

Abstract

WordNet is a lexical database for languages, the difference between WordNet and dictionaries in general is that WordNet focuses on the synonyms. The main unit of WordNet is synonym set (synset), synset is a set of one or more words that have the same meaning and certainly can be replaced in certain contexts. Synset is a very important element in implementing WordNet. In this paper, an analysis of the synonym extraction process is carried out by using commutative approach, the data test obtained from the *Oxford Paperback Thesaurus* by taking 50 word entries. Commutative method has similar characters with synonym set, synonym set can replace each other in certain contexts. The data test extraction process is carried out until the performance measurement evaluation process using *FIScore*. The system generates synonym sets that matched with the manual extraction, the result of *FIScore* between the program and Princeton synonym sets are worth 10%. The *FIScore* is very low because of the data test sources factor, the gap in the year of publishing sources is quite far and English is always evolving to adjust time.

Keywords: commutative, thesaurus, wordnet, synonym.