ABSTRACT

Intense competition in getting jobs require colleges produce graduates of quality and competitiveness. One of these qualities can be seen from the average period or longer studies of the students. This study uses data mining techniques in particular classification, ie the C4.5 algorithm to do a prediction of a study of college students, so it can be given early warning or early warning to students. Training data used is the alumni of Catholic University students Charitas Palembang Musi. C4.5 algorithms can be used to simplify the knowledge of the system so that the process of inference can be faster. The system will direct form of decision trees and rules form the knowledge base using the algorithm C4.5. This rule which will be the decision to predict a student's study time. Attributes that are used in this study is "GPA", "department", "driveway", "sex" and "hometown". This application is built using the programming language PHP: Hypertext Preprocessor and MySQL as the database. From the test results using 20 students alumni data obtained value of precision of 89.36%, recall of 97.67% and accuracy of 92%. This shows that the system has a good performance. With this test it can be concluded that the C4.5 algorithm can be applied to the case of the classification of the student alumni data to estimate a student's study time.

Keywords:
Study Time, Prediction, Data Mining, Classification, C4.5 algorithm.