Project description

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Vacation house survelance

If you rent out vacation houses, it might be in your interest to see whether people remembered to turn off their lights, as well as the heat, so you dont have to pay an expensive bill for electricity/heat nobody is using.
Also their might be a big distance between the houses, so it could be annoying if you physically have to drive out to every house to see if your customers remembered everything.
So my idea is to create a website, showing graphs from heat and light sensors, so the user can confirm via the website whether the heat is on/off, and send a signal to 2 light diodes who will simulate the AC unit and the lights in the vacation house, which in real life will be my appartment.

How?

The idea is to make it possible to login to a photon device hooked up with temperature and light sensors, mounted in my apartment, so the user can make sure the light and/or heat is off.

EVENT NAME	DATA	PUBLISHED AT
Temperature	23.965401 °C	September 10th at 5:39:09 pm
Temperature	23.965401 °C	September 10th at 5:39:07 pm
Temperature	23.965401 °C	September 10th at 5:39:06 pm
Temperature	23.965401 °C	September 10th at 5:39:03 pm
Temperature	24.004756 °C	September 10th at 5:39:00 pm
Temperature	23.965401 °C	September 10th at 5:38:58 pm
Temperature	24.004756 °C	September 10th at 5:38:56 pm

Figure 1 - temperature log from the particle console website

As picture 1 shows, i have already mounted an LM35 sensor on my particle photon device in my appartment, that is currently uploading its data to the particle cloud, the idea is to also mount a humidity sensor, once i get one.
The next step from here is to make a webhook, that will request these readings, and upload these to a server.
Since im using the thingspeak as my webhook, MATLAB scripts are possible, and the idea was, to only upload the raw ADC data to the cloud, make the relevant calculations for the sensors with MATLAB scripts, so that these internet functions are different from what the sensor itself is able to do.
And also make it possible to send data to the photon, in order to turn on/off 2 diodes mounted physically on it, to simulate AC units and lights.