Abstract

Market Basket Analysis is a data mining technique to find product which purchased together in a transaction from transaction data. This information could be used by seller to increase profit, for example by place product which often be purchased together on near area, designing product catalogue, arranging product package.

This final assessment will implemented Frequent Pattern-Growth (FP-Growth) Algorithm and Apriori Algorithm to do market basket analysis. FP-Growth algorithm and Apriori algorithm could be used to determine data set with most appearance from data collection. Analysis which applied is comparing association rule produced by FP-Growth algorithm with association rule produced by Apriori algorithm, and time required to produce association rule. Apriori algorithm is an algorithm which often used for market basket analysis.

The result from test show that association rule from FP-Growth algorithm same with association rule from Apriori algorithma. Instead the time required by FP-Growth algorithm much less than time required by Apriori algorithm.

Keywords: *Market Basket Analysis*, *association rule*, *FP-Growth algorithm*, *Apriori algorithm*