## **Abstract**

In the construction of Indonesian wordNet, synonym set is one part of wordNet development which is a collection of words that represent a meaning. The synonym sets built from the Indonesian Language Thesaurus produced by the Language Center with the extraction process from the Indonesian Language Thesaurus found several synonym sets that have word sense in each word. The difference between WordNet and language dictionaries in general is that language dictionaries focus on words while WordNet focuses on the meaning of words which are then clustered to find a better synonym set. Therefore, the Hierarchical Clustering method is used to group synonym sets that are similar based on similarity and distance value. Synonym sets that have gone through the clustering process can be used as one of the development of lexical databases. The main results of this study are a collection of synonyms that have gone through the clustering process and the accuracy value has been calculated.

Keywords: WordNet, Hierarchical Clustering, Indonesian Thesaurus, Word Sense