ABSTRACT

Rupiah coins are legal tender throughout Indonesia. In an effort to raise awareness awareness about the importance of coin preservation, especially among students in boarding schools who tend to be less concerned because of the lack of education and motivation. education and motivation. This research develops an automatic coin savings system system based on IoT technology to increase students' interest in saving money in an efficient way. in an efficient way. Coin acceptor is designed to facilitate the use of coins, while Google Spreadsheets was chosen as a tool to store user data. for user data storage. RFID technology is also integrated to support multiuser usage, allowing easy access to savings from one place. place. The test results show that this IoT-based coin savings tool has high accuracy. Coin acceptor successfully reads 3 different types of coins with 100% accuracy, and the RFID sensor reads 10 consecutive cards with an accuracy of 92% and read alternately with 84.61% accuracy. And of the 10 recorded data transmissions, the total delay was 19.2 seconds, with an average delay per transmission of 1.92 seconds. The QoS quality in the test for 5 minutes 30 seconds showed a delay of 218.01 ms with an index 3 (good) and jitter of 218.00 ms with index 1 (bad). This research successfully designed an effective IoT-based coin savings tool for use in Islamic boarding schools. to be used in Islamic boarding schools, so as to increase the awareness and interest of students in preserving coins. students in preserving coins.

Keywords : *Coin acceptor, Google Spreadsheets, Coin, RFID, Money*