

**HOME SECURITY ALARM SYSTEM WITH RADIO FREQUENCY  
IDENTIFICATION TECHNOLOGY  
FEATURES**

**MUHAMMAD IQBAL BIN MOHD ISHAK**

**2013226432**

**MUHAMAD FARIS HAIZEN BIN ZAHARI**

**2013883976**

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## **ABSTRACT**

This project deals with the design and development of a theft control system for home which is being used to prevent or control any theft attempt. The developed system makes use of embedded system comprise of microcontroller and Radio Frequency Identification Technology (RFID). The objective of this project is to design and develop home security alarm with RFID features by using Arduino Uno. Conventional home security alarm is designed with complexity and expensive. Thus, a home security alarm with RFID features by using Arduino Uno microcontroller is designed and implemented. The alarm will initiates when the intruders has invasion our home. Toggle switch that use will be function like sensor. When the door is opened or push the toggle switch will be ON. Then, the buzzer and alarm will trigger and ON. This is important for users to realizes that the invasion. Researches have been done before the implementation of this project. After doing the research and identify the problem, the project title is choose. The system started with toggle switch in standby mode. When the toggle switch is turn ON LED and Buzzer will lighten and produce a sound. If the toggle switch is OFF it will back to standby mode condition. System of home security alarm can be disable by using RFIDRC522. If the access card that is scan to the RFID is valid, the LED and Buzzer will be turn OFF. However, when the access card is not valid, the LED and Buzzer continuously to lighten and produce a sound. After the LED and Buzzer turn off the project is end. This is how the home security alarm system work.

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