UNIVERSITI TEKNOLOGI MARA

DEVELOPMENT OF EXAMINATION QUESTION CLASSIFICATION TOOL FOR SECONDARY SCHOOL

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MScIT

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ABSTRACT

Formalized learning is closely associated with assessment because assessment is used as a measure for student level of competency. Similarly, examination is used in many learning institutions for educator to know student current academic progress as well as his subsequent learning. Therefore, it is important for examination question to adhere to established standards. This entails examination question being aligned to the learning objectives and classified based on its complexity level according to Bloom's taxonomy. A case study conducted in SMK Convent Kajang reveals that for secondary school in Selangor, currently, there is no means to ensure examination question fulfils the criteria in the Test Specification Table (TST). There is no monitoring to oversee the appropriate use of the guideline and it is utilized at the teacher's discretion. The teacher is assumed to have sufficient knowledge on TST as there is no streamlined use of the guideline. Hence, this project proposes an examination question classification tool to facilitate the process of preparing the question. Natural Language Processing (NLP) is used to classify multiple choice examination questions for Physics subject. The significance of this project is that it aids the teacher in devising sound examination question and consequently adheres to criteria and requirements through a standardized use of the TST. Future work for the examination question classification tool include classifying a wider range of question types such as open ended and true/false questions, as well as provision of training data for the classification engine to become more robust.

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