Abstract

Finding Arabic texts in the Quran that have many verses and differences in language with Indonesian raises its own difficulties for verse searching by Muslim communities. A phonetic-based verse-seeking system is needed which allows the user to search for verses using Latin aphabet that represents the user's pronunciation sound. For example, if searched for the word الْحَمْدُ لِلَهِ

then the system will display all the verses that have similar sounds with the keywords. For now, there is already a Quran verse search system using phonetic string matching, but limited to finding only one verses based on query. Then if searched for words across verses

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by matching the string in the database, The system cannot provide the results of the search for two verses at once. Cross-paragraph search is needed because users don't necessarily know whether query is used in one verse or more. Therefore, a Quran verse search system was built based on phonetic similarities which can pass verses. The N-gram algorithm in the form of trigram is used to find verses that have phonetic similarities because they have high Mean Average Precision (MAP) for long keywords. To search across verses, the next five verse's trigrams are added to the end of the current verse's trigram. And as the results, MAP value is 0.9 and Recall is 0.93.