Submission Date	2019-09-10
Project Name	Smart Home Monitor
Student Names	Andrew Liauba, Luca Rojas, Lucas Finiello
Project repository	https://github.com/getLiauba/SmartHomeMonitor
SensorsEffectors choices	Tempature sensor, Motion sensor, gas sensor,camera
The database will store	Tempature throughout the day, images when the motion sensor is triggered
The mobile device functionality will include	send notifications to user when motion sensor is set off, or when tempature is too hot and trigger a fan to turn on
I will be collaborating with the following company/department	After talking to Austin about collaborators, he has put us in touch with professor Khan from the electomechanical engineering program. We are waiting on an email back from professsor Khan.
My group in the winter semester will include	Andrew Liauba, Luca Rojas, Lucas Finiello
50 word problem statement	Leaving your home and not knowing the status of it can lead to some concern for individuals. It would be beneficial if people had the ability to monitor the state of their home electronically through an app that's connected to hardware within the home, and were able to control the environment for example to turn on a fan to cool the house down or AC unit.
100 words of background	Looking at the current smart home monitoring systems they currently offer separate modules for different types of monitoring. Where we are proposing an all in one system with the modules built in. currently 2 common systems that came up were made by rogers and bell. They offer: Live video streaming, smoke and fire monitoring, water leak monitoring and thermostat control to name a couple. There are also companies that have a similar product but they market it as a security system although they do not have temperature monitoring or control.

Current product APA citation	Woodall, M. (2019, September 4). Best Security Systems in Canada 2019: Find the Right One! Retrieved from https://www.reviews.org/home-security/best-security-systems-canada/
Existing research IEEE paper APA citation	
Brief description of planned purchases	Raspberry Pi and arduino are already owned, so the tempature sensor, Motion sensor and Gas sensor will need to be purchased.
Solution description	We are proposing to build a monitor that tracks the tempature humidity, gas levels and motion of your home. The Firebase database will sore the data generated by the sensors. The mobile device application will include the ability to see the current data and past sensor data as well as control a small fan to cool the tempature.