

ABSTRACT

During the pandemic, all levels of society are encouraged to maintain cleanliness from viruses that can stick to objects that are used daily. Provision of lockers in public places will reduce the entry of objects that are at risk of transmitting the virus. The use of metal locks on lockers has a high risk of being duplicated. RFID is used because each RFID has a unique chip code that can minimize duplication and is equipped with a password so that the locker is more secure. The locker system is made based on IoT using LoRa as a liaison between devices. The locker system is divided into three parts according to its function, namely users, administrators, and developers. Locker users can set their own passwords. The administrator functions as a place for user registration, checking the status of locker availability, selecting lockers to be used, monitoring locker usage and resetting lockers that have been used. Developers store all recorded data in a locker system. After performing locker device function testing, RFID registration, receiver gateway, sender gateway, RFID testing, series and ordinary circuit solenoid voltage, open solenoid delay series and ordinary circuit, password input test, and QoS delay and packet loss parameters, it can be concluded that locker system designed to work well.

Keywords: *locker, RFID, password, LoRa*