

ABSTRACT

THE IMPLEMENTATION OF SOUNDEX ALGORITHM ON DATA LIBRARY BOOKS SEARCH APPLICATION

Data library books searching currently supported with the existence of information system. Information system aims to overcome the difficulty of manually searching especially for many collections of library books. Although it has helped the searching process, information system need right keywords to find data whom search. This should be matters for find english literature because pronunciation and writing mostly different. So that typing errors may result a failure.

An application with phonetic string matching algorithm such as Soundex is expected to handle possible typing errors. Soundex transforms word into code based on pronunciation, so typing errors can be overcome as long as both of compared strings are considered similiar.

This application was not only built using the Soundex algorithm. The methodology used in the development of this system is waterfall model and Visual Basic 2010 programming language and MySql as its database. The first searching trial by title resulted in 0.5159 precision rate and accuracy rate of 89.85%, while the second trial resulted 0,7545 precision rate and 97.63% accuracy rate.

Keywords : String matching, Soundex, Visual Basic 2010, MySql.