Question bank with paper generation**ABSTRACT**

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Examination as an activity to assess the student performance in a given semester is paramount. Manual conduct of this process includes setting-up paper(s) of a given course by one or more experts of the field. This activity as in vogue in university is manual in nature. Our goal is to prepare an automatic solution to this activity. We envisage to build a web-app that allows to generate question papers both descriptive as well as objective in any format that is set in advance (i.e., Section A, B & C as is in practice in). Our system will be capable enough to cater to any format as well as to any type of examination (like Mid-Term & End-Term). We propose a solution based on creating exhaustive number of questions of a given course and retrieving questions at the time of examination using any known scientific random procedure**.**

**PROBLEM STATEMENT**

The existing paper setting system at our Campus is manual; hence time consuming forcing the paper setting process to initiate before weeks. Storing and movement of these papers in physical form is challenging and thus susceptible to certain security issues. The process being manual and thus rely on humans for paper setting and as such papers setting and subsequent submission is prone to delays. We propose to develop web- application based solution to address the problem of paper setting.

**INTRODUCTION**

Assessment in general and term examinations in particular is a continuous systematic process that inferences about learning and development of students. Examinations have been chosen as assessment methods to assess students by the end of the course. Examinations play a crucial role for the identification of weaknesses in the teaching learning process from the perspective of teacher as well as the student. Examination results can help teachers as well as students to identify their teaching and learning weaknesses respectively and can help them to improve the same. Moreover, examination results help an educational institution to decide if a student is eligible for award of a particular promotion. It can be seen from the university perspective that aim of the examination is to gauge their student’s ability and competitiveness. On the other hand, for the students, the examinations give them goals, pushing them to attain that goal in the specific time.

Examination is conducted by asking course instructors/experts of respective courses/fields to set the papers for the both descriptive as well as objective examinations to assess the performance of students. Designing and preparation of the examination paper is a repetitive task that includes: 1) Setting the question papers, 2) Digitizing it with text editor, 3) Reviewing the quality of each question and finally, 4) Printing out the exam papers. Hence, there is a necessity to store and manage these examination papers systematically using question bank. Now this web-based application will be an attempt to create and manage a question bank for the institution of diverse discipline with the objective to bring efficiency and improved confidentiality in examination system. This will create an opportunity to develop a sustained solution to overcome the problems noticed in the pre-conduct phase of any examination system.

**EXISTING SYSTEM**

* Various institutions have developed in-house examination systems in addition to the organizations that have been working on such solutions for the last one decade.
* These institutions as well as the IT professionals have managed to develop varied MCQ Question Paper Generators for the conduct of online examinations.
* However, very little work has been done by the institutions for the automation of other type of Question Paper Generators including the descriptive ones.

**PROPOSED SYSTEM**

The proposed system is aimed to relieve the conventional system largely from the challenges while preparing the question paper for the conduct of examination. It is assumed that the proposed system gives a wide choice of questions to a paper setter to model the question paper and thus facilitates selection of proper questions for a well-designed question paper which can be generated within few minutes with no chances of repetition and duplication. It mainly aims for gathering, sorting and administration of large number of questions about different levels of difficulties from subjects related to various courses. Questions must be added by the institute or course instructor in the system. These questions can be edited or deleted any time.

**OBJECTIVES:**

1. Real time paper setting facility for paper setter.
2. Availability of any number of question papers for a particular subject.
3. Combination of two or more generated question Papers at the time of selection.
4. Selection of any number of question papers at any point of time of Examination.
5. Maintain the details of Branch, Course, Difficulty level, Question and Semester.
6. Detailed log of transactions.

**modules**

* The main Modules for this project include:
  + Administrator Login
    - * Registration of instructors, thereby providing login credential to them.
      * Generation of QP by choosing fields like type of QP, total marks of QP, difficulty level etc.
  + Instructor Login
    - * Based on the provided login credentials from the respective admin, instructor will have the responsibility to mainly update the database by insertion of questions and modification of question if required any.
  + Question insertion
    - * Course
      * Semester
      * Subject
      * Category of respected question

**SOFTWARE REQUIREMENTS**

This project will be a web-based Application developed in

* + Form Design (CSS bootstrap)
  + Coding (JavaScript PHP)
  + Database (MSSQL SERVER)