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Homework 1: Initial Idea Due January 21st, 2014

HouseSmart

The HouseSmart Design system is a basic systematic control module that connects all thermodynamic, electrical, heating and plumbing, wireless devices and your security system into one tablet. It operates on a secure 4G network that allows the devices of your choice to be connected to it. However, a separate encoder must be installed with each of the devices you choose such as boiler, access points, etc.

This design includes your thermostat settings including heated floors and even how much water and salt you have in your salt water heater in your basement. In addition the security system can be activated on this tablet. The tablet command station is in the basement and this is where its hotspot will be created. The wireless tablet can be taken with you in your car and programmed to your garage, gate and car. The lighting system throughout your house is also included in this design. The motion sensor lighting system that controls the lighting in your house can be adjusted to the HouseSmart settings. This means in the night according to what room you are in the lights will turn on and off when you leave. However, in the day time from a set time range of time the motion sensors will not have to be turned on.

The convenience of the HouseSmart and potential impact of this device is significant. Houses, condos, and beach homes are getting very hard to operate and keep running properly. With the HouseSmart your home away from home can operate on those settings. This means that the pipes in your house will not freeze and burst in the winter because the HouseSmart keeps the pipes in the system at a temperature of 65 degrees Fahrenheit. The pool heating and clean is the same concept. Once it starts getting warmer outside your HouseSmart will turn the pool skimmer and drain on to exchange the dirty water that has been in the pool all winter along with the automatic pool cover you recently installed.

Be HouseSmart. The control of your house and the functionality of the HouseSmart depends on your life and the settings you want. This includes which system of your house you allow the HouseSmart to operate. Do you want to check your HouseSmart and see in which parts of your home poor Wifi access? Is the lighting control clock off in the front of your home, well no worries because you can reprogram it from your house instead of heading outside and manually doing it. The security aspect of our module will allow you to set it up in proximity of the Master Control Station in your basement. With this device you will have the ability to turn on the A/C on the way home from the airport.

Key Features

- Sensor driven lighting fixtures dependent on day and night
- Wi-fi enabled through a mobile device app (app not included in normal system)
- Programmable thermostats- smoke alarms

- Optimizes heating and cooling of homes- conserves electricity
- Systems that use 120-240 volts current
- Low voltages devices
- Connected to its open hot-spot
- Allow specified users allowable functions open his/her alarm door for specific house entrances
- Rectangular tablet with master station designed in house

[&]quot;I pledge my honor that I have abided by the Stevens Honor Court" RS