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## **Abstract**

**Hadith is everything that is attributed to the Prophet Muhammad either in the form of words, works or attitudes. Hadith is the second life guide for Muslims after the Qur'an. As a way of life, Muslims are strongly required to visit the Hadith. Categorizing the Hadith is one of many way to ease people learn Hadith. This study aims to make a classification of the Hadith. The hadith used is the Imam Bukhari Sahih Hadith. The classification carried out is a multi label classification. The class used is a class of recommendations, prohibitions and information. Feature extraction used is N-Gram with a value of  $n = 1$  (unigram) and  $n = 2$  (bigram). While the feature selection used is TF-IDF. For classification method used is the k-NN method. The trial scenario is done by trying several k values on k-NN, the threshold on df (document frequency) for calculating TF-IDF and do some changed at the preprocessing stage. To get a reliable evaluation result, cross validation used. Evaluation of the system that has been built, it is calculated using the F1-score. Based on some of experiments conducted, the best F1-score was 0.853. These results indicate that the k-NN method is better than the ANN method and the baseline method in the multi label hadith classification.**

**Keywords: Multi label classification, Hadith, kNN, TF-IDF, N-gram**