Cold Morning Alarm

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##Proposal

I am now about 4 labs behind, and I am not sure of the full capabilities of the sense hat/raspberry pi combination, but I know I am limited in my home, to rooms which receive a Wi-Fi signal off the router where the raspberry pi can only be set up plugged into the router and not moveable. With that in mind, the current tools available to me and my lack of confidence in meeting the deadline due to falling behind and in my ability to program, in general, I propose to set up a very basic combination of home devices around the house that will turn on, on a cold morning using the raspberry pi as a guide to the temperature. As the pi is situated indoors, I would need to pull data from outdoors against the indoor ambient temperature to figure out the optimum temperature at which the indoor devices will operate. This would be the main analytical area. If I succeed, I can add more capabilities/devices/complexities.

Tools, Technologies, and Equipment

Devices

- Philips Sun Alarm Clock
- Home Kettle
- Avatar Mini Smart Sockets
- Google Smart Sockets
- Avatar Smart lights
- Raspberry Pi & Sense hat
- My Honor phone – Android
- Macbook Pro

Data

- I hope to pull outdoor data from an online data source such as Cork Airport for the outdoor temperature.
- Indoor temperature will be the raspberry Pi

Scripting language/Analytics

- JavaScript – more likely to use this for programming as had not enough exposure to writing python from scratch.

Connectivity

Hopefully I will have gained enough knowledge to code and connect these devices. I may have to put together a simulation on packet tracer if I fail to achieve in the home environment.

Project Repository

https://github.com/fitzdora/coldMornings