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A Smart Learning System utilizing Automatic Text Summarization and
Automatic Question Generation

A dissertation by

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Abstract

Living in an Information Age we have witnessed the continuous evolution of World Wide Web throughout the past years. The availability of increasing amounts of electronic information resources has influenced the field of education and hence has made the current student learning system more interactive, effective and efficient. But this has ultimately led to the problem of information overload where students cannot process the growing loads of learning material they receive in different formats, and face problems in keeping up with their busy schedules at the same time. Due to this and poor time management skills the modern-day students are burdened with a strict schedule to manage both their academic and non-academic activities. In order to solve this problem a smart learning system is suggested which uses a novel approach in Automatic Text Summarization and Automatic Question Generation. Sentence simplification, a common approach for both of the above research areas is identified for this. The problem is addressed to schooling students following the subject History.

With the evaluation of evaluators from various domains and the test results gained from a thorough testing criteria it has been attested that the project has been carried out in a comprehensive and efficient manner meeting the desired levels of expectations.

Subject Descriptors: I.2.7 Natural Language Processing

Key Words: Automatic Text Summarization, Automatic Question Generation, Natural Language Processing, Natural Language Generation, Sentence Simplification, Smart Learning System