

## Abstract

On matching several strings, it is better to choose an easy and simple algorithm that generates the optimal solution and ensures the satisfaction of the users. Strings can be considered equal or alike if they have similarity, whether it is based on the similarity in writing or pronunciation. When we match strings based on the pronunciation, there are several algorithms that can be used. They are Soundex algorithm and Doublemetaphone algorithm. However, these two algorithm cannot produce optimal solution when comparing strings of people's names in Bahasa Indonesia. This is because the algorithm presented uses the English spelling method. Other than that, the other problem on using these algorithm is the use of old spelling that is still applied on names of Indonesian people. These become the drawback of the algorithms, cause they cannot detect those old spelling name. To overcome those weaknesses, a solution is proposed to change the spelling method used on the Soundex and Doublemetaphone algorithm so that they can detect strings of people's name in Bahasa Indonesia. Moreover, an additional algorithm is used to detect old spelling in Bahasa Indonesia called as the Normalization step. As a result a modified algorithms will be constructed as to enhanced the functionality of the algorithm.

**Kata kunci** : string matching, soundex, doublemetaphone, spelling, normalization.