Smart Room: Building Cooling System Using Nature

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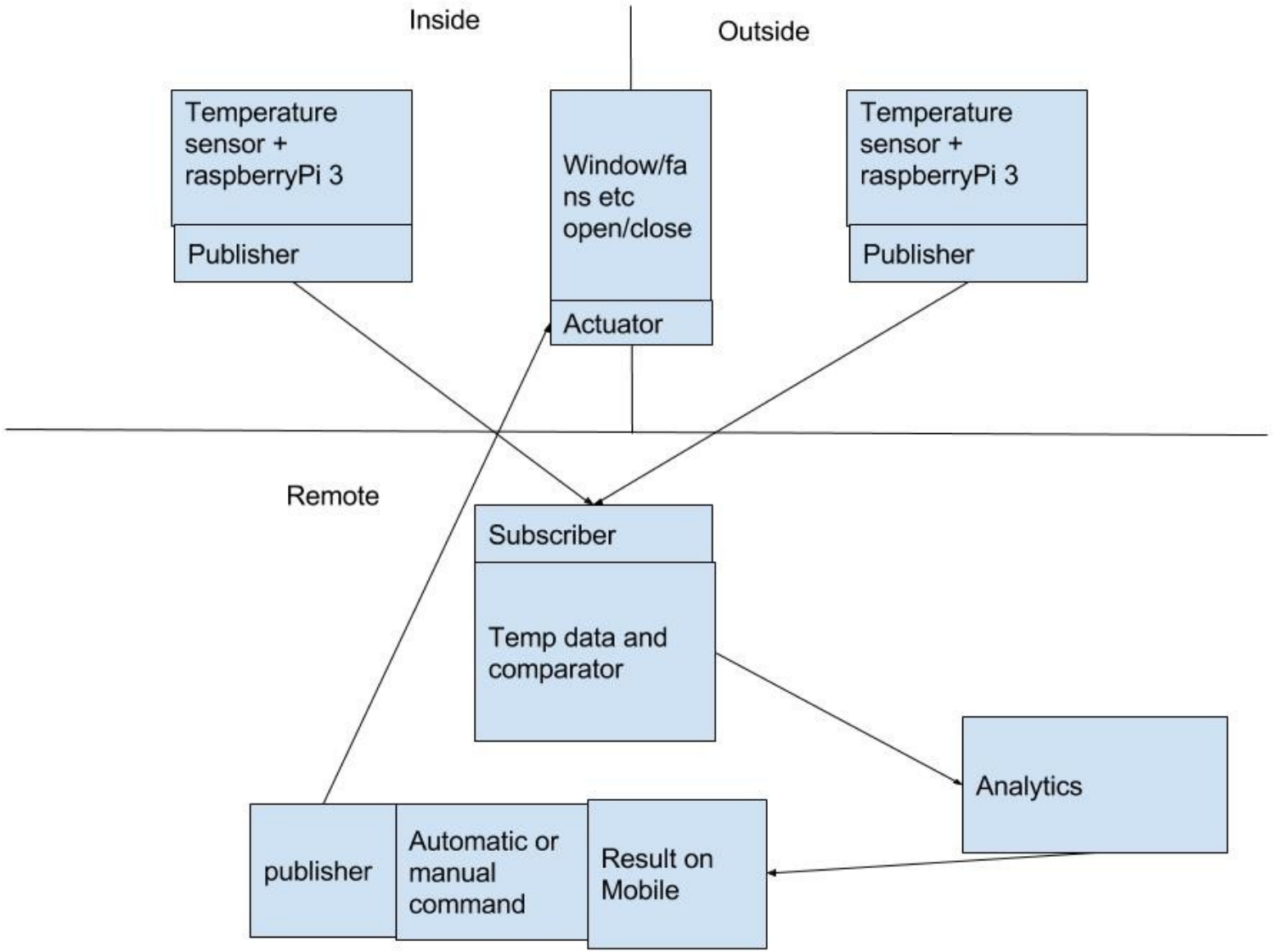
Idea

Season	Hypothesis
Summer	Temp(outdoor) > Temp(indoor)
Winter	Temp(outdoor) < Temp(indoor)

Can we infer #occupancy using the relationship between <indoor,outdoor> temperature?

Can we use this information to build a green cooling system for auditorium?

Realising the Idea



Value Impact

- Energy is always a valuable commodity in our society
- Using natural resouces to save power
- Can reduce global warming

Sensor used

- Sensor and communication unit: 2
  - LM35 temperature sensors
  - Raspberrypi 3
- Mqtt program for communicating temp data to subscribe
  - Publisher at raspberrypi3
  - Subscriber at any high end machine

Results

- Able to get all communication to work except pushing data at mobile

Future works

- Analysis on the cooling pattern
- Analysis of the outside temperature pattern
- Analysis of the power save percentage with this setup

Thank you