Pseudo Code

#Status

Calibrate the sensor

Led blue when calibrating

Led turns red if calibration fails

Display the average temperature rounded to 2 decimal places

Led turns green when calibration finishes

#Notification

Check temperature every x amount of time

Store temperature in a list

Average temperatures in the list

Display the average temperature to 2 decimal places

If temperature is extreme re calibrate the sensor

If the temperature is above the calibration value by y alert user via email

Delay for z amount of time to allow the user to respond

#Escalation

Check temperature every x amount of time

Store temperature in a list

Average temperatures in the list

Display the average temperature to 2 decimal places

If temperature is extreme re calibrate the sensor

If the temperature is above the calibration value by y alert user via email

LED blinks red

Delay for z amount of time to allow the user to respond #Choose Your Own Design

For calibration

Take all the measurements for the day

Remove the highest 20% of temperatures and lowest 20%

Take the average daily temperature

Store the daily averages over time to come up with a more accurate baseline

Test Plan

Arbitrary baseline: 37 degrees Celsius

Change in temperature: 2.2 degree Celsius

Test	Desired Result	Actual Result	Pass/Fail
37	Green led		
39	Email sent		
39.5	Email sent Red blinking LED		
15	Re Calibrate Sensor		
60	Re Calibrate Sensor		