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AUTOMATIC QUESTION PAPER FORMATION SYSTEM

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ABSTRACT

Today, education is the key to success. When discussing education, tests and exams are essential. Examinations prepare students for learning. Thus, an appropriate exam paper and format are essential. The traditional way of creating question papers is manual. This procedure involves officials chalking the question paper. Bias, repetition, and security concerns can make this strategy unsuccessful. We offer a rapid, simplified, randomized, and secure automated question paper generation mechanism. Every task this system does is automated, eliminating storage space, bias, and security concerns. We also introduced a novel approach that completely randomizes questions and avoids repetitions. The proposed approach can aid numerous educational and NGO institutes. A proper automated system for creating question papers and maintaining data may be crucial in an educational institute. This study proposes an integrated automated system that saves course questions and prints a question paper based on its syllabus and curriculum. We restrict user access through a role-based structure. Question paper duplication is prevented via system security. Any educational organization can enter and amend data with total freedom to specify courses, semesters, syllabus, and pattern. This allows educational institutions to generate secure, non-repetitive question papers, which benefits companies with limited staff and resources. Our system wants rapid operations, data storage, and strong security for all functions.

Keywords: Randomizes Question, Storage Space, Storage Security, Rapid Operation, Data Storage.

I. INTRODUCTION

This is a challenging moment due to the increase and demand in computer science. Exams are essential for evaluating students' academic progress. For this reason, a clever development question model is essential for tracking student progress and assessing learning abilities. Every educational institution must have a strong question paper. It is tedious and challenging for traditional teachers to manually prepare question papers. The Automatic Question document Generator System solution is presented in this technical document.

Time is of the essence these days. We appreciate any product that conserves energy and time. As a result, we offer an Automated Question Paper Generator System to replace the conventional method and save time. Less personnel are also required. Using our technology, administrators can ask inquiries. We allowed the admin to give each query more weight, age, and complexity. Examination plays a crucial role in the education system. Various examinations are conducted in the institutes worldwide to measure the knowledge and understanding of the students. Though the predominant methodology is used to create question papers in most of the institutes, it is inefficient. Exams are very important in the educational system. Numerous tests are administered in educational institutions across the globe to gauge students' understanding and expertise among the pupils. Even though most institutes employ the prevailing process to develop question papers, it is ineffective. The traditional approach requires more work and takes a long time. Teachers find it extremely difficult to cover every topic in the syllabus. Therefore, an automated system that generates question papers and is completely tailored is required. We have created a system that can rapidly and with little effort produce question papers that span the entire curriculum. We have created a role-based approach that limits user acces. The conventional method is very time consuming and needs more effort.

II. METHODOLOGY

Problem Statement

To enhance the process of automatic question paper generation to propose model uses the random question generation technique and to compile the same. The automatic question paper formation system is a critical component of educational institutions and assessment processes. Low security as paper is not secured using any mechanism. Patterns or repetitions may occur in paper. Slow as human labour is involved. Less variety of different types of questions.

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Motivation

- Prepare the question paper in quick time.
- Maintaining the quality of question paper consistently.
- Automizing the process helps colleges and universities in tremendous way.

III. MODELING AND ANALYSIS

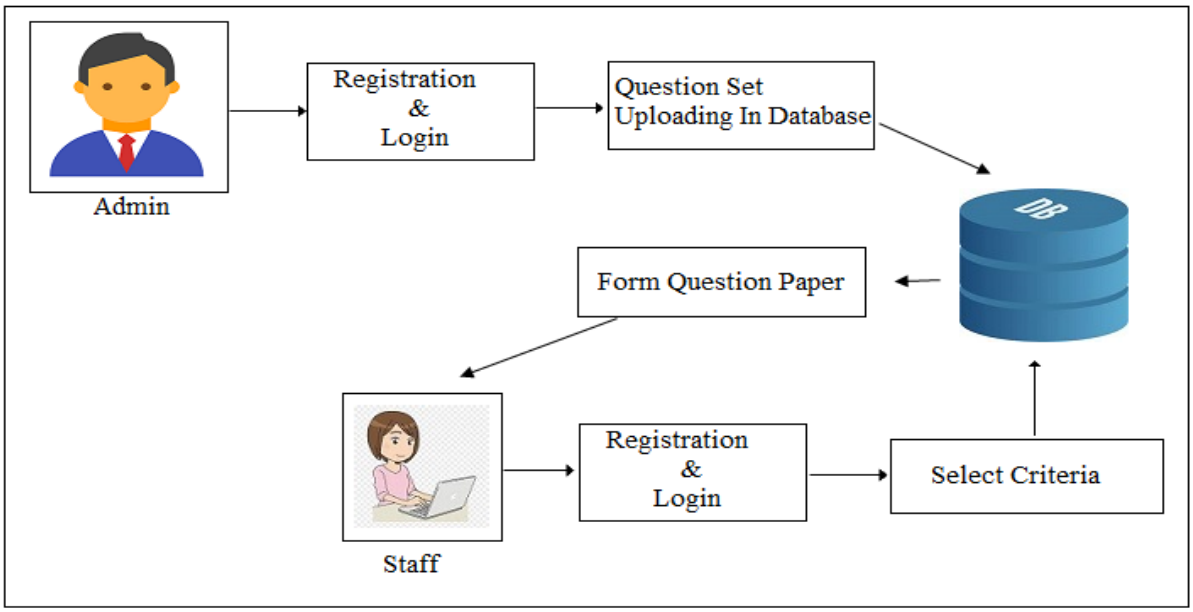

Figure 1: System Overview Design

1) Admin login:- Every school, college, or institutes, whomsoever using the QPG system will be empowered with an Administrator, the foremost important and responsible person w.r.t to examination section of particular institute. The admin possess two operations viz.,

- Registration of staff members of particular institute, thereby providing login credentials to them.
- Generation of QP by choosing essential fields such as type of QP, total marks , difficulty level etc.

2) Teacher login:- Based on the provided login credentials from the respective admin of an institute, teacher will have the responsibility to mainly, Update the database by insertion of questions/modifications if required any.

3) Student login:- students can register themselves, provided with the college enrollment id , in order to check for any updates related to exams Also students can practice and prepare for examination based on subject-chapter-module wise filtration.

4) Question insertion:-As mentioned above, it is the responsibility of teachers of a particular institute, to add/update questions in the database, question insertion will proceed by filling up required or essential fields(options)

Fields include:-

- Course
- Semester
- Subject
- Priority of respected Question

5) Difficulty choosing:- To achieve unbiased as well as expected output, QPG system is introducing a new field named “difficulty choosing” which not only selects questions from the database randomly but also filter those questions based on the priorities defined in various difficult levels. Predefined priorities based on difficulty choosing is as follows:-

- Easy:- priority ranging from 1-2.

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- Medium:- priority ranging from 3-4.
- Hard:- priority ranging from 5-6.

6) Templates:- Since QPG system will be used by any private/public institute, our main purpose for introducing this module, is to get work done with ease and to achieve quick results. This module comprises of various templates.

7) Generation:-Every public/private institute is assigned with an Admin, which is responsible for Generation of QP for the respective institute. As and when the admin selects the difficulty level and template for desired output, a query will fired into the database wherein, those type of questions which falls under the selected category , will be filtered and get store into an array. An predefined function called "Shuffle()" is triggered on to the array in order to achieve random sequence of questions, which are then reflects into the preview of QP.

8) System Auditing:- As Auditing is the most important aspect in any system, we do have implemented auditing by storing logs of all operations such as:

- After signing up or signing in into the system, an entry will be stored into the database with parameters {time, date, Teacher id, }.
- As and when addition/updating of any question is done then the essential information such as { time, date, sem, sub, teacher id.} is been stored inside the database.
- While downloading the final QP through the website, Timestamp is recorded and stored into the log along with the examiner id.

Module Description:

1) Module A: Admin Operation

- Admin Credentials
- Feeding Questions
- Storing question in database

2) Module B: Staff Operation

- Staff Credentials
- Question paper Paremeters
- Parameter Validation

3) Module C: Question Paper Formation

- Question Paper Database and Parameter
- Random Question selection
- Question Paper Formation

IV. RESULTS AND DISCUSSION

We have successfully developed an Automatic Question Paper Formation System.

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Department: computer technology

Subject: css

Time: 1 Hour

Total Marks: 20

I. Answer Any 5 (5X2=10)

[1]state the method to put message in web browser status bar?
[2]write a form to make login and password.
[3]write a javascript program to check number is armstrong or not.
[4]write a javascript to display frames without border.
[5]what is the use of settimeout () function? write a javascript to illustrate it.
[6]write a javascript that disables the right click button and displays the message right click button is disable.

II. Answer Any 5 (5X2=10)

[1]define the term - regular expression.
[2]how to declare array in javascript.
[3]what is frame?
[4]what is event handler. give an example of event handler in javascript.
[5]what is the use of settimeout () function? write a javascript to illustrate it.
[6]how to retrieve a position of desired word from the string

Figure 2: Final Output

V. CONCLUSION

The proposed work describes an automated system that progresses from the traditional method of paper generation to an automated process, by providing controlled access to the resources. This is achieved by comprehending users and their roles in the institute. We have also considered the importance of randomization in the task of paper generation. Our system has deployed an efficient algorithm which is totally randomized and avoids repetition of questions is consequent question papers, making it impossible to derive any pattern in the papers. We distinguish between administrators and subordinates by their tasks. Therefore, the resultant automated system for Question Paper Generation provides improvement in terms of controlled access to the resources, random generation of question papers and a secure platform.

VI. REFERENCES

[1] Automatic Cloze-Questions Generation by Annamaneni Narendra, Manish Agarwal and Rakshit shah LTRC, IIIT-Hyderabad, India.
[2] G-Asks: An Intelligent Automatic Question Generation System for Academic Writing Support by Ming Liu and Rafael A. Calvo
[3] Kapil Naik, Shreyas Sule, Shruti Jadhav and Surya Pandey, "Automatic Question paper Generation System using randomization algorithm" IJETR, Vol.2, Issue 12, pp.1-3, Dec.
[4] Ashok Immanuel and Tulasi. B, "Framework for Automatic Examination Paper Generation System," International Journal of Computer Science Trends and Technology, vol. 6, issue 1, Jan - March 2015.

[5] Automatic Multiple Choice Question Generation System for Semantic Attributes Using String Similarity Measures by Ibrahim Eldesoky Fattoh in journal Computer Engineering and Intelligent Systems www.iiste.org ISSN 2222-1719 (Paper) ISSN 2222-2863 (Online) Vol.5, No.8, 2014.

[6] Automatic Question Generation Using Software Agents for Technical Institutions by Shivank Pandey1, K.C. Rajeswari International Journal of Advanced Computer Research (ISSN (print): 2249-7277 ISSN (online): 2277-7970) Volume-3 Number-4 Issue-13 December-2013.

[7] Semantic Based Automatic Question Generation using Artificial Immune System by Ibrahim Eldesoky Fattoh in Computer Engineering and Intelligent Systems www.iiste.org ISSN 2222-1719 (Paper) ISSN 2222- 2863 (Online) Vol.5, No.8, 2014.

[8] Automatic Generation of Multiple-Choice Questions for Domain on to logies by Andreas Papasalouros, Konstantinos Kanaris, Konstantinos Kotis.

[9] Linguistic Considerations in Automatic Question Generation by Karen Mazidi and Rodney D Nielsen.