Submission Date	11/09/2018
Project Name	Overheat Sensor
Student Name	Duc Nguyen
Project repository	https://github.com/ngtrangminhduc/OverheatSensor
OverheatSensor choice	HDC1008 Temperature & Humidity Sensor
The database will store	Temperature scans in every 1s ; Timestamps
The mobile device functionality will include	The option to stop the device if it's overheating
I will be collaborating with the following company/department	Humber College - School of Applied Technology
My group in the winter semester will include	Abiodun's PWM driver and Aldious's ToF distance, to create a RC car
50 word problem statement	RC car created by Raspberry Pi can overheat without being noticed, and can create damage to the internal hardwares.
100 words of background	HDC1008 has a wide range of temperature with +-0.2 Celsius degree, making it a very accurate sensor to detect any temperature change, and to ensure a spontaneous reaction from the users. Its low power consumption and two operation modes (sleep and measurement) allow itself to fit battery / power harvesting applications.
Current product APA citation	HDC1008 Low Power, High Accuracy Digital Humidity Sensor with Temperature Sensor [PDF]. (2014, October). Texas Instrument.
Existing research IEEE paper APA citation	Temperature and Humidity Detection System of Communication System Based on Raspberry Pi - IEEE Conference Publication. (2018, April 9). Retrieved from https://ieeexplore.ieee.org/document/8332746/
Brief description of planned purchases	Raspberry Pi 3+ B ($99.99) ; HDC 1008 Temperature & Humidity Sensor ($6.98)

Solution description	Attach the sensor to the RC car, and use the Raspberry Pi to send out data usage to the mobile and database. If the temperature surpasses the limit, the car will receive a signal to shutdown