Abstract

Al-Qur'an is the words from Allah SWT which became the holy book as well as guidance for Muslims around the world. Each verse of the Qur'an contains meaning and wisdom that can usually be classified into more than one topic of discussion. In this Final Project will raise the issue of classification of Qur'anic topics that can be classified into more than one discussion as a multi-label classification problem, then this Final Project will produce a system that can receive input in the form of translations of the verses of the Qur'an in English and providing output in the form of topics classes contained in the verse. The system will be developed using the Multinomial Naïve Bayes classification method, with several stages of preprocessing data such as case folding, tokenization, and stemming. And also by using bag of words as feature extraction method. The best result from testing provide a 0.1247 hamming loss value.

Keywords: Al-Qur'an, multi-label classification, multinomial naïve bayes, hamming loss