Submission Date	2018-02-05
Project Name	HVAC
Student Names	Jan Fontanosa and Maasha Maheson
Project repository	https://github.com/fntj0052/HVAC
SensorsEffectors choices	Touch sensor, moisture sensor, LCD touchscreen, and stepper motors
The database will store	Operational status/condition and maintenance reminder
The mobile device functionality will include	Ability to toggle operational mode and set maintenance schedule
I will be collaborating with the following company/department	School of Applied Technology
My group in the winter semester will include	Jan Fontanosa and Maasha Maheson
50 word problem statement	creating and improving upon the monitoring of Heating, Ventilation and Air Conditioning (HVAC) systems with a user-friendly interface, with the ability to remotely control the system activities using a mobile device, and to fetch stored information on the system's condition from a cloud database.
100 words of background	HVAC systems are useful in all kinds of building applications: a smarter system can provide significant energy and financial savings while scheduling usage and allowing more granular control for systems used in specific applications (a HVAC system used to monitor an industrial refrigerator room will require different settings in comparison to one used in a residential building). By providing the ability for remote control using an Internet of Things(IoT)-based HVAC system, administrators of the system can ensure that the system is working as intended and can administrate changes to the system in a secure manner.
Current product APA citation	Ecovent Systems Inc. (n.d.). *Ecovent* . Retrieved from https://www.ecoventsystems.com/smart
Existing research IEEE paper APA citation	Al-Ali, A. R., Alikarar, M., Gupta, R., Rashid, M., Zualkernan, I.A. (2017). A smart home energy management system using IoT and big data analytics approach. *IEEE Transactions on Consumer Electronics* , *63* (4), 426-434. Retrieved from http://ieeexplore.ieee.org/document/8246800
Brief description of planned purchases	No additional planned purchases
Solution description	for a user-friendly, Internet of Things-based HVAC system