INFORMATICS INSTITUTE OF TECHNOLOGY

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Informatics Institute of Technology
Department of Computing
BEng. (Hons) in Software Engineering
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Project Report
For

An Intelligent learning system with automated questions and automated text summaries.

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Abstract

Text summarization is basically shortening a text content and it is a very time-saving activity, especially among students who are busy with their work. A system that generates a summary for given texts is proposed with a feature of generating multiple choice questions which will help to students who are studying for exams. Moreover, the ability to summarize Sinhala texts was also added to the system. There are some existing works already available, but most of those have used unsupervised technologies.

For the proposed system implementation, a supervised learning methodology is used with the LSTM algorithm. The ability to summarize in both different languages has handles with the same model. As the main language python is used and for the UI implementation flask is used. A dataset of 500 records has been used to train the implemented modes and achieved an accuracy of 72.12%. Using evaluators from various fields to evaluate and test results, complete testing standards ensure that the project is fully and effectively driven to the appropriate levels.
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Keywords; Natural Language Process, Neural Network, LSTM, Text Summarization, Automatic MCQ Generation