Abstract

Information retrieval system is a system used to find relevant informations from a collection of information based on a query that a user need. A System information retireval is said to be ideal when the system can find only the relevan document in its search. But usually there are terms used in a document and query that has a lots of morphological variants that made the terms such as ”*compute*”, “*computing*” and “*computation*” are not equivalent to the system.

Stemming technic is implemented in an information retrieval system to change the morphological variant *term*s into a form of term which is equivalent to the system. Beside that stemming can also reduce the size of the index file. In this final project we implemented a stemming technic using STANS algorithm in an information retrieval system.

STANS algorithm is one of the affix removal stemmer technic that is formed from the modification of porter's stemming. In this final project we analyzed the effect of implementing stemming using STANS algorithm. The result of the research is that stemming can reduce the terms that brings the effect of reducing the index file size. In the perspective of the system's performance we can said that the implementation of STANS algorithm is better than Porter's based on the result of precision, IAP, and non IAP that shows an increment without reducing the result of the recall.

Keywords : information retrieval system, stemming, STANS algorithm