iJRASET
International Journal For Research in Applied Science and Engineering Technology

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 9 **Issue:** VI **Month of publication:** June 2021

DOI: https://doi.org/10.22214/ijraset.2021.35953

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429
Volume 9 Issue VI June 2021- Available at www.ijraset.com

MCQ Generator using Machine Learning

Prof. Harish Gorewar[1], Nikita Lanjewar[2], Akshara Gajwe[3], Trupti Charpe[4], Komal Bagde[5]
[1, 2, 3, 4, 5]*Department of Information Technology, KDK College of Engineering, Nagpur, Maharashtra, India*

Abstract: This software used to present an creative approach for generating multiple choice questions in automatic way. MCQ Generator software, which is used in schools, institution, colleges etc which want to have a huge database of questions for frequent generation of question papers.
Keywords: MCQ,E-learning, Admin, Authentication, Database

I. INTRODUCTION

New e-learning methodologies require assessment procedures that automatically measure the students' achievements during the teaching and learning process. These procedures must be compatible with other solutions that provide personalized feedback to students for understanding and improving the quality of their learning experience. The system is to present an innovative approach for generating multiple choice questions in automatic way. MCQ Generator software, which is used in schools, institution, colleges etc. Which want to have a huge database of questions for frequent generation of question papers, Many e-learning proposals use Multiple-Choice Questions as an assessment tool. Basically, an MCQ consists of a question text and a few choices, from which one is the correct answer. The automated creation of tests involves generating distraction based on certain knowledge and, subsequently, using these distracters to create the assessment test.

II. LITERATURE STUDY

A. A Taxonomy of Questions for Question Generation. Centre for Computational Language and Education Research, University of Colorado, Boulder Rodney. Nielsen @ Colorado. edu. Rodney D. Nielsen1, Jason Buckingham, Gary Knoll, Ben Marsh and LeysiaPalen March 2014. - In summative assessment, questions are intended to evaluate the answerer's knowledge, understanding and skills.

B. Optimizing the Correction of Multiple Choice Question test answer sheets using the Digital Image Processing. , IEEE- Image analysis of the algorithm can be improved by choosing larger dimensions for neighboring matrices to resolve the recognition error occurring on the answer sheet. Also, the software could be ported to smart phones which will allow teachers to travel to the test centers carrying only printed tests which does not need for any additional resources, apply the tests, capturing images and calculating scores.

C. Neural Models for detecting key Phrase Detection and Question Generation. 1MILA, Universite de Montr´eal2Microsoft Maluuba February 2018.Sandeep Subramanian1,*,y, Tong Wang2, Xingdi Yuan2, Saizheng Zhang1.

D. Literature review of automatic question generation systems. School of Science, RK University **Associate Professor, College of Agricultural Information Technology. Sheetal Rakangor*, Dr. Y. R. Ghodasara** January 2015 -proposed framework helps in question generation by deploying agents, the agents will perform various operations like processing the document, classification of information and generation of question.

E. Philosophy-Based MCQs Generation.Tahani Alsubait1•Bijan Sattler1 Received: 15 May 2015 or Accepted: 5 October 2015 or Published online: 17 November 2015. -> Proposed framework helps in question generation by deploying agents, the agents will perform different operations like processing document, information classification and question generation.

F. NLP module for bulgarian text processing. international meeting on innovations in science and education 22-24, 2017 Stoyan Cherecharov,1 Hristo Krushkov,2 Mariana Krushkova3 -wide use of web-based information systems and a lack of highly skilled developers are the primary motivation to search for methods and approaches to optimize the building of such systems.

III. METHODOLOGY

Admin Login with authentication, Admin Module has two major roles: User Management and Question Management.

1) *User Management:* In User Management, First Admin will enter his Login id and Password and then he will add instructor to the system and send instructor login id and password to the instructor's email id for accessing MCQ Generator and details of instructor are stored in the database.
2) *Question Management:* Admin will manage questions according to the Department, Semester, Subject and Unit Test Number.

©IJRASET: All Rights are Reserved

a) Student Module is divided into Login Module and Registration module. In Login Module, student will enter their credentials i.e. Login id and Password to access the proposed system. Student gives exam and views their result.

b) Teacher has two major roles: Question Entry, Test Paper Customization, Generate System and Previously Generated Test Papers. Teacher Module is divided into Login Module. In Login Module, Admin as well as teacher will enter their credentials i.e. Login id and Password to access the proposed system.

- *Question Entry* –Instructor make database by entering questions according to Department, Semester, Subject, Questions will be stored in database.
- *Test Paper Customization* – Since this system is generating paper in txt format, instructor can simply make changes in test paper. If instructor wants to change questions of the test paper, he/she can customize test paper by simply editing questions of test paper.
- Generate System – Paper generator can generate test paper by entering Department, Semester, Subject, and unit Number.
- *Previously Generated Test Papers* – Instructor can check previously generated test papers in the system by login into the system.

A. User/Student

1) Registration
2) Login
3) Give MCQ Exam
4) View Result
5) View Progress

B. Teacher

1) Registration
2) Login
3) Upload PDF or Text file
4) Select word for MCQ answer.
5) Generating MCQ
6) Select MCQ from generated MCQ Dataset.
7) View student progress
8) Suggest study material to student according to student progress.

C. Admin

1) Login
2) Maintain Exam Details
3) View Teachers
4) View student progress

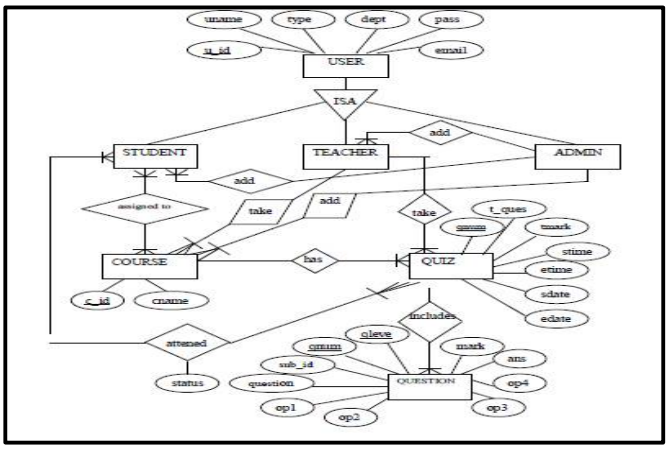


Fig 1. ER Diagram

©IJRASET: All Rights are Reserved

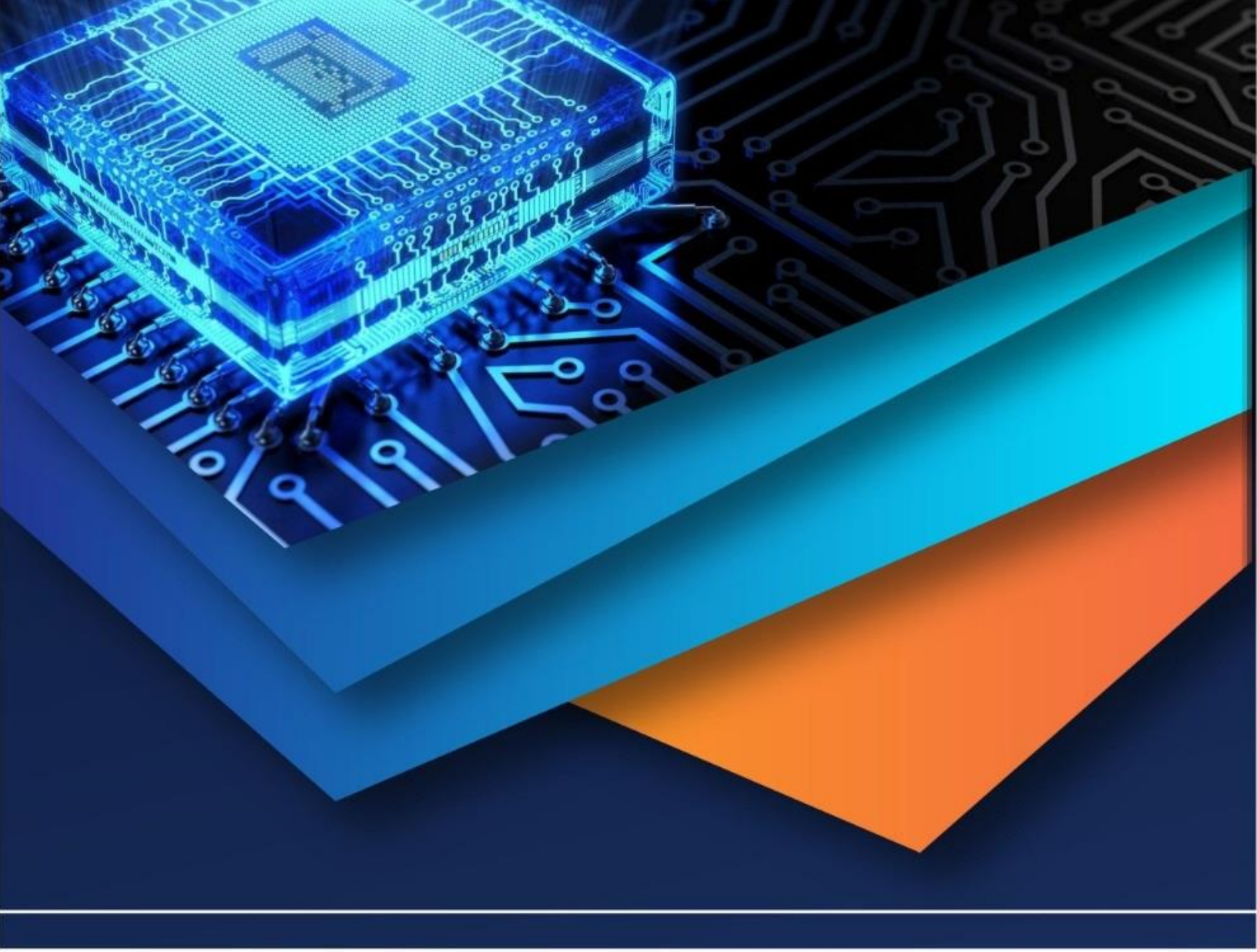
IV. CONCLUSION

Multiple choice questions of fill in the blank type and analogous type were successfully generated. Questions of good standard were produced with reasonably high accuracy (higher compared with the existing models). Evaluation is essential in the teaching-learning process and MCQs are popular for educational assessment. This system established of six broadly classified dependent phases, namely, pre-processing, sentence selection, key selection, question formation, distracter generation, and post processing.

REFERENCES

[1] A Taxonomy of Questions for Question Generation. Centre for Computational Language and Education Research, University of Colorado, Boulder Rodney. Nielsen@Colorado.edu March 2014.
[2] Optimizing the Correction of MCQ test answer sheets using Digital Image Processing
[3] Literature review of automatic question generation systems .School of Science, RK University **Associate Professor, College of Agricultural Information Technology. January 2015
[4] Ontology-Based Multiple Choice Question Generation. Received: 15 May 2015 / Accepted: 5 October 2015 / Published online: 17 November 2015
[5] Nlp module for bulgarian text processing .international conference on innovations in science and education 22- 24, 2017.
[6] Effect of patient reminder/recall interventions on immunization rates: A review. By Szilagyi PG1, Bordley C, Vann JC, Chelminski A, Kraus RM, Margolis PA, Rodewald LE
[7] Shah, M. P., Kamble, P. A., &Agnihotri, S. B. (2016). Tackling child malnutrition: An innovative approach for training health workers using ICT a pilot study. 2016 IEEE Region 10 Humanitarian Technology Conference (R10-HTC).

©IJRASET: All Rights are Reserved



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)