## ABSTRACT

Document Editing is an exhausting job because it demands high rates observation and thoroughly examination. This leads to an idea of creating an Indonesian Document Software Editor which can help an editor's work.

Indonesian document Software Editor needs an intelligence dictionary that can determine class of word like adverb, adjective, noun, etc from a word both the stem and the derivative words. The input for this intelligence dictionary is a word and it gives class of the word as a result. Intelligence Dictionary consist of three parts : words component (affixes and suffixes, stem word, class of stem word and class of word) determination, stem word dictionary management, and knowledge base management. B<sup>+</sup>tree file is used for maintaining the knowledge base data and stem word dictionary data to gain fastest access. By inference machine within it, the intelligence dictionary can determine class of word from derived words.

Morphological Analysis is one of Natural Language Processing process. The Intelligence Dictionary do the Morphological Analysis to determine affixes and stem word of a word. And then it will determine class of word based on the affixation rule in the Knowlege Base.

In this final project the writer implement the Intelligence Dictionary, do a test and analyze the result wether it gives the correct output based on Kamus Besar Bahasa Indonesia. The Intelligence Dictionary is hopefully can support the development of Indonesia Document Software Editor.

## Keywords : Natural Language Processing, Morfology, Software Editor.