ABSTRACT

Data mining is the process of analysing a set of data to obtain valuable information. The use of data mining has become common in society, especially in supporting business activities. For companies engaged in the sales sector such as showrooms, the data generated by each transaction. The increasing number of sales transactions will be ineffective if the data is not optimally utilised, and only ends up as data stored in data warehouses or records. Therefore, an application is needed that is able to process large volumes of data to produce meaningful information for users. Data mining applications, especially those using the Apriori algorithm, can be very helpful in data processing management as well as in analysing transaction data in the database. This system is able to process data for analysis in a certain period, such as month and year, and display the analysis results in the form of vehicle sales patterns. The analysis results are obtained after the system processes the data set by considering a predetermined confidence level. This level of confidence is determined through the minimum support and minimum confidence parameters. Thus, it is possible to identify the level of interrelationship between the products that have been sold, which in turn helps users in making better decisions. This application is built with object orientation, namely Unified Modelling Language (UML), Entity Relationship Diagram (ERD), and database storage using My Structure Query Languange (MySQL). The method used in designing application development is Software Development Life Cycle (SDLC). The testing technique uses Black Box testing. Making programme code using the CodeIgniter Framework with the Hypertext Preprocessor (PHP) language.

Keywords: Application, Data mining, Apriori algorithm