

Abstract

The Quran search system is a search system that was built to make it easier for Indonesians to find a verse with text by Indonesian pronunciation, this is a solution for users who have difficulty writing or typing Arabic characters. Quran search system with phonetic similarity can make it easier for Indonesian Muslims to find a particular verse. Lafzi was one of the systems that developed the search, then Lafzi was further developed under the name Lafzi+. The Lafzi+ system can handle searches with typo queries but there are still fewer variations regarding typing error types. In this research Lafzi++, improvements in the development of typographical error types were carried out by applying typo correction using the autocomplete method to correct incorrect queries and Damerau-Levenshtein distance to calculate the edit distance so that the system can provide query suggestions when a user mistypes a search, either in the form of substitution, insertion, deletion, or transposition and users can also easily search because they use Latin characters according to pronunciation in Indonesia. Based on the evaluation results it is known that the system can develop better, this can be seen from the accuracy value in each query that is tested can surpass the accuracy of the previous system, by getting the highest recall of 96.20% and the highest Mean Average Precision (MAP) reaching 90.69%. The Lafzi++ system can improve on the previous system.

Keywords: Quran, Damerau-Levenshtein distance, phonetic similarity, typographical error, autocomplete