ABSTRACT

UTIS SUTISNA. Spelling Correction for Indonesian Query using Damerau Levenshtein Algorithm. Under the supervision of JULIO ADISANTOSO.

Query spelling on search engine is important to improve the quality information searching result. When user types query for search engine input, sometime spelling mistakes occurred due to position of keyboard and finger movement while typing. As an effect, searching result is incorrect and when user misspells the query, information obtained will not succeed. Therefore, search engine requires an application of spelling corrections. This research proposes correction process for query spelling by giving words suggestions which are obtained by calculating edit distance for each corrected word towards every word in dictionary. The concept for calculating edit distance uses Damerau Levenshtein algorithm which consists of 4 operations: (1) insertion, (2) substitution, (3) deletion, and (4) transposition. This research shows that implementation of Damerau Levenshtein algorithm is able to increase recall-precision value in information retrieval system. It is shown by the increasing of average recall-precision value at 44.82% after correction.

Keywords : Damerau Levenshtein, Algoritme Damerau Levenshtein Metric, edit distance