Submission Date	2018-09-11
Project Name	Thermometer
Student Name	Malin Lomax
Project website	n01103934.github.io/Thermometer
My project will Sensor/Effector Choices	Connect to a database and mobile application where the temperature readings are stored. Sensor/Effector: TMP006 IR Temperature Sensor
The database will store	Temperature readings from my Temperature Sensor.
The mobile device functionality includes	Collecting Temperature readings to my mobile device using a database.
I will be collaborating with the following company/department	Creatron Inc.
My group in the winter semester will include	I tried to find someone that has a similar idea as me but their group is already filled up so it just me right now but I hope to find someone soon. Until then I will work myself.
50 word problem statement	The problem solved by this project is being able to check whether or not a person has a temperature that is above the normal which is over 38 degrees C (100.4 F). Many people of all ages get fevers that affects their ability to work in industries effectively so with this thermometer they can monitor their temperature levels and determine whether or not they should treat it.
100 words of background	A bit of background about this topic is temperature which is all around us like in the air, human body, machines, etc. Over the years people use technologies that can measure the temperature of people's bodies that emit hot temperature in order for it to adapt with the changing weather throughout the week whether or not it is hot or cold. The technology helps people determine if they need to be treated to ease their fever and lower their temperature in the body. Almost every day people get fever that can intervene with their work life and can become a factor to face which is why they need technology to help with them.
Current product APA citation	Contact-less Infrared Thermopile Sensor Breakout - TMP006. (n.d.). Retrieved from https://www.generationrobots.com/en/402345-contact-less-infrared-thermopile-sensor-breakout-tmp006.html
Existing research IEEE paper APA citation	Improved infrared temperature sensing system for mobile devices - IEEE Conference Publication. (n.d.). Retrieved from https://ieeexplore.ieee.org/document/4684455/
Brief description of planned purchases	I plan on buying a Raspberry Pi 3, TMP006 IR Temperature Sensor, Jumper Wires (male to female/female to male), LCD Screen and Green Leds. Some materials I already have in my parts kit like a Breadboard, Red Leds, and Resistors.
Solution description	The IoT solution is measuring body temperatures of any person that is above or below the normal level. I will develop an app for giving updates on the temperature of a particular area as well and it will warm a user whether it above and below the danger level just like this summer. In the summer it was like 32 degrees and above that is a troubling matter for many people. This will help alert many people who travel a lot everyday.