ABSTRACT

AUTOMATIC EXAMINATION SYSTEM FOR ESSAY ANSWER USING RABIN KARP METHOD WITH STEMMING AND SYNONYM RECOGNITION FOR DEVELOPMENT LEARNING MANAGEMENT SYSTEM OF SMAN 2 TASIKMALAYA

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SMAN 2 Tasikmalaya is one of the schools that have used information technology in education using online examination system. Exam is one form of evaluation is needed in each learning process. Based on the type, the test can be done with a multiple choice test and an essay exam. At SMAN 2 Tasikmalaya, in the form of a multiple choice test is a type of test that is often used in the test online, the reason is the easiness in correction and assessment process. For essay exams still done manually, so in practice the test must be carried out in the classroom, and in the assessment process requires enough time because the inspection process is done manually, besides the results are sometimes less objective assessment.

The automatic examination system for essay answer is an application built using Rabin Karp method with stemming and synonym recognition. Rabin Karp method is a method that uses a matching string hash function as a comparison between the search string with the string in the text. In this system, the method Rabin Karp will find the value of the percentage of similarity between the students' answers with the answer key previously exist in the system. This application is built with the aim of helping teachers to give essay tests and correcting essay automatically.

Application testing done using whitebox and blackbox testing. Based on test results, there is no fault functionality and logic flow in the system, and the output of the inspection system essay using Rabin Karp is the value of similarity between the students' answers with the answer key. In addition, based on research using questionnaires, the average scores of each answer agreed that this application can be used to assist in providing essay exam and make the process of correcting answers automatically.

Keywords: *rabin karp, automatic examination, automatic assessment, essay answer*