ABSTRACT

Name : Jusuf Lutro Manullang

Student Number : 41515210037

Counsellor : Sukma Wardhana, S.Kom, M.Kom

Title : Application of Knuth Morris Pratt Algorithm For

Motorcycle Spare Parts Website Maranata Repair

Shop

In the era of information a lot of data is generated and recorded in various ways, however the text remains as main form in exchanging information so that text or string processing is very necessary. String matching is the process of finding one or more occurrences of strings (more commonly referred to as patterns) in the text, besides that it is an important subject in a broad text processing domain. With the amount of data generated it is necessary to have an algorithm for searching patterns for text (strings) to facilitate the search for string data. Several studies related to the Knuth-Morris-Pratt algorithm have been carried out in various fields including the music industry and so on. This study aims to implement the Knuth-Morris-Pratt (KMP) algorithm which facilitates text search especially on the Maranata Repair Shop e-commerce website. The method for pattern search in the Knuth-Morris-Pratt algorithm starts from the left sequence and then moves to the right besides that for the development of e-commerce websites The Maranata Repair Shop itself uses a waterfall. In this research, the Knuth-Morris-Pratt algorithm was successfully applied to the e-commerce website of the Maranata Repair Shop to look for patterns in the text and to facilitate data search for motorcycle spare parts.

Keywords:

text processing, string matching, knuth-morris-pratt (KMP), e-commerce, waterfall

