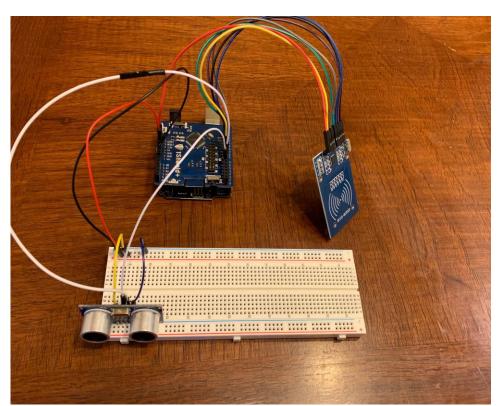
# Motion- sensing Alarm Door, 03/03/19

"Team Name: Team Tech Hub Team members: Rawad Bader



### **Description**

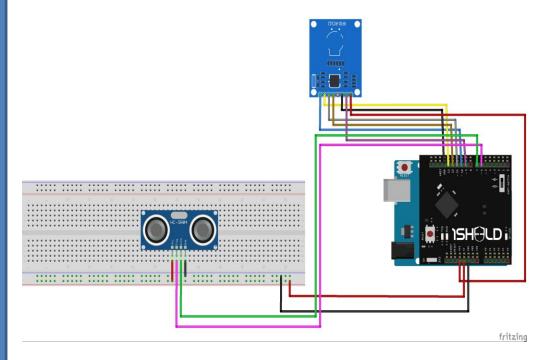
This project was build to create a security system that detects the motion of movements to fire an alarm system and play a message that tell us if that door was opened with permission or not. The alarm was modified with multiple components that made it more a deviance I added a 1sheeld that made it to be connected to the phone by Bluetooth. The 1sheeld give it advance options like using all the functions of the phone like camera and more. This system can be used in businesses and companies for their security. I think a good security system helps everyone to be safe.

#### Reflections

While my project was simple in some aspects, it was quite challenging in others. I didn't expect that coding would be easy, but it took on a new level of difficulty when it came to finding a code that works with my device. It took quite a bit of research and some revision of the code to get it to behave as I wanted. There was also the fact that my project was more like two in one, each part took me a considerable amount of time to accomplish. I think adding the 1sheeld It was a helpful thing to do.

## **Steps of the Project**

- 1) Start by wiring your components to the Uno chip. Ground wire to ground into the breadboard, the VCC wire to 5V into the breadboard, and all the wires as showing the pictures bellow goes to the chip.
- 2) The Motion detector VCC wire to the 5V into the breadboard, and the ground wire into the breadboard, but the ECHO and Trig to the chip.
- 3) The RFID positive side connected to a 3V, and it negative side into the breadboard.
- 4) The 1sheeld implemented on the top of Uno chip.
- 5) Once everything is connected, the code needs to be uploaded to the UNO chip to make things work.
- 6) The alarm system is now complete. It is ready for testing and it could be installed to doors or anything that produce motion.



## **Future improvements**

If I had to make any improvements, I think that investing in motion detector would be on the top of my list. The one I use now it work well, but to make the motion detector work in longer distances would be more efficient. I can work more in my code to make this system have more features like voice recognition and a lot more. I feel good about my project and all the features it was up to this point of it.

