

CHAPTER I

INTRODUCTION

1.1 Background

Data mining is a logical combination between knowledge of the data and statistical analysis, developed in a process that uses statistical techniques, mathematics, artificial intelligence and machine-learning. And data mining is used to extract and identify information useful for the various related knowledge of basic database.

Apriori algorithm is data retrieval algorithms associative rules to determine the relationship a combination of items. Association Rule done through the mechanism of calculating support and confidence of the relationship item. An association rule is said support interesting if the value is greater than the minimum support and confidence value is greater than the minimum confidence. Apriori algorithm is suitable to be applied when there are multiple relationships between items are analyzed, One of them could be applied in the field of promotion and marketing strategy determination.

In making these simulation algorithm apriori tries to analyze the sales transaction data by using several examples of items to find steps or problems in applying the promotion of goods or the determination of marketing strategy.

1.2 Scope

This simulation project created using HTML5 programming language, a programming language by adding jquery as a support in the process step. Apriori algorithm was used as the main algorithm using an array of data structures and random number. This project also uses Sqlite as a simple database that can be used mainly in the browser.

Problem Limitation on this project are:

- 1. Items name must be listed in the database.**
- 2. Input minimul support**

1.3 Objective

This simulation was made to seek a combination of item-sets to have a value which often arise in accordance with the criteria and the desired filter. The results of the simulation algorithm can be used to assist in getting the association rules from a transaction items.