ABSTRACT

BENEDIKA FERDIAN HUTABARAT. Phrase word graph module in BogorDelftConstruct. Supervised by SRI NURDIATI.

BogorDelftConStruct is the first KG application developed in Indonesia using MATLAB. 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 this research is to develop a phrase word graph module in BogorDelftConstruct system. The phrase has 40 word graph patterns formed by affixation. The process of forming word graph starts by acquiring root word and affix within 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 are used as parameters to determine which pattern of phrase word graph 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 40 patterns of phrase word graph, all of them can be identified according to the results of testing for patterns of phrase word graph module with a total of 265 tested phrases.

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