

Abstract

Theft is increasing lately. Theft is often the case makes homeowners are increasingly considering the level of security and threats that may occurs at home. Furthermore, home burglary occurs because theres is a change that provide the ease of theft one of the doors of the house in a state not locked. In this final task, built a prototype of which is controlled by a microcontroller-based applications on Android smartphone users and is equipped with ultrasonic sensors, PIR sensors, GSM/GPRS module, door lock solenoid, LED and buzzer. Users sending commands via SMS sent by application on user phone who then commands executed and the microcontroller sends an SMS through GSM/GPRS Module for giving system status after the system is given the command by user. PIS sensor is used to detect movement in front of the door. While there is movement, the system will send notification to mobile users and the environment around the home by activating buzzer and LED. Furthermore, system performs automatic door locking after the door in an open condition for 5 minutes. Hoping the provided the features, can assistance users in providing protection to home users and prevent negligence in performing a locking door.

Keywords: Theft, negligence, Android, Microcontroller, sensors