ABSTRACT

Only some applications that are built are successful once the client uses them. This problem occurs because there is an inconsistency between applications built with the client's needs, especially in the Software Requirements Specification (SRS) document as the reference data for software development. These losses can be avoided by implementing consistency in the contents of the SRS document. Therefore, before application development, the SRS document consistency process is crucial to match the client's needs and the developer's understanding of developing software. This study aims to propose recommendations for fixing artifacts based on the lowest value of consistency between Step Performed and Sequence Diagrams through a text-mining approach. The results of the validation and reliability tests using Gwet's AC1 formula through the Python programming language produced a Kappa Score of 0.500000, while through expert questionnaires of 0.159998. Based on the comparison of artifact consistency calculations, recommendations for fixing artifacts were made for the lowest consistency measurement values in the comparison of SP09 (d9) with SD09 (d23), which had a value of 0.840124.

Keywords: Extraction, Step Performed, Use Case Description, Consistency, Sequence Diagram, Text Mining