

AUTOMATED QUESTION GENERATION USING NLP

ABSTRACT

It is important for students to be experts in their field of study and preparation of high-standard questions encourages students' thinking ability. Manual question generation like worksheets and quizzes is not scalable for online transformation and leads to increased workload on teachers. As the pattern of assessment is majorly shifting towards multiple-choice-questions, fill-ups, Boolean questions, etc., it has become very hard to construct and requires a considerable amount of time for setting numerous questions. To cope-up with this, it is very important to build a time-efficient automated question generation system. In this proposed system, we use NLP techniques to generate questions. NLP is a natural language processing technique that makes it possible for computers to read the text and set questions and therefore provide answers to the question generated. Text of any domain is provided as input to the system which is summarized using the BERT algorithm and T5 model. BERT (Bidirectional Encoder Representation from Transformers) is a deep-learning technique for NLP. The T5 (Text-To-Text Transfer Transformer) uses a text-to-text approach where the input and output are always text strings. Keywords are generated using Python Keyword Extractor (PKE) and distractors are created using the Wordnet approach. Wordnet is an API used to get the correct sense of the word so that good and relatable distractors are generated. This system solves the problem of the manual creation of questions and reduces time consumption.

Internal Guide

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