Question Paper Generator

Vaishali Baviskar¹, Gajanan Wadgave², Vijay Rathod³, Gururaj Puranik⁴, Madhura Sathe⁵, Rahul Nagagoje⁶

1, 2, 3, 4, 5, 6 Information Technology, G. H. Raisoni Institute of Engineering and Technology, Pune

Abstract: Generating question papers is a tedious and time-consuming operation. This study uses Python to construct a fuzzy logic-based model for autonomous paper creation. With the aid of a huge number of questions saved in the database, college officials may create a fully personalized question paper. The programme may be used to produce question papers based on the examination level, which may include unit tests. It enables the authorities to pick and choose from the syllabus's chapters. The programme makes use of a database to use the question paper, which might include hundreds of questions. The programme generates a collection of random questions on which the question does not appear. The programme is a great tool for quickly generating question papers and so saving time and effort.

Keywords: Question paper, Python, MySQL.

I. INTRODUCTION

In the educational system, examinations are quite important. Various tests are held at institutes across the world to assess students' knowledge and comprehension. Though most colleges employ the most common process of developing question papers, it is ineffective. The traditional procedure takes a long time and requires more work. It is quite difficult for instructors to cover all parts of the curriculum. As a result, a computerized question paper generation system that is fully tailored in all respects is required. We've created a system that can produce question papers that cover all of the curriculum's syllabus in a timely and efficient manner. We've created a role-based approach that controls individuals' access. The system allows the administrator to enter a collection of questions, together with their weighting and complexity, into the database. The user must select the difficulty level and the modules/chapters from the syllabus on which they plan to take a test while creating a question paper. The system creates a question paper in the form of a document file with a pre-populated institute name at the start. This technique tries to cut down on the amount of time and effort necessary to create a question paper.

II. DEFINITION OF THE PROBLEM

The conventional approach of creating question papers is time-consuming and stressful. It is quite difficult for the teacher to cover all areas of the course goals while avoiding question repetition in future tests. Because there are no defined techniques, the quality of the question paper is entirely dependent on the experience and skill of the particular teacher. It necessitates sifting through a large syllabus and selecting questions that need a significant amount of time. At times, it is necessary to create question papers at the last minute. The fact that there is a scarcity of experienced teachers exasperates the problem. All of these variables can sometimes degrade the quality of the question paper. It's challenging to create a solid question paper with a variety of questions that are matched with the course's learning objectives in terms of content and cognitive level. As a result, an automatic question paper generating system designed exclusively for colleges is required. This system will allow schools to produce question papers with random questions that cover all of the specified chapters and effort on the part of the employee.

III. RELATED WORK OR LITERATURE SURVEY

Many people have done research and suggested several systems to create question papers in recent years. Advances in technology have resulted in improvements to previously designed systems. We've studied various study articles on the subject that can assist us in constructing an improvised system that is efficient and dependable in every way. These papers are given below in order of when they were published.

A. “Design of Adaptive Question Bank Development and Management System”

In this research, they describe an adaptive question bank management system that intelligently selects questions from a large database (question bank) and represents the question model based on the question paper designer's inputs or parameters (QPD). A graph is used to create the idea map, and a database is used to store the questions.
B. “Fuzzy Logic Based Intelligent Question Paper Generator”
In this research, a fuzzy logic-based model for autonomous paper creation is given, which is implemented in MATLAB. The fuzzy model is shown to be more trustworthy, rapid, and logical when compared to the conventional technique. When creating a question paper for any subject, regardless of field, a fuzzy logic-based methodology is used to logically pick these criteria.

C. “Representing Examination Question Knowledge into Genetic Algorithm”
The most pressing problem is figuring out how to automatically produce question papers that follow the Outcome Based Education (OBE) guidelines. This project will look at using multi-constraint evolutionary algorithm techniques to create an auto-generator of exam questions (AGEQ).

D. “Automatic Generation of Question Paper from User Entered Specifications using a Semantically Tagged Question Repository”
The currently available tools are inflexible and only support extremely basic or restricted tagging. From a semantically labelled question repository, the system will automatically construct a question paper. It was discovered that using this technique increased the accuracy of question selection by 95%. Five Computer Science teachers with at least five years of expertise reviewed the usability and user friendliness. They were given simple instructions in the initial phase of user testing, including "visit each aspect of the system," "validate each item on every screen using positive and negative inputs,” and "check the validity of produced question paper in XML and word format."

E. “Android Based Exam Paper Generator”
Exam Paper Generator is a tool that allows instructors to select hard, well-framed questions and produce them in a short amount of time. Because it is an Android application, it can be done with a few touches of the hand and is therefore available at any time and anywhere. They have built a mechanism in this Android application in which random questions are chosen by mapping them to the requirements specified. Administrators can insert the formatted questions in the database (also known as a specification table) before this.

IV. EXISTING SYSTEM AND ADVANTAGES OF NEW SYSTEM
In the existing method, there is no computerised mechanism that digitally checks the response sheet. As a result, universities need a large number of employees as well as a lot of paperwork. Time is wasted by both the learner and the teacher. The teacher is not required to create a self-question paper because the gadget does so automatically. This increases the device's viability.

A. Disadvantages of the Current System
1) Increase the reliance on documents
2) Increase the complexity of the system.

B. Advantages
1) Architecture that is highly scalable
2) A system that is simple to use and comprehend.
3) It facilitates virtual classroom instruction for students and colleges.

V. CONCLUSION
The suggested method generates question papers based on the subject and the marks that the subject instructor assigns. It assists both the teacher and the student in attending exams and evaluating grade sheets. The proposed system saves the human being time and money. The proposed solution is based on a computerised method that improves development accuracy and efficiency.
REFERENCES

[1] International Journal of Emerging Technology and Advanced Engineering, Website: www.ijetae.com ( ISSN 2250 - 2459, ISO 9001:2008 Certified Journal, Volume 4 , Issue 3 , March 2014 ) 660 Online Descriptive Examination and Assessment System Bhagyashri Kaiche 1, Samiksha Kalan 2, Sneha More 3 , Lekha Shelukar 4 1,2,3,4 KBT College of Engg Nashik, (India) 

[2] Z. M. Yuan, L. Zhang, G. H. Zhan, A novel web-based online examination system for computer science education, In proceeding of the 33rd Annual Frontiers in Education, 2013, S3F7-10. 

[3] WebBased online Secured Exam; B.Persis Urbana Ivy.A.shalini, A.Yamuna/International Journal of Engineering Research and Applications (IJERA) ISSN:2248-9622 www.ijera.com Vol. 2, Issue 1Jan-Feb 2012, pp.943-944943. 

[4] Online Descriptive Examination and Assessment System.L. Zhang, et al., Development of Standard Examination System of Special Course for Remote Education, Journal of Donghua University (English Edition), 2013, Vol. 19, NO.1, 99-102. 

[5] Challenges of Online Exam, Performances and problems for Online University Exam; IJCSI International Journal of Computer Science Issues, Vol. 10, Issue 1, No 1, January 2013 ISSN (Print): 1694-0784 — ISSN (Online): 1694-0814. www.IJCSI.org 

[6] Al-Mashaqbeh, I.F. Al Hamad, A.Student’s Perception of an Online Exam within the Decision Support System Course at Al al Bayt University Conference publication Pages: 131135 7-10 May 2010. 

[7] Design and Development of the Online Examination System based on B/S Structure.Hongmei Nie Math,Physics and Information Engineering College Zhejiang Normal University Jinhua,China E-mail: nhm@zjnu.cn 

[8] Shuffling Algorithms for Automatic Generator Question Paper. Nor Shahida bt Mohd Jamail Abu Bakar Md Sultan Faculty of Computer Science and Information Technology Universiti Putra Malaysia, 43400 UPM SERDANG, Selangor, Malaysia. E-mail: shahidajamail@yahoo.com 

[9] Hanxiao Shi, Guodong Zhou and Peide Qian (2010), An A ttribute - based Sentiment Analysis System, Information Technology Journal, pp 1607 - 1614. 

[10] Papri Chakraborty (2012), Developing an Intelligent Tutoring System for Assessing Students Cognition and Evaluating Descriptive Type Answer, IJ MER, pp 985 - 990.
INTERNATIONAL JOURNAL FOR RESEARCH
IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY
Call: 08813907089  Whatsapp (24*7 Support on Whatsapp)