ABSTRACT

Al-Quran is a way of life for Moslems. Al-Quran translation is available on database website server. It will facilitate user to search verses of Al-Quran in Latin language.

The Latin words search in the Al-Quran using Exact String Matching has been widely used before. As well as searching word in the Al-Quran by using Arab language. If the words had been input incorrectly (Inexact String Matching) then the word in Al-Quran would not be found in the databases.

To cater this issue, the system of string matching identifier based on similar pronunciation (Phonetic String Matching) would then be used with algorithm of caverphone 2.0 and Dice Similarity. Caverphone 2.0 searched phonetic code and dice similarity searched the level of word similarity. Dice Similarity Coefficient searched level of similarity between two words.

The search of Al-Quran verses in Latin based on Phonetic String Matching using the algorithm of Caverphone earns 76.5% for precision value and 100% for recall value. Similarity calculation between two strings using Dice Similarity algorithm earns correlation value of 80 %.

Key Words: Caverphone, Phonetic String Matching, Exact String Matching, dice similarity, Al-Quran, Inexact String Matching