Smart Door Lock System Using Bluetooth Based Android for Smartphone with Door Lock Keypad

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ABSTRACT

Nowadays, smartphone is one of the most important thing in life. Anywhere we go, we can see people used it very frequently. Mobile phone has various types, for example like android, iOS, windows and etc. Home security can be improved by using mobile phone to take care about out belonging. Home security systems are becoming increasingly safe with the features on mobile devices. In this project, the author want to develop mobile phone to communicate via Bluetooth with home door lock system. To open or close the door it depends on range of Bluetooth and the password that have been set. Arduino microcontroller will control all the hardware and software function. HC-05 Bluetooth module is connected to the Arduino UNO to link with the door lock application in the Android smartphone to command servo motor to control the movement of the door. This system is able to communicate with the door lock approximately thirty feet away from the Arduino UNO. Moreover the door lock also can be lock and unlock using the application in the smartphone just with a single pressed as the servo motor received the command from the application or keypad. Furthermore, the LCD indicator can successfully show the status of the door lock when the door open or close and the inserted password also shown on the LCD when the user use the door lock keypad.

KEYWORDS: Arduino UNO, Bluetooth, Android, Smartphone, Door Lock.

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