

ABSTRACT

The purpose of this research is to build a better garage system and can be run automatically to replace conventional garage that was used on the general public. Commonly used conventional garage is very troublesome because it requires a lot more time just to open and close the garage door, not to mention the added difficulty of taking into account the distance between vehicles which wish to be included into the garage so they don't occur collisions with the back wall. Research methods that are used by the method of analysis and design and the author of the analysis results through the design stages of the next stages to be implemented. Results to be achieved in this research is the creation of smart garage systems that can help resolve problems in the automation of a car garage, makes it easy for users and the creation of a smart garage system more effective and efficient way to replace conventional garage which is commonly used at this time. The smart garage architecture uses a microcontroller, Arduino Uno R3 as a process, ultrasonic sensor as input devices and also, servo motor, buzzer and LCD as a tool output in smart garage that will be created.

Keywords : *Automation, Microcontroller, Arduino Uno R3, Car Garage, Vehicles*