

## Abstract

Information Retrieval system used to recover information relevant to the needs of users from a collection of information automatically. The desired information represented in the form of query, And contains one or more terms that will be used in the search.

An Information Retrieval system, is called ideal if the system can finds all relevant documents and it finds the relevant documents only. However, the terms contained in documents and in queries often have many morphological variants, so that couples which have a different term would not be considered equivalent to the system.

In the context of Information Retrieval, stemming can be used to limit the different variants of word forms into basic form, so that later can upgrade the system in finding relevant documents based on existing query. In this final project developed an information retrieval system that implements the technique using a Porter and Dawson stemming algorithm.

Porter stemmer is the removal algorithm morphological and inflectional endings from English common and consists of a set of conditions or rules action. Dawson Stemmer stated that the most desirable form of context-sensitive rule is a form that can be generalized to apply in various situations. In this final project will be carried out comparative analysis of the algorithms are at the Information Retrieval system.

Keywords : *Information Retrieval System, stemming, Dawson algorithm, Porter algorithm*