

ABSTRACT

Plagiarism is a serious problem in education because most of the perpetrators of acts of plagiarism in Indonesia come from educated people such as school and university students. Prevention of plagiarism of text documents can be done by creating a plagiarism detection system. The system will be more effective and efficient because it runs on the computer instead of manually, so it can examine several documents at once. Smith-Waterman algorithm is a classical method to compare two strings to identify the similarities in both. This algorithm was originally developed in the field of bioinformatics and are now starting to be implemented in computer programming that can be selected to build a plagiarism detection system. The author will build a plagiarism detection system using the Smith-Waterman algorithm with Arifin and Setiono stemming algorithm. Arifin and Setiono algorithm use a dictionary in search of root words in Indonesian and features a combination of feedback to overcome overstemming.

Keywords: Plagiarism, String-matching, Smith-Waterman, Preprocessing, Stemming, Arifin dan Setiono.