Abstract

Written exam is the common type of exam to measure student's learning achievement, from Elementary School, Junior High School and Senior High School. The difficulty level of the exam may vary from one question to another, so that the exam result could be analyzed further by observing in which difficulty students can or cannot answer correctly. Bloom's Taxonomy has a cognitive domain that can be used as reference for determining the exam questions' difficulty. The cognitive domain has 6 different classes which in order of them are remember, understand, apply, analyze, evaluate, create. This final project aims to do a classification of exam questions into 6 classes of Bloom's Taxonomy cognitive field. The data used will be a text in Bahasa Indonesia from Elementary School, Junior High School and Senior High School. Methods used in this final project are Support Vector Machine and Naive Bayes, since both are proven in previous study to perform well in the same task. As for the feature extraction, this final project will be using TF-IDF that has been modified based on weight value from POS Tag. Such feature extraction method is already proven in previous study to perform better than the regular TF-IDF.

Keywords: Bloom Taxonomy, Support Vector Machine, Naïve Bayes, TF-IDF