ABSTRACT

Parking space is something that is really needed in this day and age, where many people have used motorized vehicles for transportation especially in residential areas. As a result, many houses do not have enough parking space at home which causes owners to park their vehicles on the streets in housing which can also disturb other road users, because many of these housings do not escape the reach of crime where many vehicles are also lost due to many vehicles. parked outside the house in housing security in housing also cannot be a benchmark because there are some blind spots that thieves can use as an advantage.

Therefore, the author designed an automatic garage system that can be controlled remotely without any physical contact with the use of a device with the help of the Kodular application as a tool for controlling it with the help of bluetooth HC-06 as its connectivity. The user registers first which will be sent to the firebase database so that the user can log in with the data that has been registered in the firebase database and the user has entered the application to control this automatic garage system

The results obtained from this study are the system can sign up and log in with the help of the firebase database and applications with the help of bluetooth HC-06 which can control the servo at the entrance and exit of the garage and also the entrance and exit of people and can check the parking lot via the i2c LCD which available to be able to see how many parking spaces are available and can also find out how many people are out through the door and passing by.

Keywords: vehicle, residential, parking lot, Kodular, HC-06, Firebase, servo