**PROJECT REPORT**

**ON**

**QUESTION PAPER GENERATOR**

TO

**YASH SHETH**

**SUBMITTED BY:**

***CHAITANYA MOHAN MOLUGU***

***STUDENT ID:1992718***

***YAMINI REDDY BANDA***

***STUDENT ID: 1992585***

***HARSHINI RAO TAKKALAPALLY***

***STUDENT ID:1992712***

Contents

[1. INTRODUCTION 3](#_Toc17293539)

[2. System Configuration:- 4](#_Toc17293540)

[2.1. H/W System Configuration: 4](#_Toc17293541)

[2.2. S/W System Configuration:- 4](#_Toc17293542)

[3. DATA FLOW DIAGRAM: 5](#_Toc17293543)

[4. CLASS DIAGRAM: 6](#_Toc17293544)

[5. Modules: 6](#_Toc17293545)

[6.GitHUB : 9](#_Toc17293546)

[7. REFERENCES: 10](#_Toc17293547)

# [1. INTRODUCTION](#_1._INTRODUCTION)

In today’s age, education is the most important way of achieving success. When we discuss education, it is imperative to mention tests and examination. Examinations prepare students in their quest for knowledge. So, having a proper examination paper and format is quite necessary. Now the traditional method of generating question paper has been manual. In this method certain officials chalk out the question paper. But this method can be ineffective at times owing to bias, repetition and security concerns. We have proposed an automated process of Question Paper Generation which is fast, streamlined, randomized and secure. Every task performed by this system is automated so that storage space, bias and security is not a concern anymore. A design of suitable automated system for generating question papers and managing related data may prove vital in an Educational Institute. In this paper, we have proposed an integrated automated system that stores questions related to a particular course and prints a question paper based on its syllabus and curriculum. We have implemented a role-based hierarchy which restricts access to the users. The system also deploys security mechanisms that prohibit duplication of question papers. There are provisions to enter and edit data suitable to any educational organization with complete freedom 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 boon for organizations with limited staff and resources. Our system aims to provide fast operations, data storage and high security for all its tasks. 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.

[2. System Configuration:-](#_2._System_Configuration:-)

# [2.1. H/W System Configuration:](#_2.1._H/W_System)

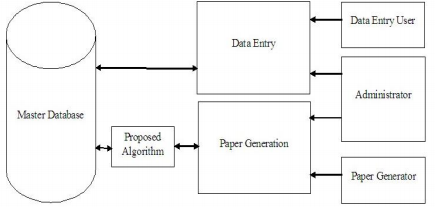
Processor - Pentium –III

1. Speed - 1.1 Ghz
2. RAM - 256 MB(min)
3. Hard Disk - 20 GB
4. Floppy Drive - 1.44 MB
5. Key Board - Standard Windows Keyboard
6. Mouse - Two or Three Button Mouse
7. Monitor - SVGA

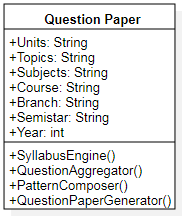
## [2.2. S/W System Configuration](#_2.2._S/W_System):-

1. Operating System : Windows95/98/2000/XP
2. Application Server : Tomcat5.0/6.X
3. IDE : Netbeans 7.2.1
4. Front End : HTML, Java, Jsp
5. Scripts : JavaScript.
6. Server side Script : Java Server Pages.
7. Database : Mysql 5.0
8. Database Connectivity : JDBC.

# [3. DATA FLOW DIAGRAM:](#_3._DATA_FLOW)



# [4. CLASS DIAGRAM:](#_4._CLASS_DIAGRAM:)



# [5. Modules:](#_5.__Modules:)

1. Syllabus Engine.
2. Pattern Composer.
3. Question Aggregator.
4. Question Paper Generation
5. Syllabus Engine:

The role of the syllabus engine is more of an aide than an absolute necessity. Even though it is recommended that an exact copy of the syllabus which was followed for the course should be present in the bank at least the broad topics should be mentioned via the Syllabus Engine. This comes in very handy for the pattern composer and the question aggregator phase. The pattern required by this framework is not just a mention of the marks distribution but a insight about which question to be picked. This provides unique relationship between the pattern and the syllabi of the course. Each course offered for a programmed will have multiple units or modules. The content taught in a course is divided into sections. The division can be based on the teaching hours required or based on the concepts to be covered. Though such divisions are not directly related to a question bank yet it is recommended to have such divisions for ensuring the questions that are chosen randomly are evenly distributed across the entire subject of study. The division of the course content also has a relation with the pattern which will be discussed under the pattern composer.

1. Pattern Composer

The skeleton of the examination paper to be generated is defined under the pattern composer module. A blueprint of the examination paper should be defined in this section. The user is free to create any kind of question paper. Question papers might have a single section or multiple sections. Pattern composer establishes relationship with syllabus engine by providing the flexibility to choose questions from the various divisions created through syllabus engine. Various subsections of the examination paper is defined by the pattern composter. Provision for composite questions can also be provided in which each question can be a combination of one or more questions forming sub divisions in the question. Against each question the unit, the topic and the sub-topic from where the question has to be picked should be mentioned. Internal choice or section wise choice can be specified. Multiple patterns can be created depending on the requirement of the type of the examination.

1. Question Aggregator

The third segment of the Bank Interface is the Question Aggregator. The questions will be entered through this module. Every question can be viewed as an object, therefore the question class should contain attributes namely, a question type, a complexity factor and the mark weight age. Some of the question types which we can enumerate includes multiple choice question or objective type question, descriptive question, numerical problems, fill-in the blanks and state true or false.

1. Question Paper Generation

The question paper generator considers the complexity required the number of sets of question papers to be generated. The algorithm for generating the examination paper picks up a question according to the pattern defined and on successful pickup marks the question so that the same question may not be selected in two subsequent examination paper generation. The output of a successful generation can be stored as MSword for further printing and reprography.

# [6.GitHUB :](#_6.GitHUB_:)

We have been using git and github for hosting our project on github. We have made a public repository questionpaper-repository which is on README.md option and we made our teammates as collaborates so that we all can have the copy and the repository so that we can makes changes locally and also on remote. We have been using git and github from netbeans IDE we made commits, push, pull requests and merge stashing the files where ever necessary.

# 

# 7[. REFERENCES](#_7._REFERENCES:):

[1]Automatic Cloze-Questions Generation by Annamaneni Narendra, Manish Agarwal and Rakshit shah LTRC, IIIT-Hyderabad, India.

[2] Automatic Question Generation using Discourse Cues by Manish Agarwal\_, Rakshit Shah\_ and Prashanth Mannem.

[3] G-Asks: An Intelligent Automatic Question Generation System for Academic Writing Support by Ming Liu and Rafael A. Calvo.

[4] 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

[5] International Journal of Scientific and Research Publications, Volume 5, Issue 1, January 2015 1 ISSN 2250-3153.

[6] Surbhi Choudhary, Abdul Rais Abdul Waheed, Shrutika Gawandi and Kavita Joshi, “Question Paper Generator System,” International Journal of Computer Science Trends and Technology, vol. 3, issue 5, Sept – Oct 2015.