

Q-MINE (Automated Question Paper Generator)

***Suvrata Saha¹, Rahul Gour², Pooja Kamble³, Piyush Pandey⁴, Hrishikesh Kedar⁵,
Professor Sharda Chhabria⁶***

Department of Computer Science and Engineering

G.H.R.A.E.T, Nagpur, Maharashtra, India

Corresponding Authors' email id: suvratasaha@gmail.com

Abstract

In today's time, education plays the most important role to achieve success. Examination prepares students delving for more knowledge. So, assay of their knowledge is quite necessary. Earlier the traditional method of generating question paper was done manually. We have proposed an automated system of Question Paper Generation which is fast, automated, easy and secure. The proposed application helps in reducing the tedious task of the teachers of manually creating the question papers in an efficient manner. As the name suggests the tasks which were then performed by the faculties now will be carried out on the phone. The proposed application will be helpful to many educational institutes and NGO based institutes.

Keywords: Q-MINE, Automated Question Paper Generator

I. INTRODUCTION

In this paper, we have proposed an integrated automated application that generates questions papers related to a particular course and prints a question paper based on its syllabus and curriculum. This application dwindle the chances of redundant questions from question paper. There are prearrangements to enter and

edit data suitable to any educational organization for specifying courses, semesters, syllabus and pattern. This enables an educational institute to generate question ensuring security and non-repetitiveness of question papers and is a benefit for organizations with limited staff and resources. Our application provide fast

operations, data storage and high security for all its tasks.

Automation - Automation is refer to replacement of the manual operations with computer procedures and other machines. Automation is focused at increasing productivity, manufacturing prowess. Human error and labour cost will also be reduced. It also plays a vital role in manufacturing industries. Automation can be of different types: -

- a) Information technology (IT)
- b) Computer-aided manufacturing (CAM)
- c) Numerically controlled(NC)
- d) equipment
- e) Robots
- f) Flexible manufacturing systems (FMS)
- g) Computer integrated manufacturing (CIM)

II. LITERATURE SURVEY:

Existing Paper-based Systems

The existing system requires human staff to jot down questions that appear in the question paper. The teachers or professors select the questions according to the prescribed syllabus.

Limitation of Paper-based Systems

As most of the human working processes, this system suffers due to partiality . There might be some questions which are repeated in many question papers as the professor has a personal penchant towards them.

There is no guarantee of pure random generation of question paper. The security of the system can be easily compromised, if leverage over the person responsible for generating question papers is obtained.

• Other limitations include: -

- a) Lack of storage space
- b) Prone to damage
- c) Inefficient document transportation
- d) Supply costs
- e) Poor environmental credentials
- f) Limited collaboration
- g) Editing problems

III. PROBLEMS FOR MAKING AUTOMATED QUESTION PAPER GENERATOR APPLICATION:

1. No repetition of question:

The time of generating question paper many of times repetitions may occurs. So to avoid this problem , we make use of such algorithms which keep track of questions and do not allow the repetition of questions.

2. Chapter wise allocation:

As there are different types of exams like unit test and end semester exam, so each exam has different modules of chapters covered on which the question paper has to be generated. So challenge faced here is to make system such that it is able to allocate the question chapter wise or module wise for the respective exams.

3. Analysis of databases:

4. Formatting of paper:

The generated questions from the system are to be presented in proper format or proper exam template. So the challenge faced is how to format the layout of the paper in the required style and in a compatible format.

5. Paper pattern:

It is very important to know the question paper pattern and Marks allocation Scheme. So while designing the question paper the challenge is that the system should give flexibility in choosing the desired paper pattern and allocating marks to each question in paper.

IV. IMPLEMENTATIONS

The Automatic Question Paper Generation Application is develop and build up in

Android it generates the question paper in pdf format.

Modules in question paper generation:

- 1) Super Admin
- 2) Admin
- 3) Student

A) Super Admin: Super admin will store question in the database, and give authentication to the faculty to access the application.

B) Admin: Admin can generate, insert or modify the question- set and the question paper will generate in the form of PDF.

C) Student: Student can only access previous year question paper or old question paper and syllabus of individual subjects that student want to access.

V. PDF FILE CREATIONS

The questions generated are converted into the format of question paper and then converted it into PDF format.

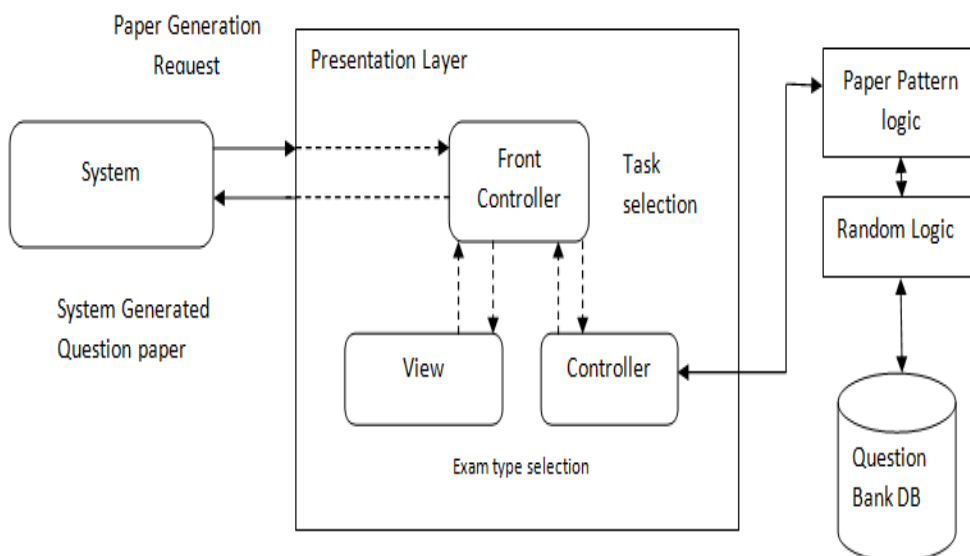


Figure: 1

VI. FEATURES AND BENEFITS

Following are the characteristics of the Q-Mine (Automated Question Paper Generators) Application:

- Simple user interface which increase the smooth the process of updating data.
- Generates and develops the well formatted question paper in a matter of few minutes.
- Questions can be easily modified
- A question paper can inserted to the database at any instances and different of test paper could be generated without any limitations.

- With the use of this application for exam paper generation there are zero chances of question paper getting leaked as paper can generated few minutes before the exam.

VII. CONCLUSION

This paper presents various systems to create effective question and automate the complete procedure of question paper generation. Some system uses searching algorithm and questions can be generated that are relevant to syllabus and generate a question paper according to weight age of each chapter. Thus system simplifies the whole process of question paper generation. And further security can be added in future to system.

REFERENCES

- I. Suraj Kanya, Madhuri Sachdeva, Navdeep Dhaliwal, Sonit Singh, "FuzzyLogic Based Intelligent Question Paper Generator" IEEE International Advance Computing Conference (IACC),2014.
- II. Vijay Krishan Purohit', Abhijeet Kumar', Asma Jabeen, Saurabh Srivastava, R H Goudar ,Shivanagowda, "Design of Adaptive Question Bank Development and Management System", 2nd IEEE International Conference on Parallel, Distributed and Grid Computing, 2012.
- III. Noor Hasimah Ibrahim Teo, Nordin Abu Bakar, Suraya Karim, "Designing GA- based Auto-Generator of Examination Questions", 2012 UKSim-AM 6th European Modelling Symposium © 2012 IEEE
- IV. Aishwarya Chavan, Divya Karekar ,Mojitha Mohandas , Rasika Manjarekar,"Automated Question Paper Generator System using Apriori Algorithm and Fuzzy Logic" Automated Question Paper

Generator System using Apriori Algorithm and Fuzzy Logic,2016