

PERFORMANCE ANALYSIS OF KNUTH-MORRIS-PRATT (KMP) AND BOYER MOORE ALGORITHMS ON MARITIME TERM SEARCHES

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Abstract

Maritime Affairs, as a field that is increasingly in demand and a major topic of conversation in society, presents its own challenges, especially in understanding specialized terms that often feel unfamiliar. This research has developed and tested the Maritime Dictionary Application as an effective solution in overcoming the obstacles of understanding these complex terms. The main focus of this research is the analysis of algorithm performance, particularly in comparing Boyer Moore and Knuth Morris Pratt algorithms, implemented in the context of the Maritime Dictionary App. The results show that the Maritime Dictionary Application allows users to search and understand various maritime terms quickly and accurately. The implementation of Boyer Moore algorithm proved to be more efficient in the context of this application compared to Knuth Morris Pratt algorithm. After the research, it was found that Boyer Moore algorithm is faster than Knuth Morris Pratt algorithm with a time difference of 20 ms, where Knuth Morris Pratt algorithm has an average speed of 25 ms and Boyer Moore 5ms. Thus, this application is expected to open the door for more individuals to get involved and contribute to the development and further understanding of important aspects in the maritime world.

Keyword : Boyer Moore ,Knuth Morris Pratt