ABSTRACT

From year to year development of information systems increasing and data mining is a part of the information system. Data mining is the process of automatically searching useful information in large data storage. Data mining has one of several techniques of classification techniques, while the decision tree is one method of classification techniques that serve to map out alternatives in solving a problem. One algorithm that implements the method of decision tree classification algorithm is ID3 (Iterative Dichotomocer 3). By utilizing the data mining system specifically created algritma ID3 application design to predict the student's study is based on academic values. Process carried out by two pieces of data that is input training data and testing the data, the first step training process the data into a decision tree based on the calculation of gain and entropy. Of the tree is then created a rule which will then be used in the testing process based on data testing. The resulting output of the percentage predicted results of the algorithm are made in comparison with the data of the original study period. Tests carried out using different amount of training data.

Key words: Data Mining, Decision Tree, ID3 Algorithm