IMPLEMENTATION OF ALGORITHMS SMITH-WATERMAN IN APPLICATION DEVELOPMENT EARLY DETECTION PRESUMPTION OF PLAGIARISM ON COLLEGE STUDENT ASSIGNMENT IN DEPARTMENT OF ELECTRICAL ENGINEERING AT A STATE UNIVERSITY JAKARTA

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ABSTRACT

Plagiarism or falsification of the results of other people's work can be done by anyone, of course, it is very adverse the original author. At the Department of Electrical Engineering, State University of Jakarta conducted a study that aims to develop the initial allegations of plagiarism detection application using the Smith-Waterman algorithm on student assignments. With this application is expected to assist faculty in identifying the initial allegations of plagiarism in student assignment. The study was conducted in the laboratory Department of Electrical Engineering, Faculty of Engineering, State University of Jakarta from October 2014 through January 2015. Applications initial allegations of plagiarism detection works by comparing the similarity of the text contents of the entire document by using the Smith-Waterman algorithm. The results to be obtained by the user is in the form of percentage similarity of the documents that have been compared. This application has been implemented on the task of web design and e-commerce with a number of 26 documents.In comparison web design task manual calculation by calculation using an application that is considered similar to the manual calculation percentage between 58% -94% while on duty e-commerce documents are considered to be similar to the manual calculation has a percentage between 50% -85%.The results of the comparison between the Smith-Waterman algorithm with Jaro-Winkler distance algorithm shows that most of the Jaro-Winkler algorithm greater distance than the Smith-Waterman algorithm can be taken from the highest value JW 86.43% and 85.56% SW.