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Name: Alarm-Motion Security System

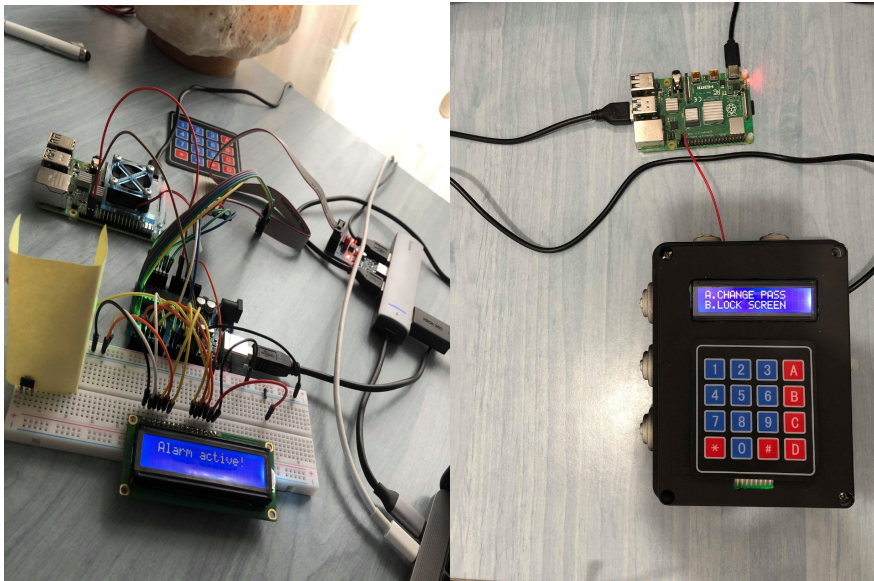
Video: [https://www.youtube.com/watch?v=55vQ4-\\_GNIO](https://www.youtube.com/watch?v=55vQ4-_GNIO)

Hackster: <https://www.hackster.io/343350/email-alarm-motion-security-system-349b14>

### Elevator pitch:

This system monitors movement through a sensor and initiates a 10 second countdown to input the right password

Before After



### Story:

The idea behind our project was to secure a place, i.e a room, a store using a system easy to build at home for a lower price than the average security system on the market.

The system will detect movement through a sensor, initiating a 10 seconds countdown. During these first 10 seconds, if the movement stops, the system will reset to the locked and listening state. If the sensor detects movement again during this period a signal will be sent to the raspberry pi which will in turn send an alarm email to the configured address.







To disarm the system, one would have to input the right password in a short time frame. If the wrong password was put three times in a row, the system will trigger the alarm and one would not be able to deactivate it.

After the alarm was triggered, one would be able to input the password again to the initial locked and listening state.

If the right password was entered, the alarm will be active again and the person has a preset time of 10 seconds to step away from the sensor's range.

## Components:

### Hardware components

 Arduino UNO & Genuino UNO	× 1
 Raspberry Pi 4 Model B	× 1
 PIR Sensor, 7 m	× 1
keypad	× 1
 Adafruit RGB Backlight LCD - 16x2	× 1
 Jumper wires (generic)	× 1
 Resistor 330 ohm	× 1

