I. INTRODUCTION

Software development activities require software requirements specifications (SRS) documents. The SRS document was created from the analysis results in software development, then directed to develop software modeling through the unified modeling language (UML) artifact. [1] [2].

UML is a language for visualizing a software system basedon Object-Oriented [3]. 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 textualsimilarity in software requirements specification through functional requirements with use case diagrams using the WuPalmer (WUP) method in finding semantics. So that the completeness of the SRS document is created because who can identify missed requirements and software developmentwill be of high quality.

This research has the following contributions andnovelties:

- Determine the semantic similarity in the software requirements specification (SRS) using the WUP method.
- Processing the extraction contained in the WUP resultswith the software requirements specification (SRS).
- Determine the results of the similarity of the software requirements specification (SRS) through text mining.
- Implement validation tests by applying Gwet's AC1 calculations.

Implementation of Semantic Text Similarity in validatingthrough the reliability of Gwet's AC1 [4]. The process will bemeasured using the WS4J semantic similarity. The WS4J application can measure semantic similarity between words and between sentences. This semantic measurement is carriedout through the depth of the two synsets in the Wordnet taxonomy using the WUP formula. [5]. The next step is to calculate the value of the word similarity matrix with the weight value of each criterion to determine sentence similarity, which can be used as evidence that the developer has carried out software requirements analysis [6] so that thefunctional requirements (FR) and use case descriptions contain the same content. Same. To search for textual semantics using the Wu Palmer (WUP) method, assign a score from 0 to 1 [7]. Below is an example explaining the differencebetween FR and use case description. See Table I.

TABLE I. DIFFERENCE FUNGSIONAL REQUIREMENT AND USE CASE DESCRIPTION

Functional Requirement on Requirement Specification	Step Performed on Use Case Description
1. Admin must manage employee data. 2. Etc.	1. Admin goes to the employee data page. 2. The system will display the employee data page. 3. Admin manages employee data. 4. Etc.