Abstract

Hadith is one of Islamic's source beside the Qur'an which contains words and actions narrated by the Prophet SAW. There are so Prophet SAW's friends who followed his journey and had an important role in spreading Islam. There are still many people who do not know and have difficult time to finding the names of the friends who participated in the Prophet SAW's journey. Therefore, this research will make an indexing of the names that appear in the nine narrators' hadith collections. This indexing names uses Named Entity Recognition (NER) because indexing names only need entities in the form of people names. To make indexing names in hadith collections, this research will be use Hidden Markov Model (HMM) as a method. HMM is very often used in previous research and often gets quite good performance scores. Using the HMM's method and using several combinations of features, the system has a pretty good performance by counting recall, precision and F-1 for by calculating this performance. The values of performance were obtained using HMM's method are 86%. But by using cross validation based on the parameters, the performance values increase 2%, which means that the performance in this research is quite good for 38.102 data hadith.