Abstract

Abstract— The SRS used in this study is an application called "Sipjabs". This application processes data regarding the position of human resources to meet the needs of a company. This research aims to implement semantic textual similarity in software requirements specification through functional requirements with use case diagrams using the Wu Palmer (WUP) method in finding semantics. This research method is presented in a flow chart consisting of three main activities: research object analysis, semantic textual similarity, and validity and reliability testing. In this research, an extraction process for the Requirement Specification has been produced, divided into five documents: FR01, FR02, FR03, FR04, FR05. Then the steps performed in the use case description are divided into UD01, UD02, UD03, UD04, UD05. The highest similarity value is found in documents UD03 and FR03, where the number of similarities is 0.626640. In addition, the highest score of the sentence that has been calculated using the Wu Palmer concept is 0.8000, which is found in the words "page" and "user". The highest kappa value with Gwet's AC1 formula is 0.02547770700636931, which means "Fair Agreement". For the results of the calculation of the questionnaire filled in by the expert, namely 0.82022, which means "Almost Perfect". Keywords— Semantic Textual Similarity, Requirement Specification, Use Case Description.