ANNISSA ZAHARA. The development of adjective word graph dictionary module in BogorDelftConstruct. Supervised by SRI NURDIATI.

One of natural language processing methods that represents the result of semantic analysis of a text in a graph form is Knowledge Graph (KG). Until now, there are only a few researches using KG to do semantic analysis for texts in Indonesian language. Those researches were mainly focus on analyzing text, constructing rules to analyze text and engineering to understand the text. Some other researches have done semantic analysis from various part-of-speech. Nevertheless, the results of the research have not been implemented yet. To realize a long term goal of doing text abstraction automatically, BogorDelftConstruct has been developed as an early stage. In line with that, this research implemented semantic analysis for one part-of-speech in BogorDelftConstruct.

The objective of the research is to develop an adjective word graph dictionary module in BogorDelftConstruct system. The adjective to be analyzed have 19 word graph patterns formed by affixation. Process of forming word graph started by getting root word and affix that contained in input word using stemming based on Kamus Besar Bahasa Indonesia (KBBI). Root word is used to search part-of-speech in KBBI. Part-of-speech of root word and affix is used as parameter to determine which pattern of adjective word graph that is appropriate. The appropriate pattern which contains the meaning of the word is generated in the system. The process of determining the appropriate pattern can be considered as a testing stage.

In this module, from 19 patterns of adjective word graph, only 18 patterns that can be identified. A pattern of adjective word graph that unidentified is me-kata benda-kan. Adjective word graph me-kata dasar-kan and me-kata benda-kan have a similar former affix. Because of that, the system was not able to distinguish the two patterns. From 250 input words which used in testing module, there were 13 errors which resulted in accuracy of 94.80%. The occurrences of the error, was due to incapability of stemming function to produce intended root word and the uncompleteness of KBBI.

Keyword : adjective word graph, Knowledge Graph, stemming, Kamus Besar Bahasa Indonesia (KBBI).