

## **Abstract**

Locker as a storage room needs a security system such as key for opening and closing the locker safely. Locker security system had been developed and increased to be looks like password, RFID system, and the latest is finger print. The usage of locker security system by finger print with one finger scanner for every locker will need more scanners for more lockers. This system will be not so efficient, need more energy resources and making the locker system will be higher cost. This research will apply locker security based on authentication centric system, using only one finger scanner for many lockers under supervision of the Security personnel. There are two models locker security problem. If authentication factor (key or biometric fingerprint) is being stolen or duplicated and being used by un-authorized person (P1). If user with ID not registered to this system performing an authentication (P2). This system has proven to anticipate security problems. Response time testing had been performed to this system with achievement of 1.87 second more than the other available system. Even though, the time different is still under tolerance with more increment of proposed security system. So, the proposed system could give more locker security, proven safe, cheaper and efficient.

**Keywords:** locker, finger print, authentication, centric system