

## **Abstract**

*ATM is a bank facility which enables customers to conduct banking business without serviced by a "teller" man. Bank should provides the best service to the customer either by guaranteeing ATM machines can always be used with no downtime. In this case, the author tries to implement the C5.0 Decision Tree classification to create predictive scheduling system that can be used by the bank to prevent downtime. In system design, starting with the raw data preprocessing to the train data and test data. The data then classified using C5.0 decision tree that each model produces a value of accuracy. Values of the highest accuracy is 93.25%. A model that has the highest accuracy be the best model , then that model is applied to new data to be used in making the prediction system .*

*Keywords: ATM, Bank, classification, C5.0, Prediction, Decision Tree*