaptability is less as there is no feedback facility for system [4].

Gauri Nalawade et.al proposed Automatic Generation of Question Paper from User Entered Specifications using a Semantically Tagged Question Repository. Depending on the type of assessment required, the system can be made to select particular question types. Also user specification is optimizable & it also can detect vague data entry in the system [5].

III. MOTIVATION

Now a day there is growth in the field of computer science. In today’s age, education is the most significant way of achieving success. Generating an efficient question paper is a task of great significance for any educational institute. In traditional method, Teachers used to generate the question papers manually. It was very challenging for the lecturers to do this task. By using existing system teachers can creates question papers in a few seconds, also they get the students result without effort and in less time. Also to improve student’s performance this system is useful. By conducting demo test.

IV. OBJECTIVE

The proposed online exam system has following objectives,

1) Generates the Question Paper in a matter of seconds.

2) Reduce the staff efforts.

3) To guide the student for right or wrong answers in demo test.

4) Display the result of examination immediately after exam is over.

5) To increase the performance of the student.

V. EXISTING SYSTEM

This system is implemented to facilitate automatic generation of question paper from semantically tagged question repository. The system would be useful for institutes, publishers and test paper setters who have a huge repository of tagged questions and need to frequently generate question paper with ease. In this paper, the working of the system is demonstrated for written examination of Data Structure domain of an engineering curriculum.

VI. PROPOSED SYSTEM

Fig1. Shows the working of online question paper generating system. The previous question paper generating system is used for theory question paper generation. In our system Admin has username and OTP for the login. Admin see the result of teachers. Teacher’s also has username and OTP for the login. Teacher’s has authority to allow the students for the loginsystem we allow the admin to approve or disapprove the Teachers also has the authority to add their Subjects. Teachers add the questions according to the units. After adding this questions are stored in a database along with their marks or weight. Teachers can see the result of the student.
It is made to allow teachers to generate question papers with randomly for every question paper to cover all unit’s questions with an difficulty level or making system allowed by teachers within a second. Now on question paper generating time the teacher just has to select the weight of the question paper and difficulty level. Students require username and password for the login process. Student can give demo as well as final test. Demo test is only for the practice purpose. While giving the demo test there is no need to do login. While giving final test students will get the login id and password by teacher. In final test after submitting each question student see their result. Finally when student submit overall test then student get their overall result.

All the questions as well as result are stored at cloud. Also question paper generation process is done at cloud. Server add number of clients to the cloud.

VII. ALGORITHM

Search Engine Algorithm:
1. Get the input specification.
2. Marks_Left = Total_Marks.
3. For all the values present in Topic, Question type, cognitive level and difficulty level, search the question in Min range column
4. If Marks_Left > 0, then search in Max range columns.
5. For each question id from concept table, search the question in Question table using following query:
   select id, text, max_marks from question where id = concept_qid and max_marks <= Topic[j][i] and (cognitive = coglevel and (max_marks <= Coglevel[x][z]) and (q_type = Qtype and (max_marks <= QType[l][m]) and (difficulty = Difflevel and (max_marks <= DiffLevel[v][y])))
6. If question found, add it to Question paper database
7. Decrement the values of the respective arrays and Marks_Left by marks of the question.
8. While Marks_Left > 0, go to step 4.
9. If no question added to Question_paper database, issue a warning, else display

VII. CONCLUSION

Generating automatic question paper for online MCQ test and conduct the online exam to increase performance of student by detecting marks of student after submitting each question and also check the performance of students as well as teachers. Notification given to the student on failure of exam conduction.

REFERENCES
Mayuri M. Bankar:  
B.E computer in Jaihind College of Engineering, Kuran. Her area of interest is programming language like C,C++, Java.

Pranjal C. Bhalerao  
B.E computer in Jaihind College of Engineering, Kuran. Her area of interest are programming language like HTML, HTML5, Bootstrap,C++.

Pratiksha S. Bhor  
B.E computer in Jaihind College of Engineering, Kuran. Her area of interest is developing android application.

Prof. A.K. Dere  
Professor of Department of Computer Engineering, Jaihind College of Engg, kuran, Maharashtra, India. Her area of interests are Comp programming languages Data mining, Embedded Operating System, Fundamental Programming Languages.