

## Abstract

Stemming in Information Retrieval system is used to limit the different variant forms of the word into its basic form, so that later may improve the ability of the system in finding relevant documents according to existing queries. Information retrieval system is said to be ideal if it can find relevant information only. Terms that exist in the query or the collection of information has many morphological variants so that terms which have a different form will not be deemed equivalent by the system. In this thesis, created an Information retrieval system that implements a stemming technique using the algorithm and the algorithm Nazief & Adriani Sembok Ahmad Yusoff.

Nazief&Adriani algorithm and the algorithm is an algorithm Ahmad Yusoff Sembok stemming for Indonesian language text. The second difference of this algorithm is in the process of removal imbuannya (affixes). For Algorithm Nazief & Adriani, affixes removal process performed on the suffix (suffixes) in advance. While the algorithm is the removal of affixes Ahmad Yusoff Sembok first performed on the prefix (prefixes).

In this final analysis was performed using the influence of the application of stemming algorithms and algorithms Nazief & Adriani Sembok Ahmad Yusoff. The results showed that the system is able to reduce the term stemming generated so as to reduce the size of the index. From the standpoint of system performance, to say the application of the algorithm Nazief & Adriani more better than algorithm Ahmad Yusoff Sembok recall where the value is always greater than the value of precision and recall values in the algorithm Nazief & Adriani greater than the value of a recall on Ahmad Yusoff Sembok algorithm.

**Keywords :** *Information Retrieval, Stemming, Algoritma Nazief&Adriani algorithm, Ahmad Yusoff Sembok algorithm*