

### Title: SMART RFID SECURITY SYSTEM

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### Intro

This security system will be used for high profiled security areas like banks. To be granted entrance you will need to have a RFID tag. RFID stand for Radio Frequency Identification and uses radio waves to transfer data.

## **Materials and Methods**

### **Results**

### Information & conclusion

Every tag will have a limited amount on time to be used , so that visitors of the secured area can't comeback later and enter the area without clearance. There will also be cameras who will turn in an 180° angle when they are in neutral mode. From the moment when an RFID tag makes contact with the RFID reader the camera will turn to the door to record the visitor coming in. The same protocol will be used when the visitor wants to leave the secure area.

For the door lock we can use a solenoid which will keep the door locked when there will be a certain amount of voltage send to the solenoid. When an verified tag will be red by the RFID reader the circuit will be shut down for a certain amount of time. So that the visitor can open the door. When the smart RFID security system loses power , because of a storm , or something else the solenoid will be powered by the backup batteries , and an alarm will go of. There will also be an emergency system lockdown button witch will close all doors until the lockdown release button will be pressed.

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A log file of all visitors with the timestamps will be kept. And can be used to quickly find video footage of a certain visitor or certain time.

# Referencelist

# **Extra Documents**

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