

## ABSTRACT

In general safety doors of the house is used by people just use regular house door lock, where people have to open or lock the door of the house in the distance approaching and sometimes locks on the doors are still lagging behind due to negligent. This resulted in the door lock is still not safe. The reason for pushing me to create an innovation applied and gives more security than the door locks in general.

Innovation is realized by making the house through the door slot system control bluetooth. This tool does not need a key just use apps on android that is connected to the microcontroller through the circuit bluetooth control android application so that users can open or lock the doors with the remote distance range according to the bluetooth.

Authors make android application that has a way of working that is by pressing an image on android app then sends commands to the microcontroller block communication through bluetooth. At the command microcontroller block command is processed then proceed to block l298 as a relay driver to determine central lock open or lock. So the android app replaces the function of the door locks in general. Based on the results of the testing distance bluetooth connection in the hallway outside the room and as many as 550 times the experiment of the obtained results in the maximum distance alley room as far as 51 meters with 91.9% success percentage. While the maximum distance in the room as far as 41 meters with 90.3% and the percentage of success in the maximum distance as far as 38 meters outdoors with a success percentage of 89%. It can be concluded that the device was made to work well according to the design and implementation of door slot system with bluetooth controls.

Keywords: door locks, microcontroller, bluetooth, android