Repository Link:
https://github.com/danielmochalov27/Raspberry-Pi-FSE-100-Project

- As a note we have changed from having an rgb sensor, one buzzer and a speaker to just having 2 buzzers, ultrasonic sensor, PIR and a button. A project change paper will be submitted next class period. The description of how the code is supposed to work is at the end of this paper. **The changed code is in the repository and labeled "pratice.py"**. We also posted a question on reddit to get a better understanding of how to solve this problem and we got few responses which make sense as they describe a very elegant solution of using variables to define different states of the button and from there if one state is active do this if not don't do anything. All of this will be tested next class and revised additionally as needed.
- Have implemented the physical connection of the sensor to the main board
  - All connections for sensors such as the 2 buzzers, PIR Sensors, Ultrasonic and button all function and are inputting data individually based on example code provided at the beginning of the project. All the sensors are plugged into the breadboard and are ready to go when the code works.
- Are able to read information from the sensor
  - Yes and no individually the sensors work as they are supposed to but when trying to integrate them all together especially the button none of them work as expected. The button is not able to escape its loop for some unexpected reason and thus we are not able to use it as a turn off and on. Even the TA in the class had no idea why it didn't work and did some research and still couldn't come up with an answer so we re did the code.
- Are able to use the information you get from the sensor for define some sort of behavior expected in your solution
  - As of this moment now we are able to get individual sensors to work and export the data into the terminal and nothing beyond that but we have during off hours (not in class) have recorded everything and will test everything when we get back to class.
- Show the feedback that your system will provide based on the inputs (sensors)
  - The code is supposed to work as the button being able to turn everything off and on and then the ultrasonic sensors as you get closed to something it will beep faster and faster like car parking sensors and then the PIR sensor will utilize the second buzzer to beep when it detects motion in front of the person for example people, pets, and moving objects. If the

person wants to use this they click on the button once and it will turn everything or on click again to turn everything off.

Thank you for all the help and support