

Project description

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orangery surveillance

In order to build your own orangery, depending on what plants you have in it, it might be in your interest to be able to confirm that everything is okay even when you are not in the area, since a lot of exotic plants can die in either too warm/cold conditions, and some in too dry/wet conditions.

The idea is then to make a website, where the user can log in, and always get the current temperature and humidity readings from the orangery.

In real life, the board will be mounted in my apartment, and not an actual orangery, the idea is then also to make a warning lamp light if my apartment gets too warm, so if I'm present, I can see I should open a window, and in the orangery I should turn the AC unit on.

How?

The idea is to make it possible to login to a photon device hooked up with temperature and humidity sensors, mounted in an orangery, so the user can make sure there isn't a leak somewhere, or the heat is turned 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 apartment, 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 I'm using the thingspeak as my webhook, MATLAB is possible, and the idea was, to make the humidity calculations for the sensors with MATLAB scripts, so that these internet functions are different from what the sensor itself is able to do.