

## **Abstract**

Beyond the information contained in the Qur'an, it will be difficult to bring up the information manually, anyone who wants to know more deeply related to the Qur'an. Therefore, there is a need to find information relevant to those already classified in the Qur'an, especially in one verse of the Qur'an may have more than one topic (multilabel). This research examined how to build classifier to solving multilabel problems on Qur'anic topic topic with k-Nearest Neighbor method. In this research, there is a comparison between feature extraction, Weighted TF-IDF and TF-IDF. The result of that comparison is that Weighed TF-IDF has better performance compared to normal TF-IDF. The highest result by finding the most optimal k score is k=25 with the average score of hamming loss = 0.134875. There will be a test to measure the effect of stopword removal and lemmatization with optimal k value, for a case without stopword removal, the result is 0.136375, whereas without the lemmatization the result is 0.13537. For not using stopword removal and lemmatization the average hamming loss is 0.1373125.

**Keywords:** Qur'an, classification, multilabel, KNN, hamming loss