Abstract—Islamic question-and-answer (Q&A) websites are available as platforms for sharing and learning about Islam. Different Islamic Q&A websites usually shares similar Q&A topics that have been frequently asked by Islamic learners. However, due to a large number of Q&A entries in such websites, manual topic classification would be costly and time consuming. The objectives of this research are to develop a classification system for Islamic Q&A topics and analyze the vocabulary words that affect the classification results. To achieve these objectives, well-known supervised learning methods that have been previously implemented to classify Islamic texts are utilized, namely K-Nearest Neighbor (K-NN), Support Vector Machine (SVM), Multinomial Naive Bayes (MNB), and Multinomial Logistic Regression (MLR). In this research, these classifiers are evaluated in classifying Islamic Q&A entries. The evaluation finds that the SVM achieves the best accuracy and Hamming loss at 79.8 percent and 0.202, respectively. This research also finds that the relevant or specific vocabulary from a class can improve the classification system's ability to predict correctly and vice versa.

Keywords—Topic Classification, Islamic Question and Answer, Supervised Learning, Vocabulary Words