

HACKING THE THINGS: HOW I MADE IOT RELEVANT TO ME USING LITTLEBITS AND TWILIO SMS

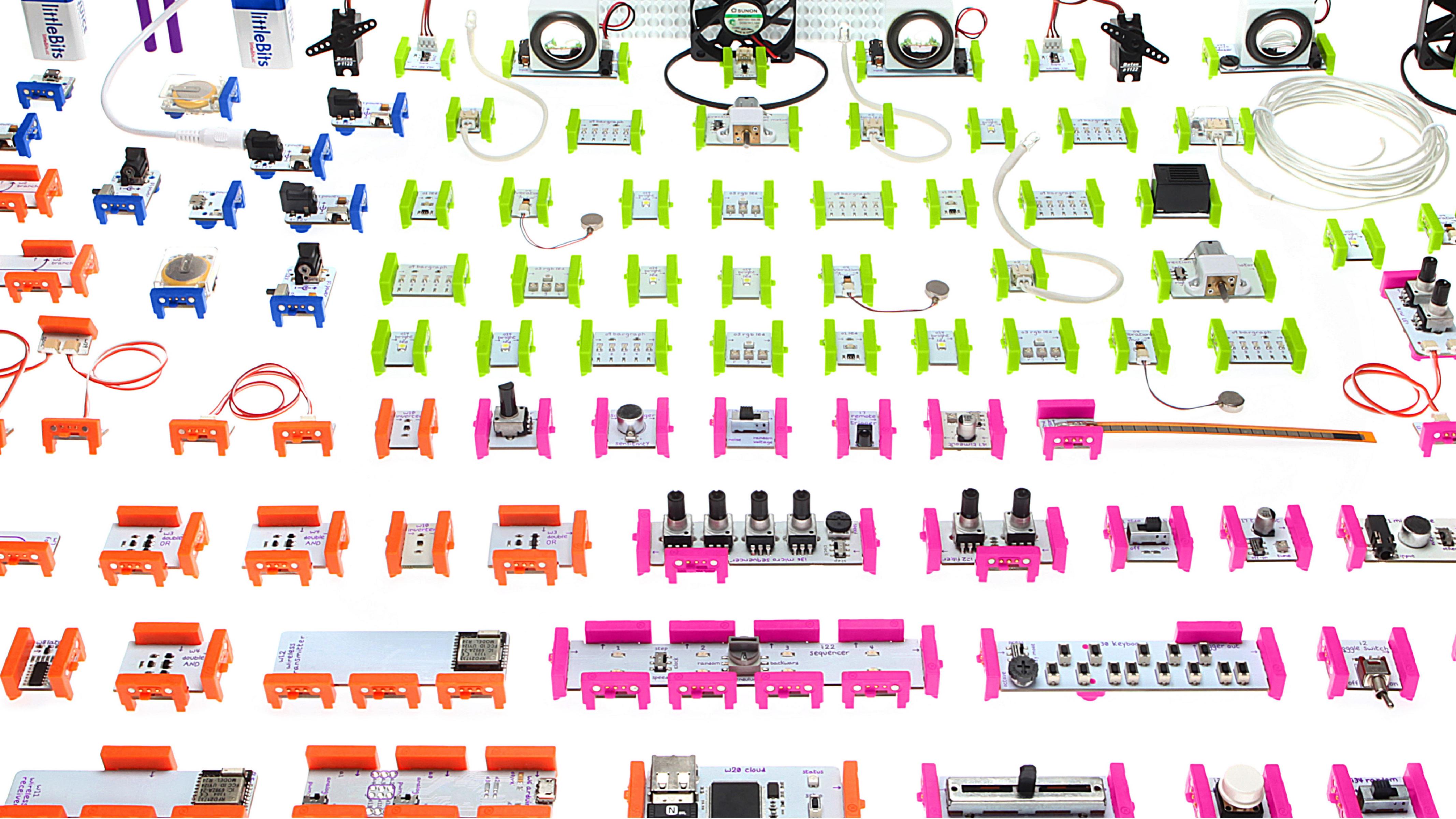
kristin salomon
EE @ littleBits
kristin@littlebits.cc
github.com/kristin-littleBits

LET'S MAKE IT PERSONAL.

littleBits: what is it?

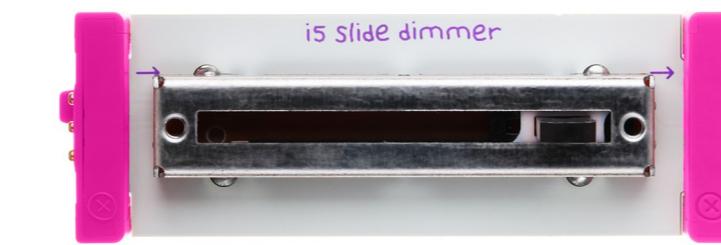
why?: background behind the project

implementation: hardware + software

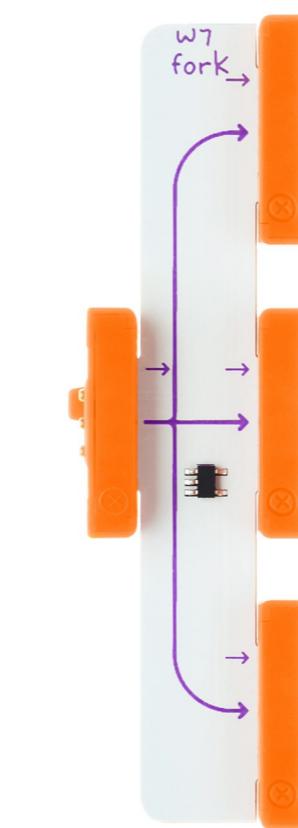




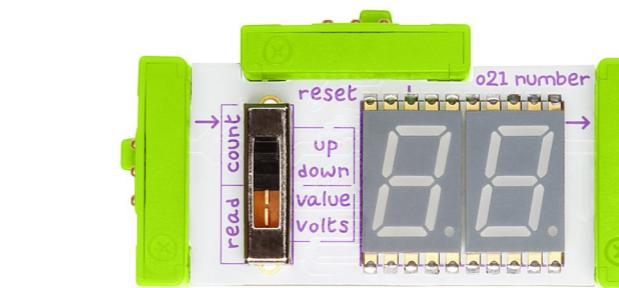
BLUE
Power



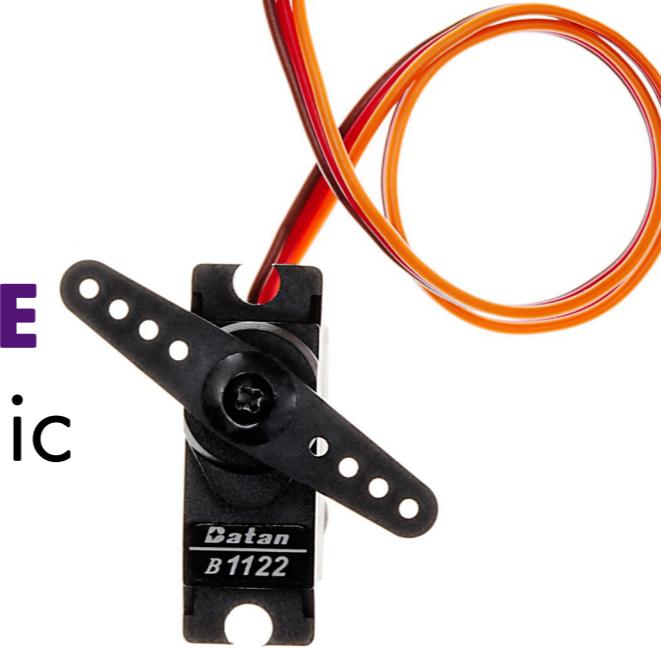
PINK
Input

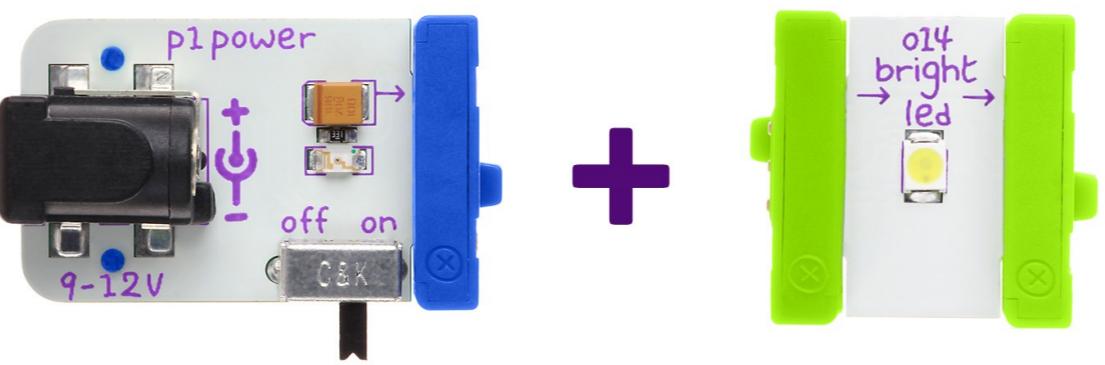


ORANGE
Wire/Logic



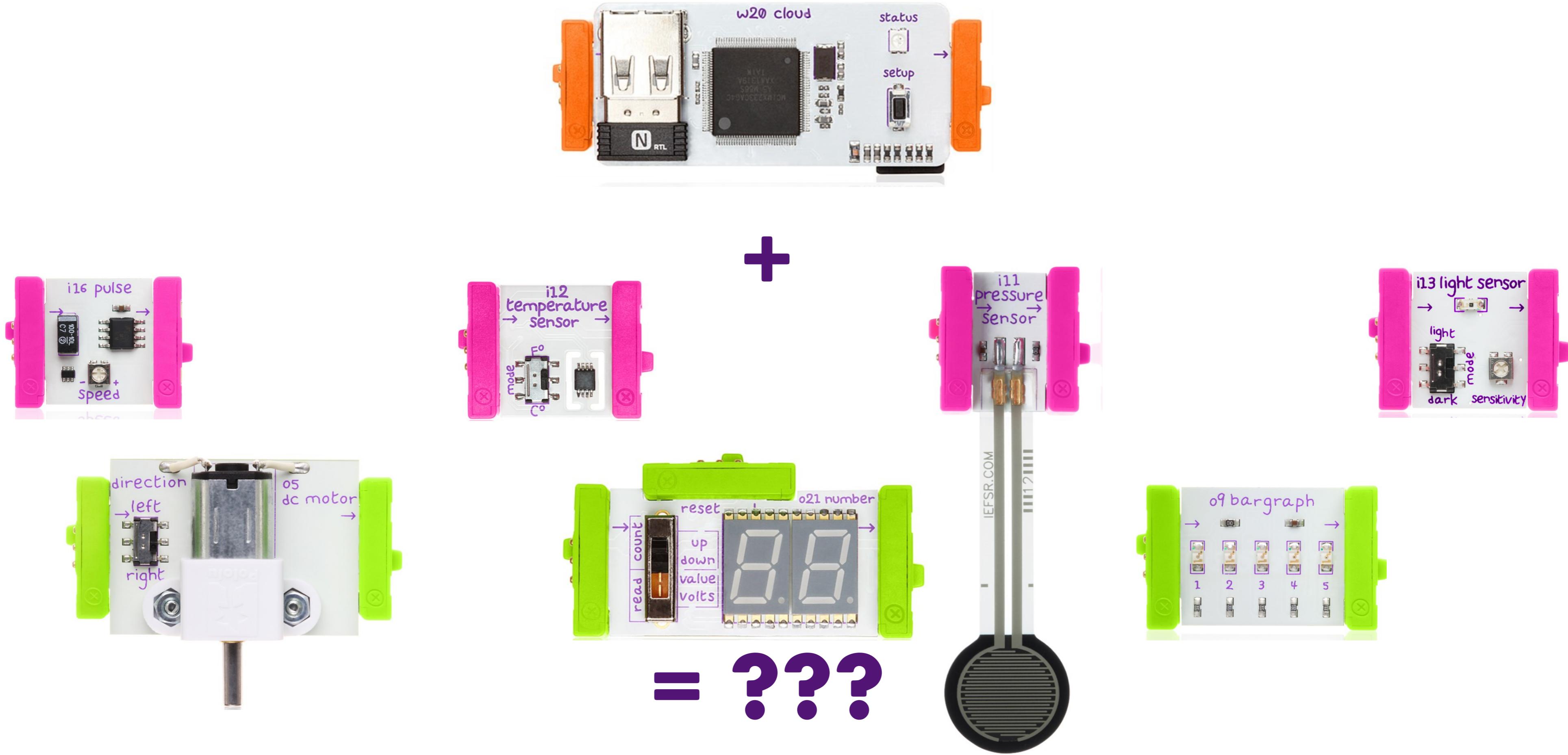
GREEN
Outputs







THE CLOUDBIT™



LET'S MAKE IT PERSONAL.

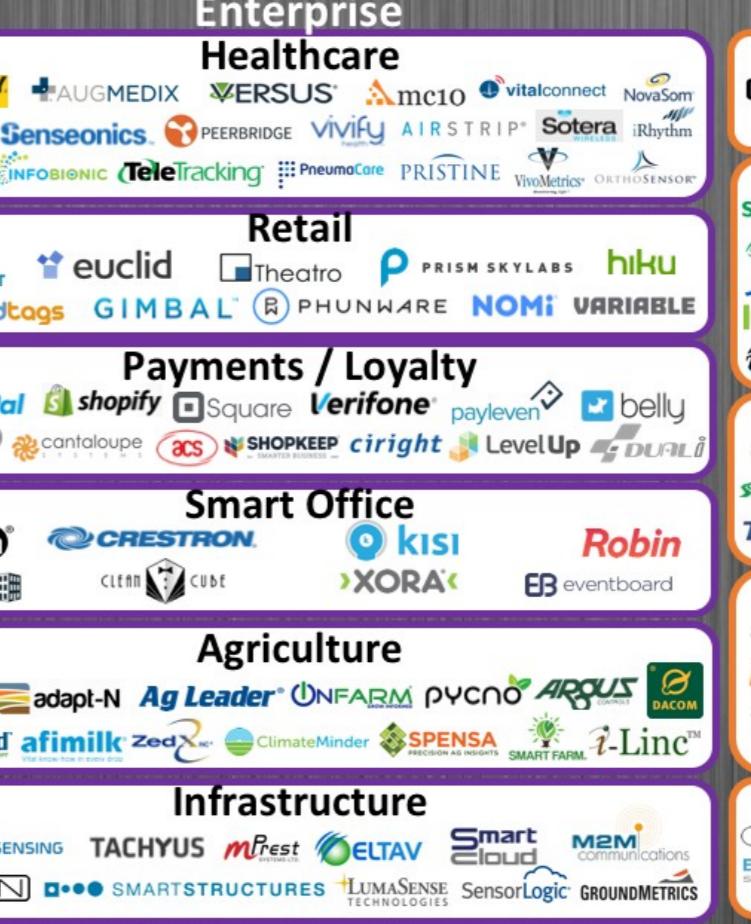
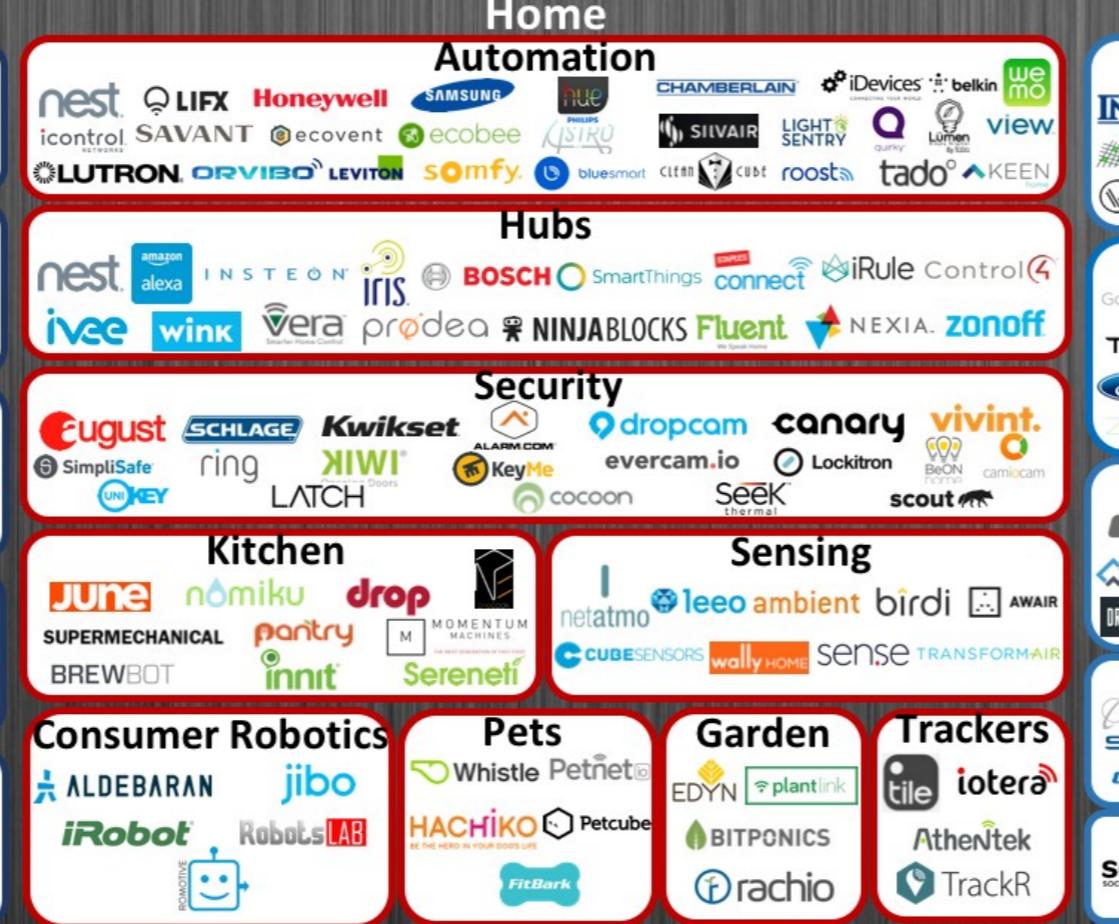
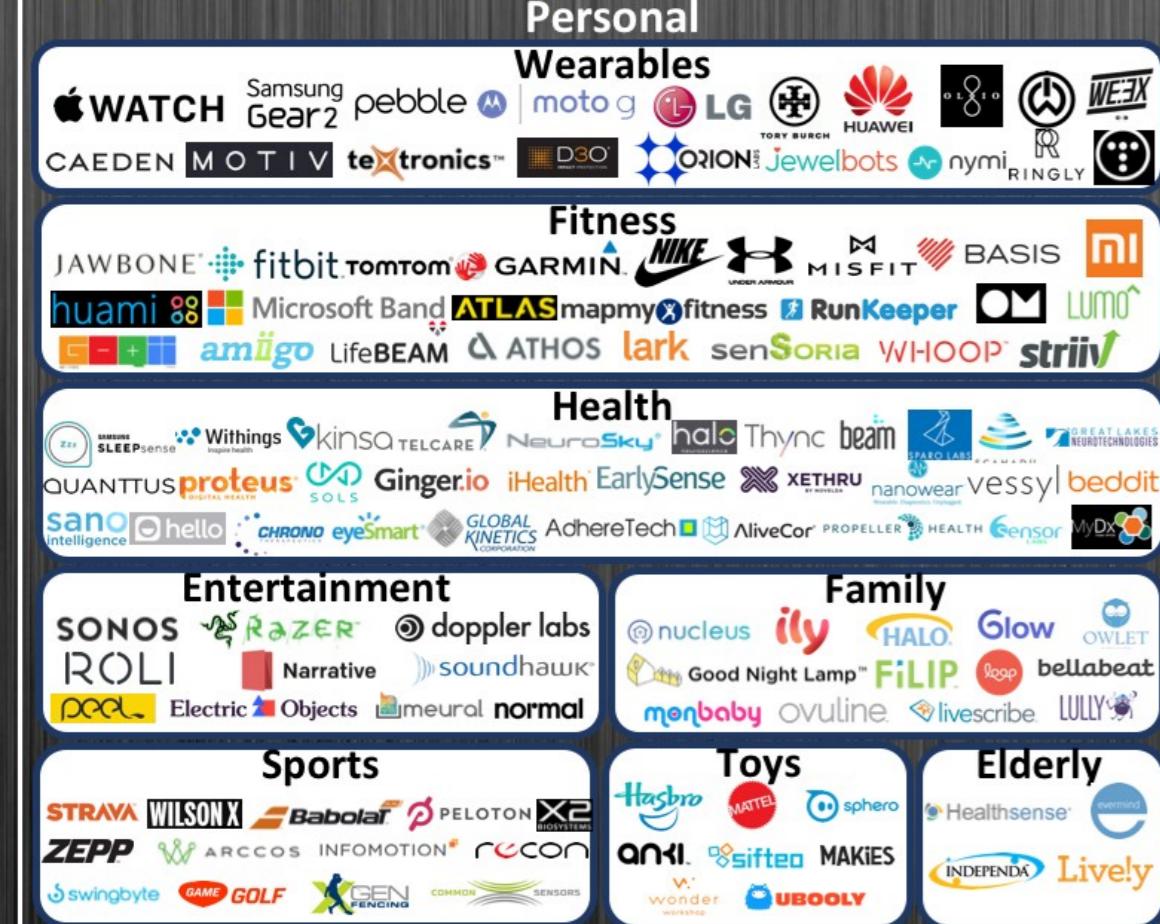
littleBits: what is it?

why?: background behind the project

implementation: hardware + software

Internet of Things Landscape 2016

Applications (Verticals)



Platforms & Enablement (Horizontals)



Building Blocks



WHAT TO MAKE... A PERSONAL ALARM SYSTEM!

- Capture information from the room
 - Is the window open? → temperature
 - Is my bedside drawer open? → light
 - Is my coin bank in its place? → pressure
 - Is my door open? → bend
- Send data to the room
 - Turn on an alarm → buzzer/speaker
- View data in a nice dashboard on the web
- Get SMS notifications when things happen

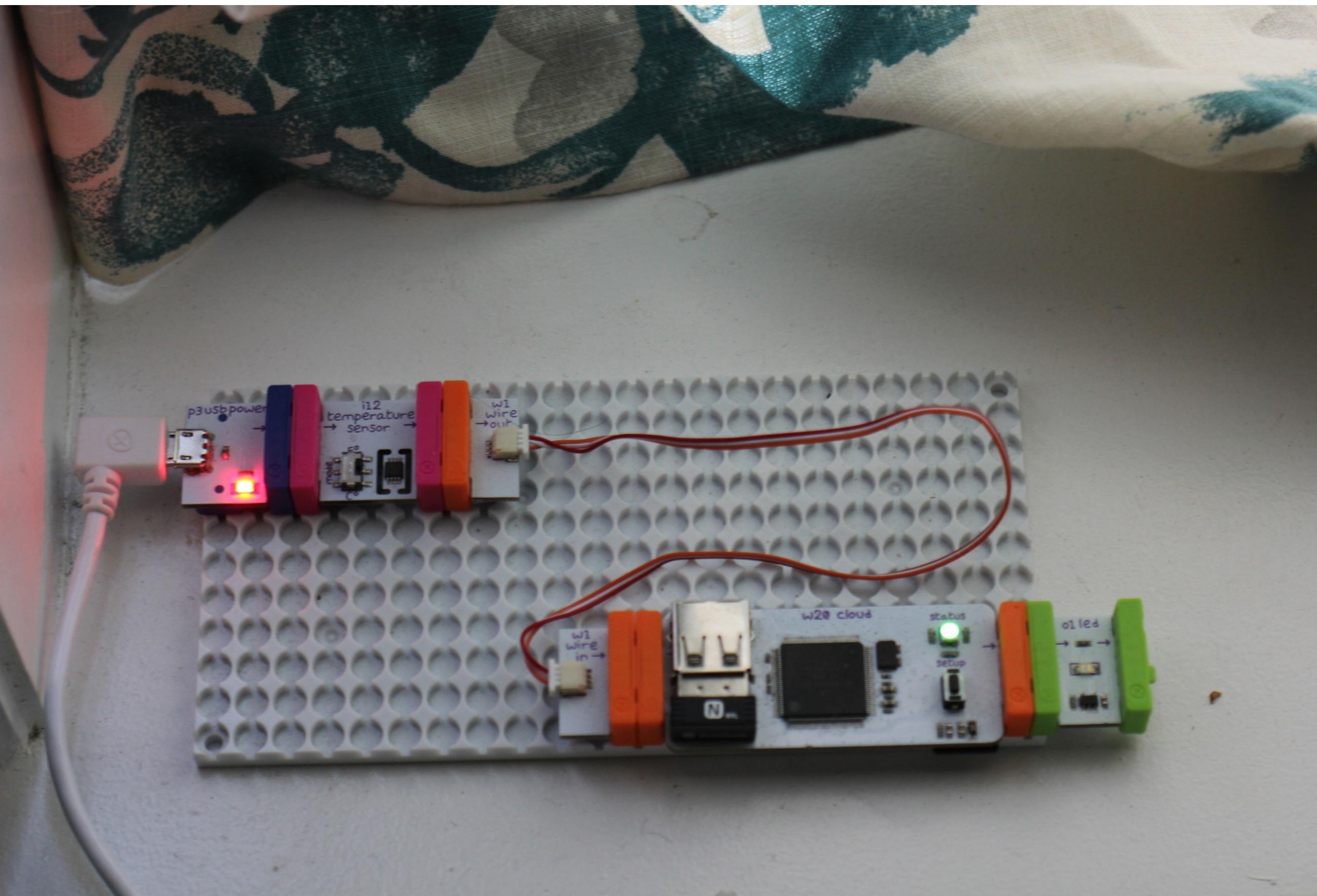
LET'S MAKE IT PERSONAL.

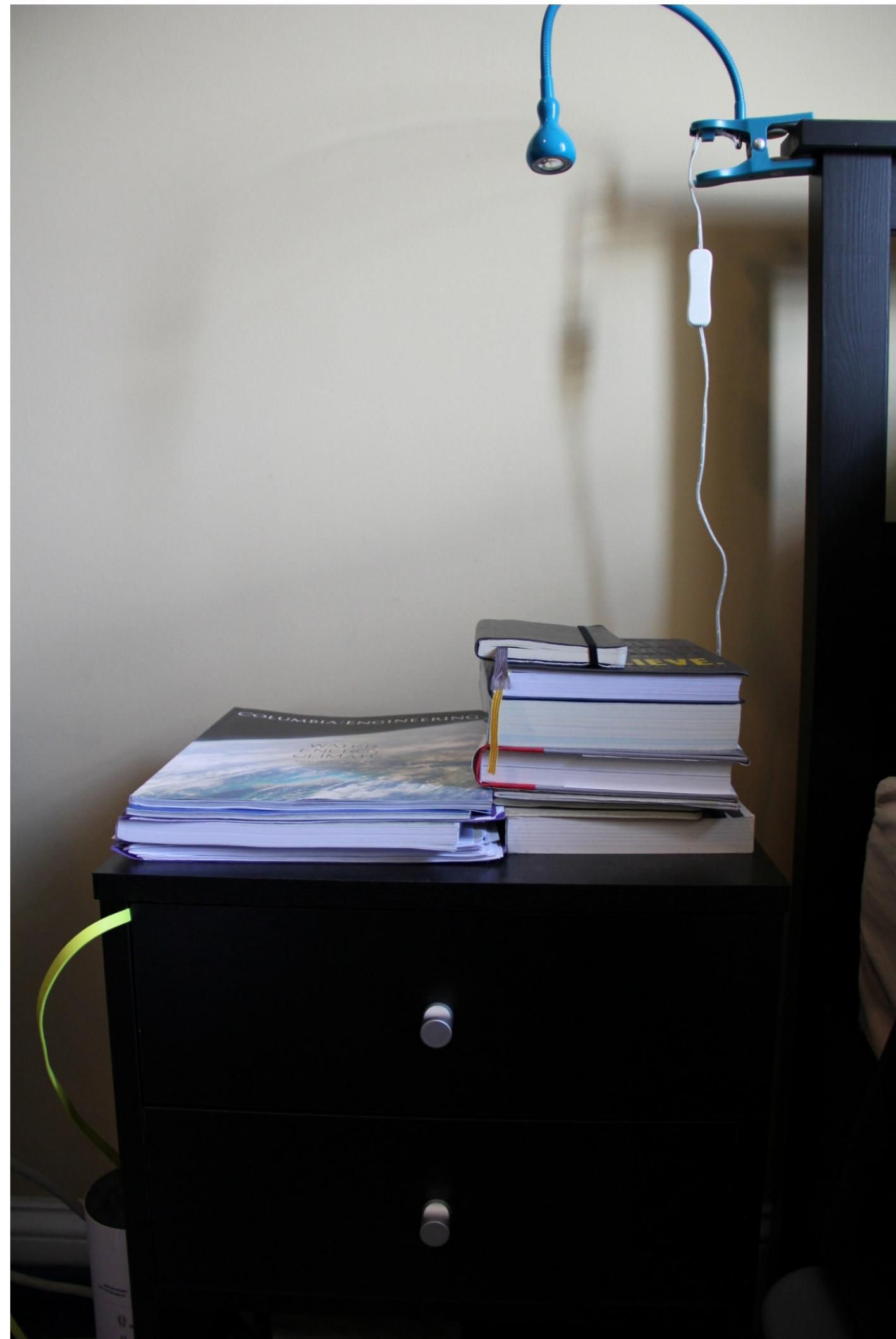
littleBits: what is it?

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IS THE WINDOW OPEN? → TEMPERATURE SENSOR





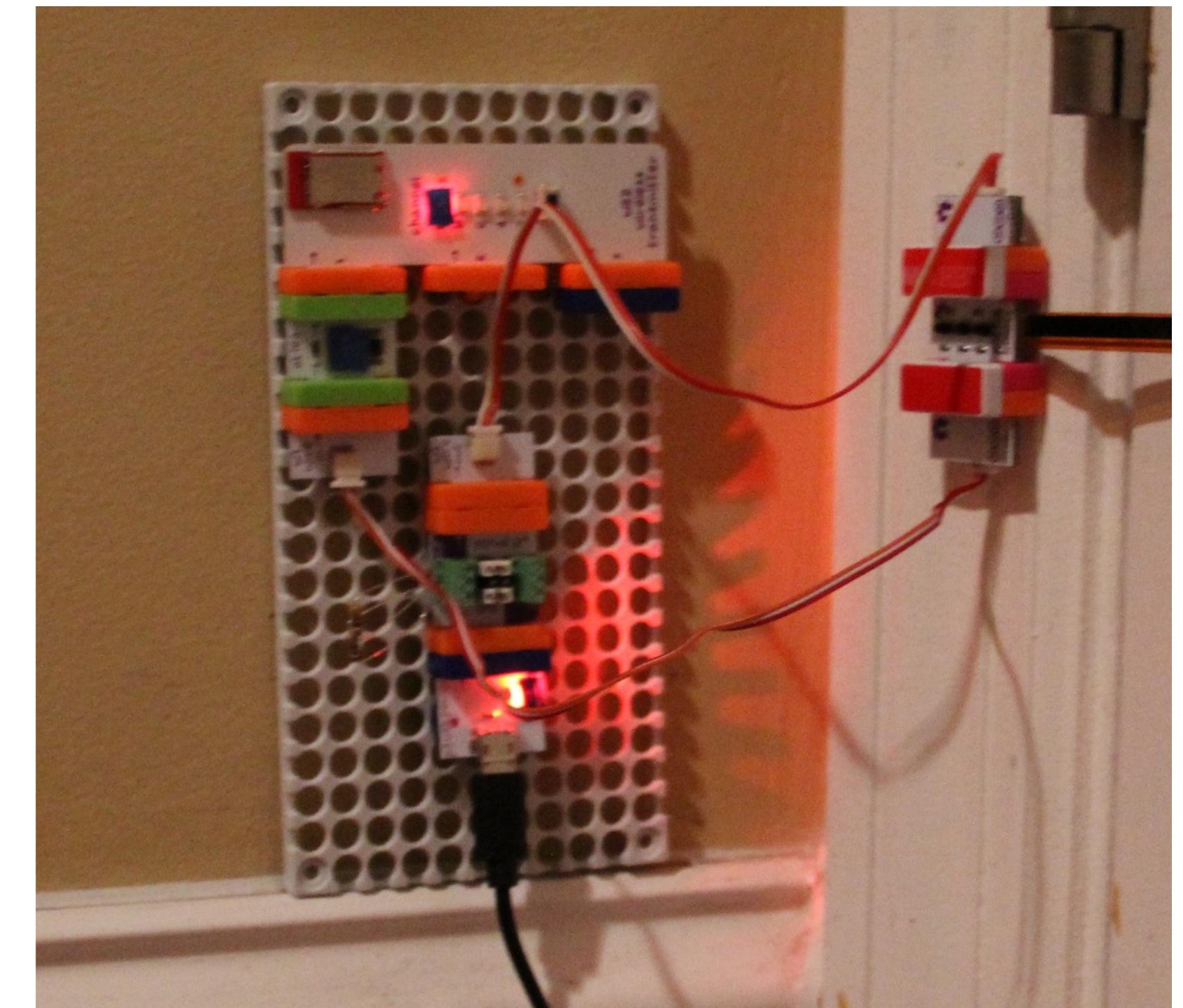
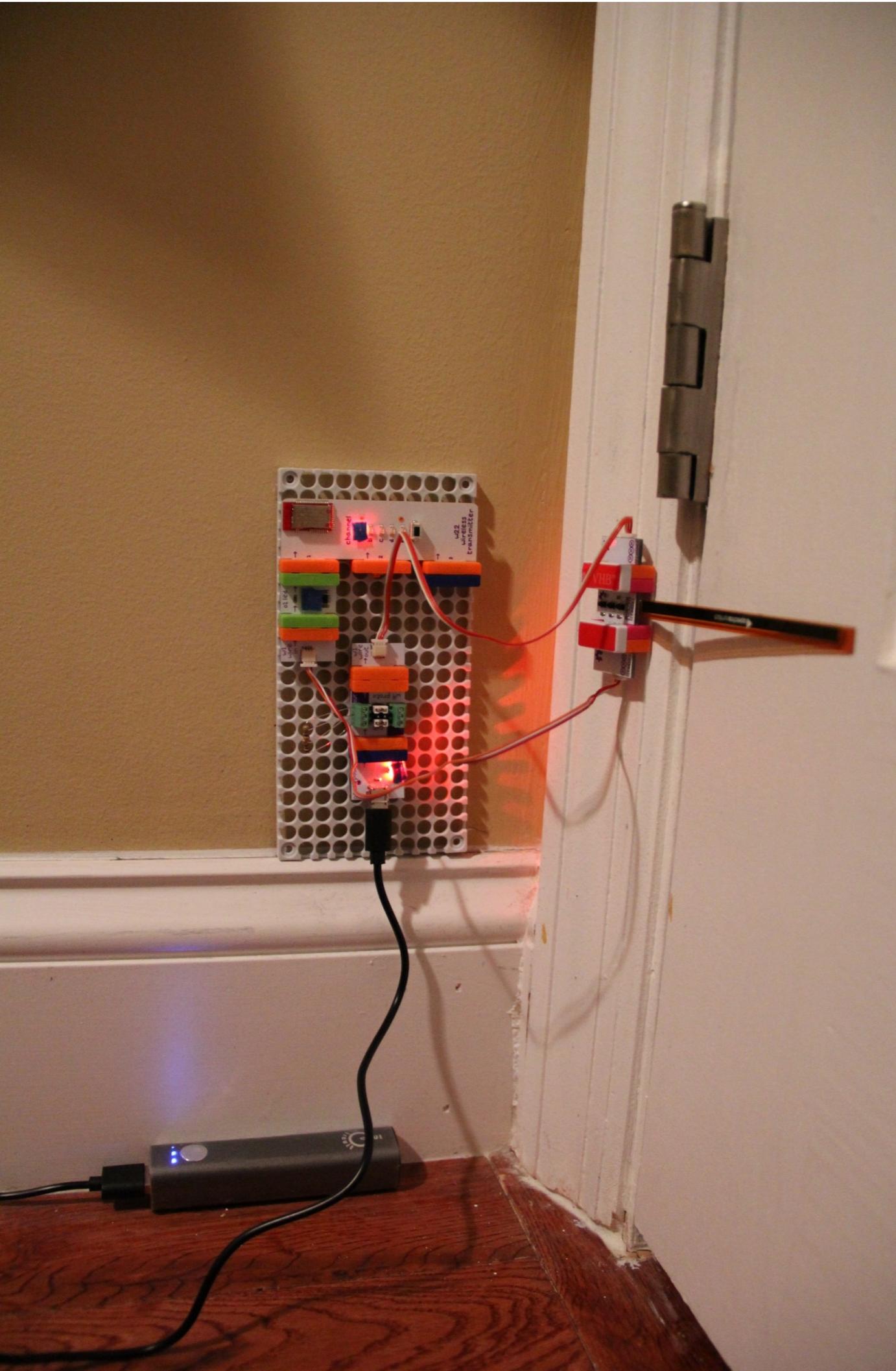
IS MY BEDSIDE DRAWER OPEN?
→ LIGHT SENSOR



IS MY COIN BANK IN ITS PLACE? → PRESSURE SENSOR



IS MY DOOR OPEN? → BEND SENSOR



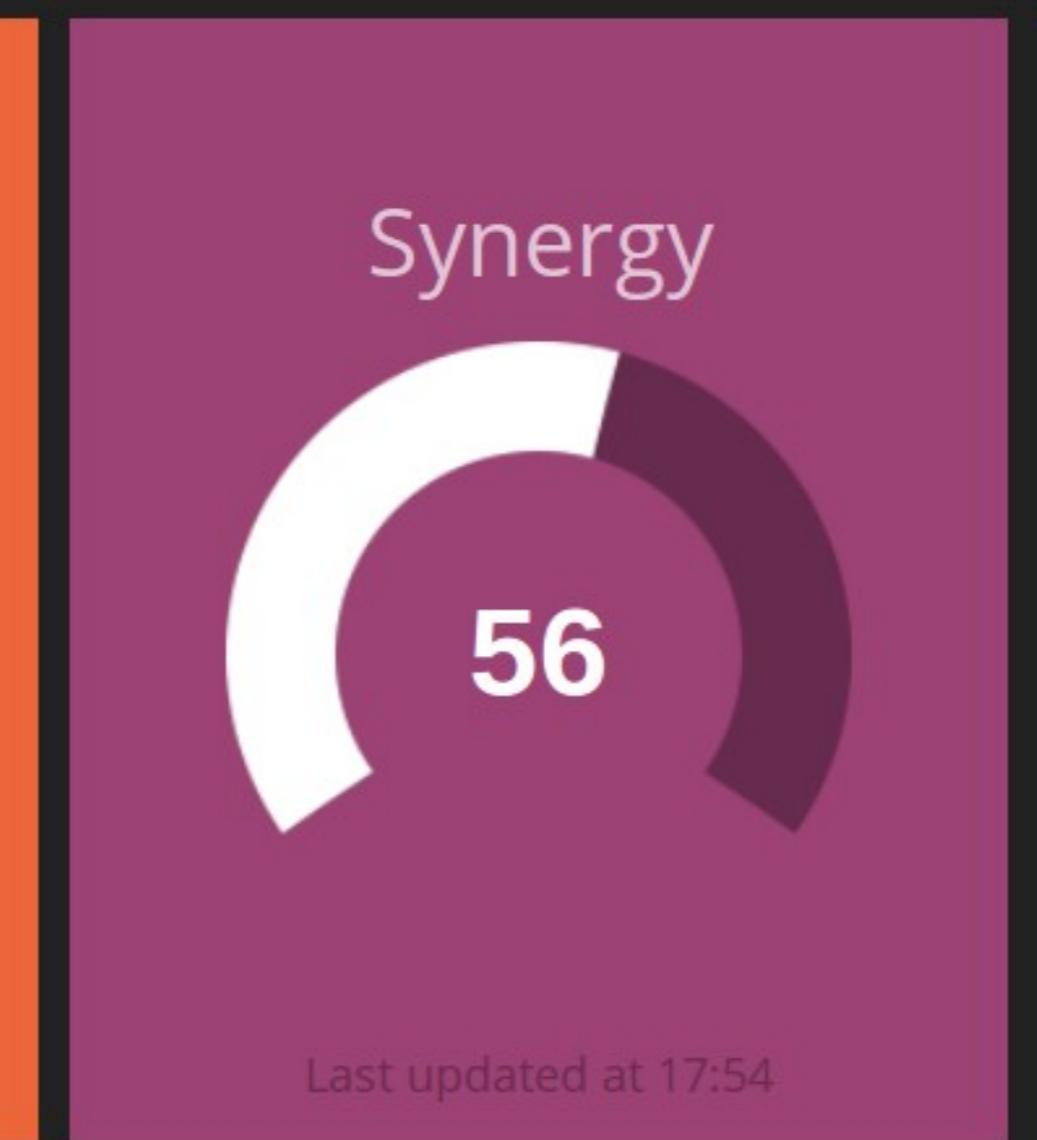
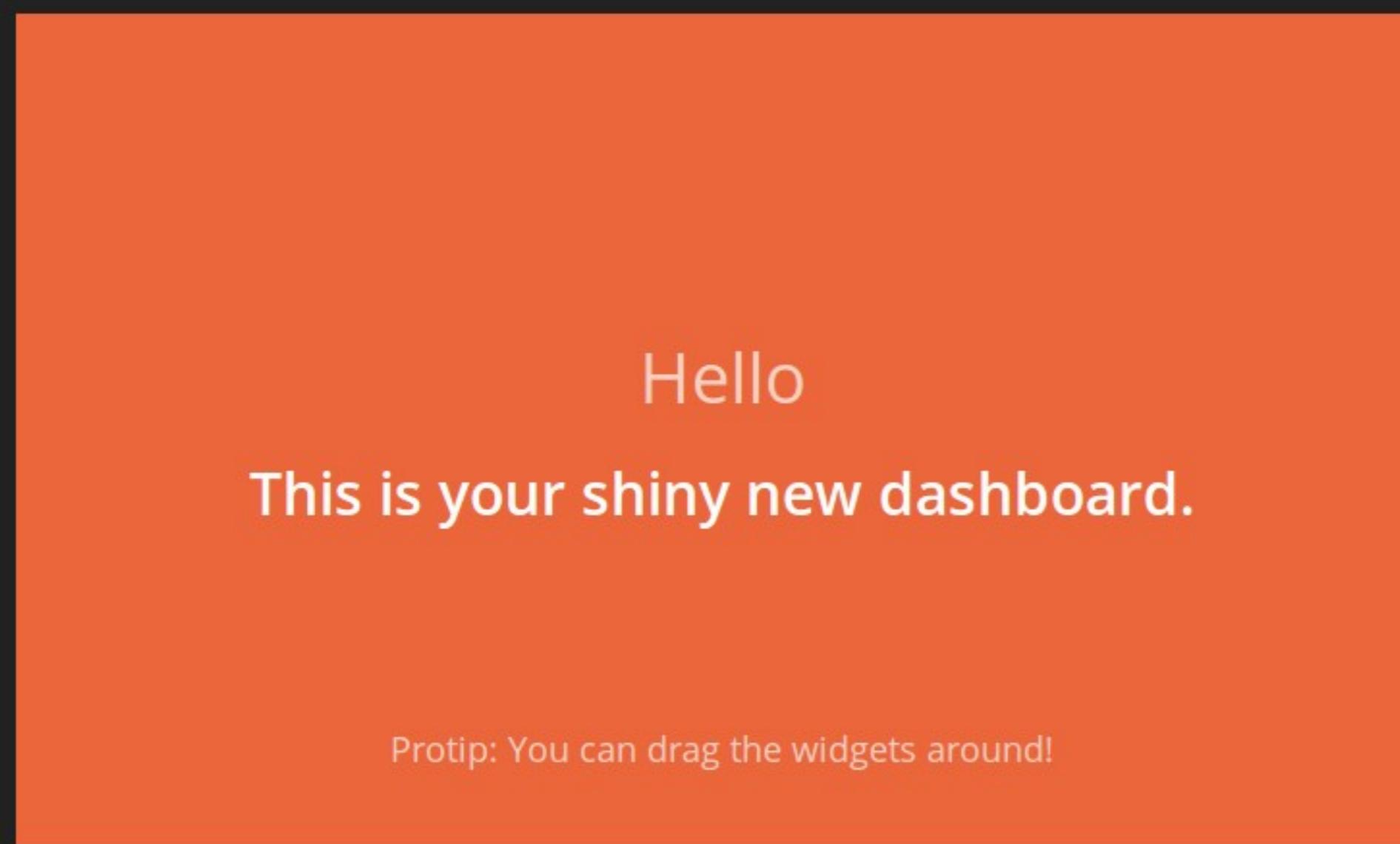
SOFTWARE TOOLS

Node.JS

littleBits cloud HTTP API

Twilio SMS API

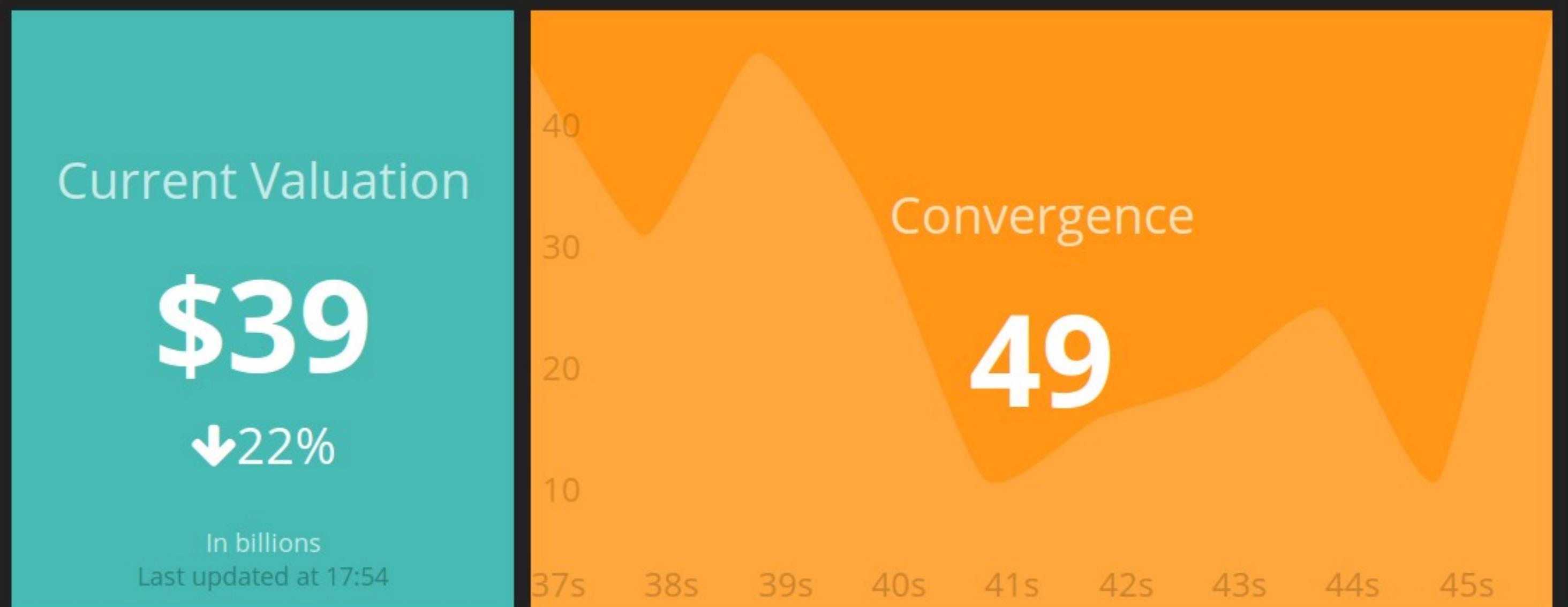
dashing-js: a port of Shopify's Dashing in Ruby to Node.JS



Buzzwords	
Synergy	4
Enterprise	6
Paradigm shift	5
Pivoting	5
Turn-key	6
Streamlininess	3
Exit strategy	5
Web 2.0	1
Leverage	1

of times said around the office

Last updated at 17:54



Try this: curl -d '{ "auth_token": "YOUR_AUTH_TOKEN", "text": "Hey, Look what I can do!" }' -H "Content-Type: application/json" http://localhost:3030/widgets/welcome

Sat May 21 2016

22:37

HARLEM FORECAST

RIGHT NOW



57°

Drizzle

NEXT HOUR



Light rain for the hour.

LATER



Light rain until tomorrow morning.

Last updated at 22:34

Room Temperature

72

degrees F

Last updated at 22:37

Coin Bank Status



Last updated at 22:37

Is the door open?

NO!

Last updated at 22:37

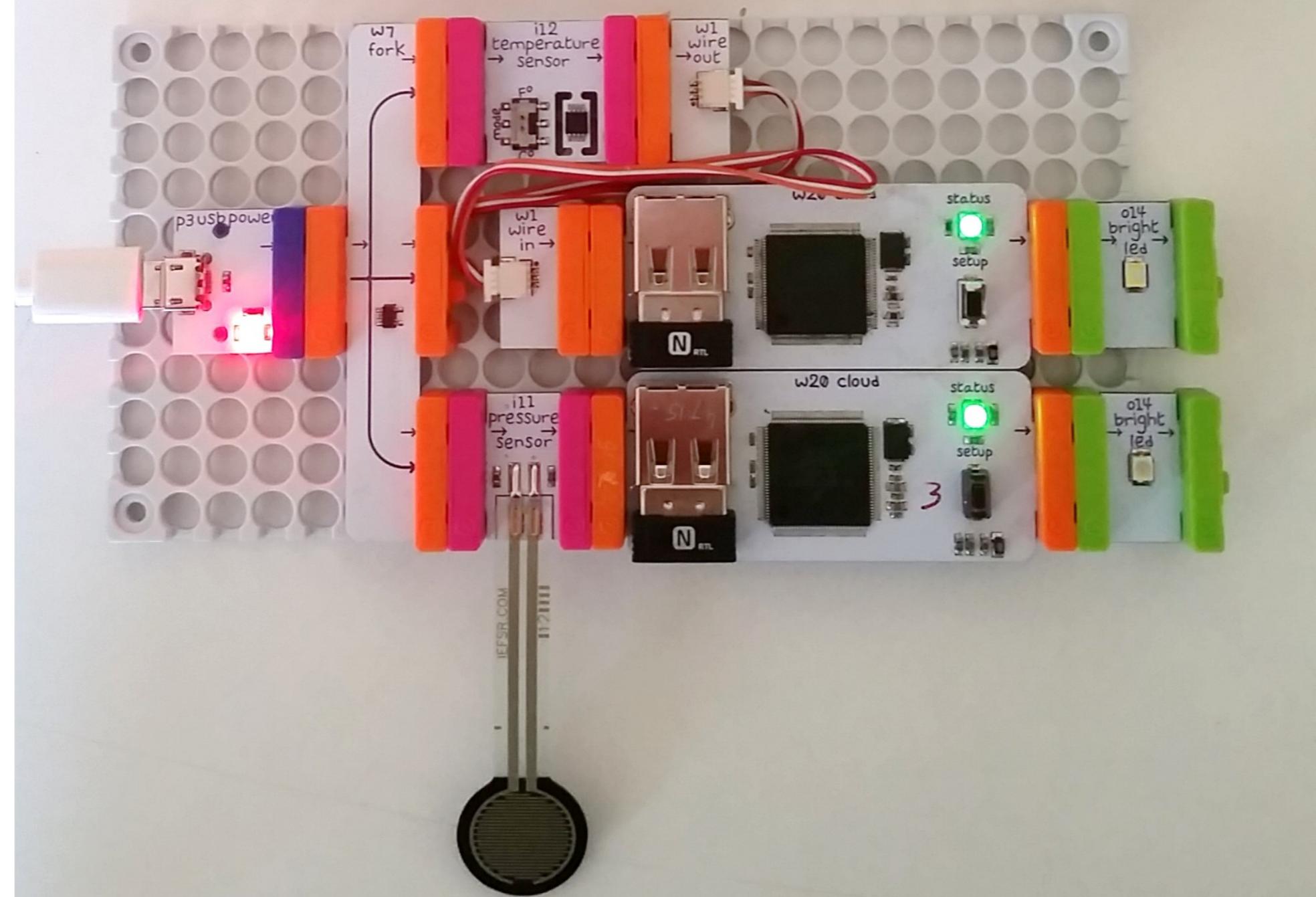
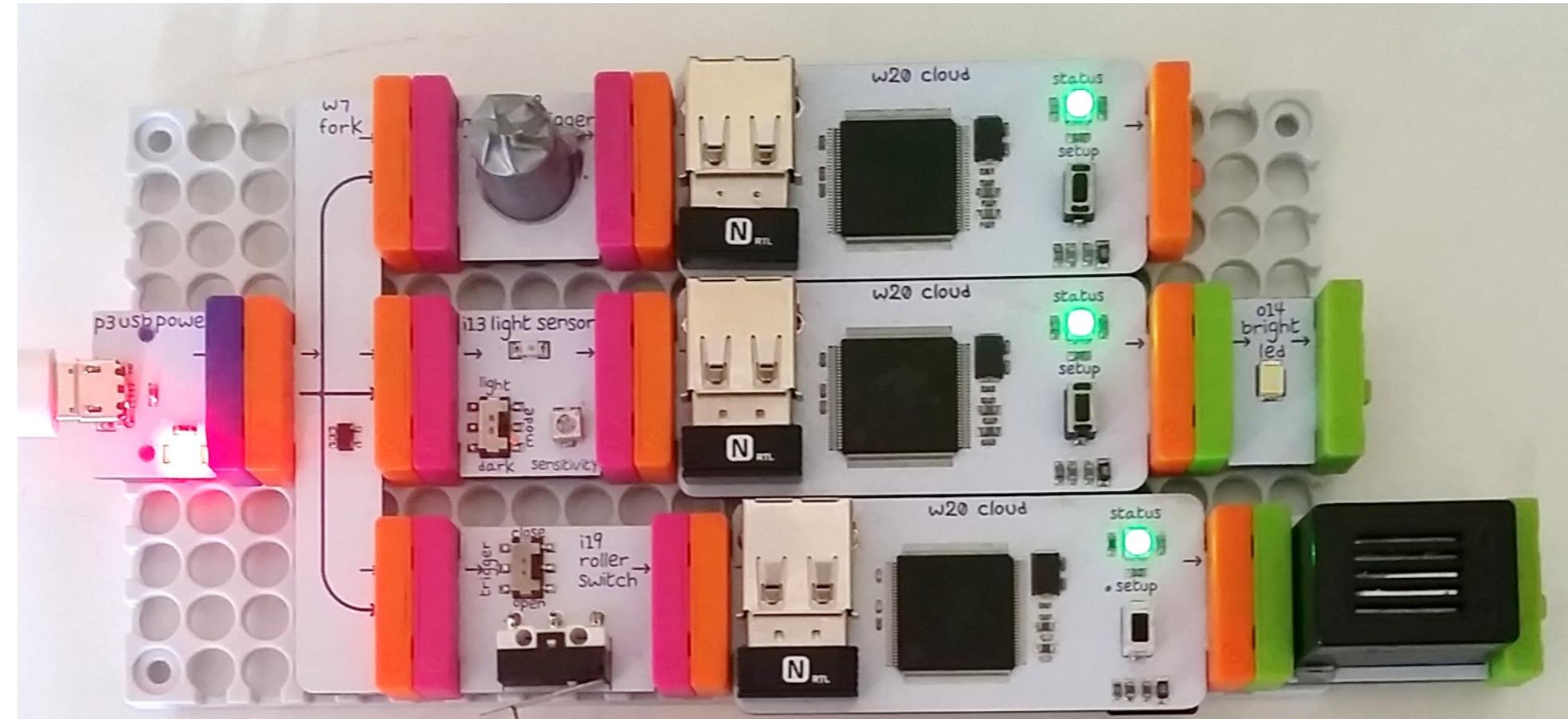
Drawer Status



Last updated at 22:37

Set the alarm!

Turn the alarm on.



hello there, SIGNAL

let's look at some data

:)

Mon May 16 2016

21:06

SF

RIGHT NOW



63°

Clear

NEXT HOUR



Clear for the hour.

LATER



Partly cloudy starting tonight,
continuing until tomorrow
morning.

Last updated at 21:06

Room Temperature

76

→0%

degrees F

Last updated at 21:06

How much
pressure?



Last updated at 21:06

Is the switch open?

NO!

Last updated at 21:06

How bright is it?



Last updated at 21:06

Set the alarm!
Turn the alarm on.

LET'S ADD ANOTHER WIDGET

See project on [github](#).

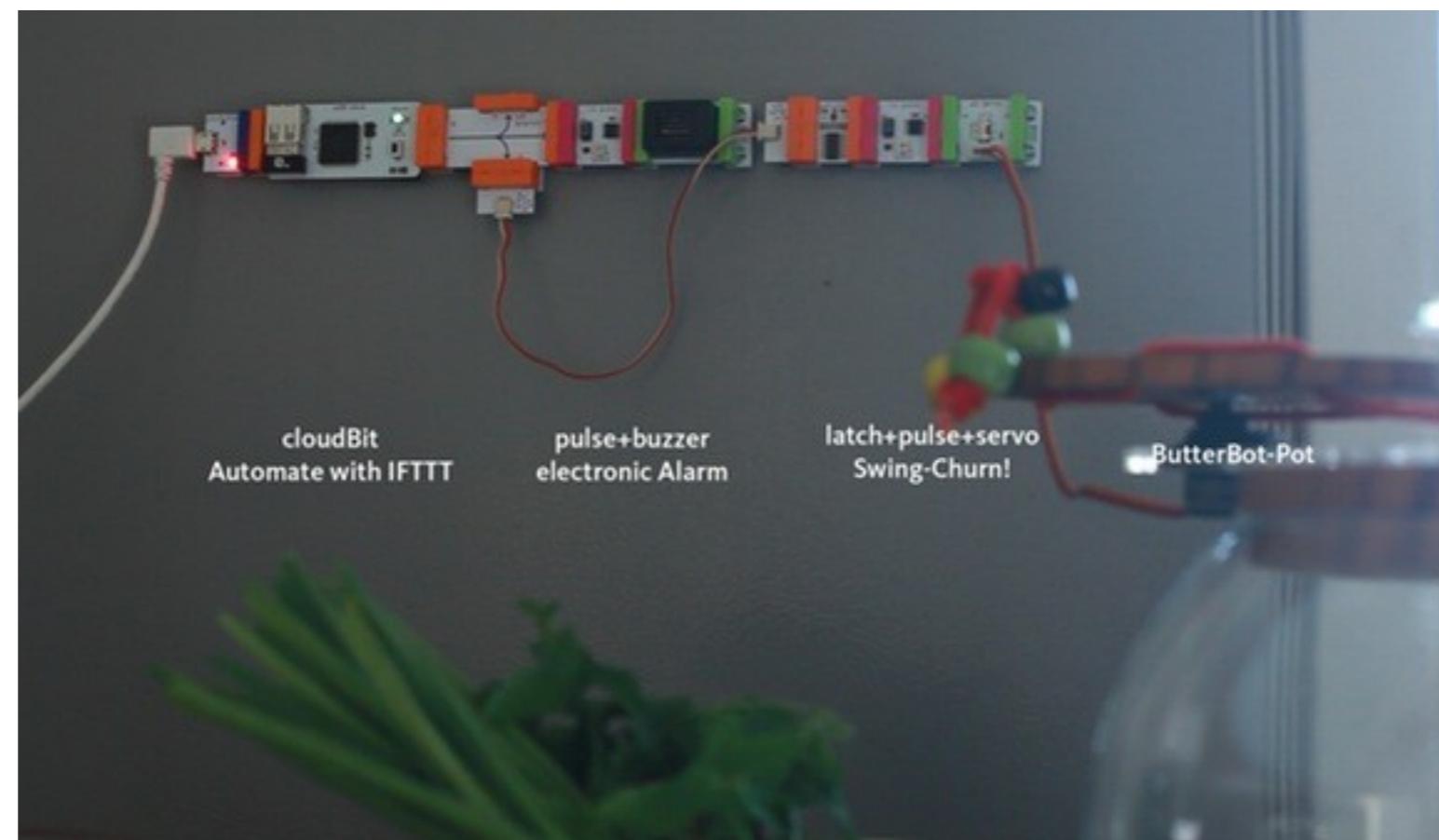
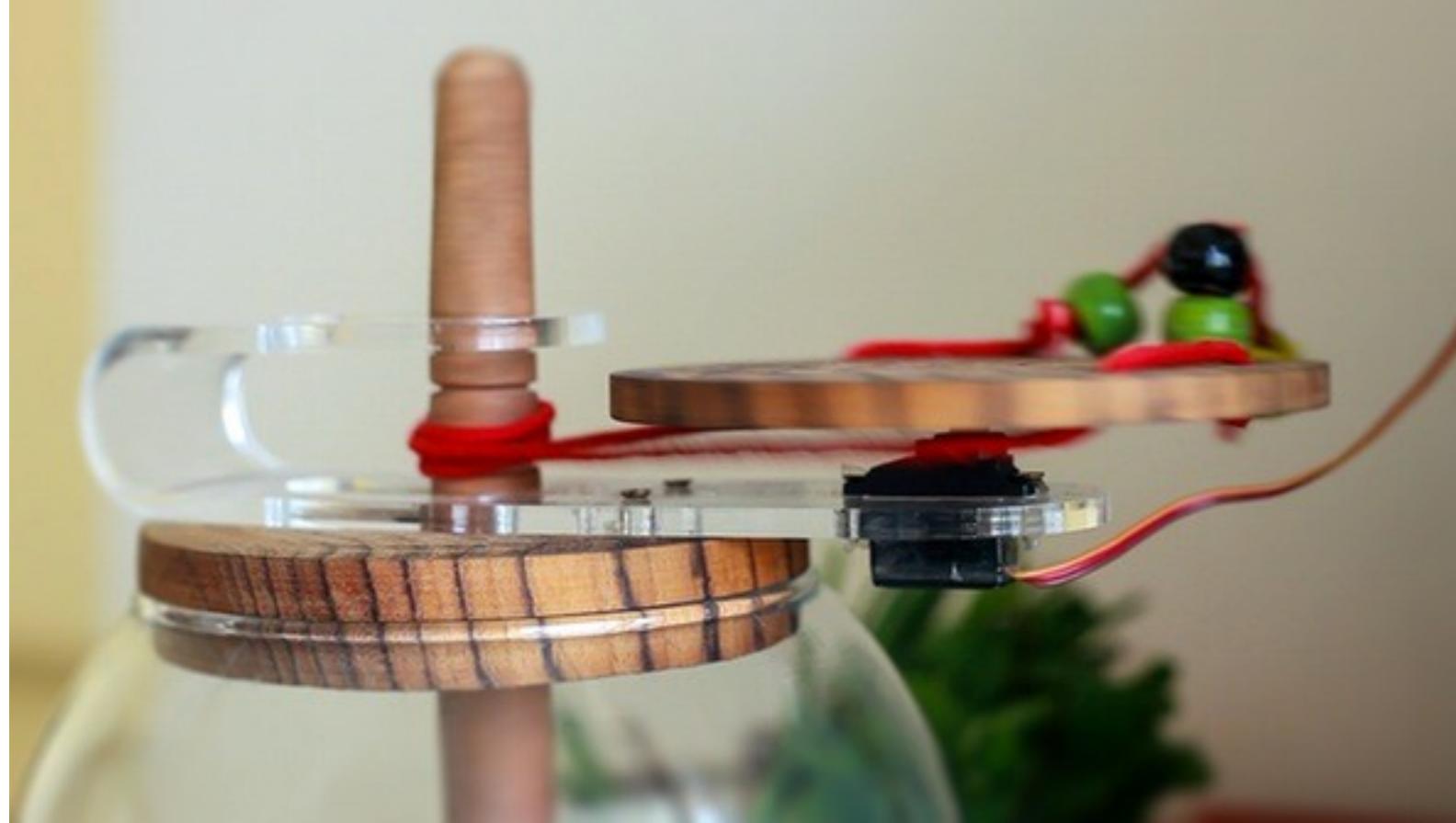
EXAMPLES IN THE COMMUNITY

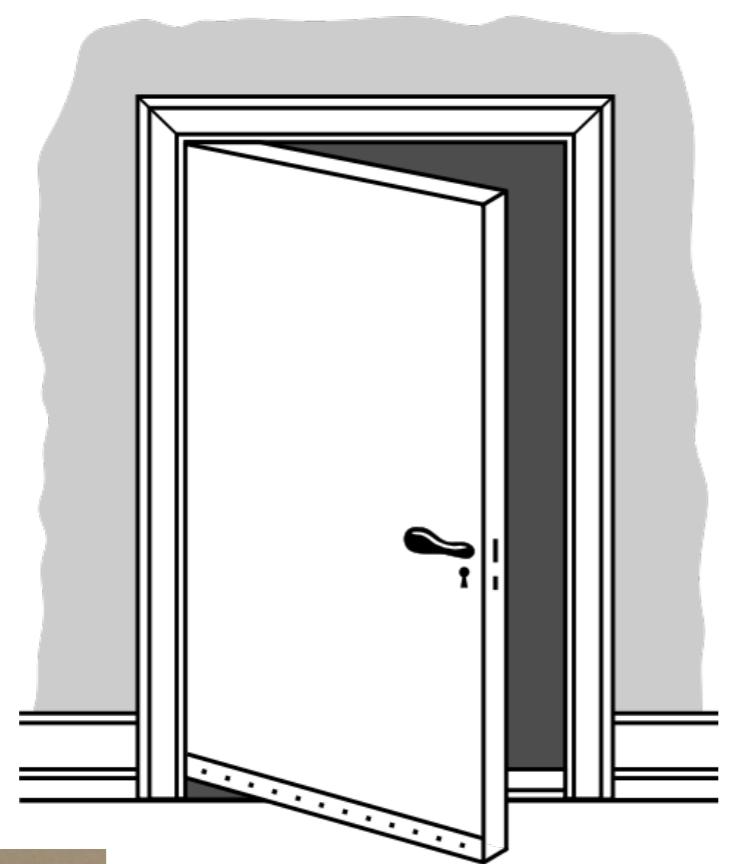
Laundry Done Alerts by Glenn, Kris, Andrew



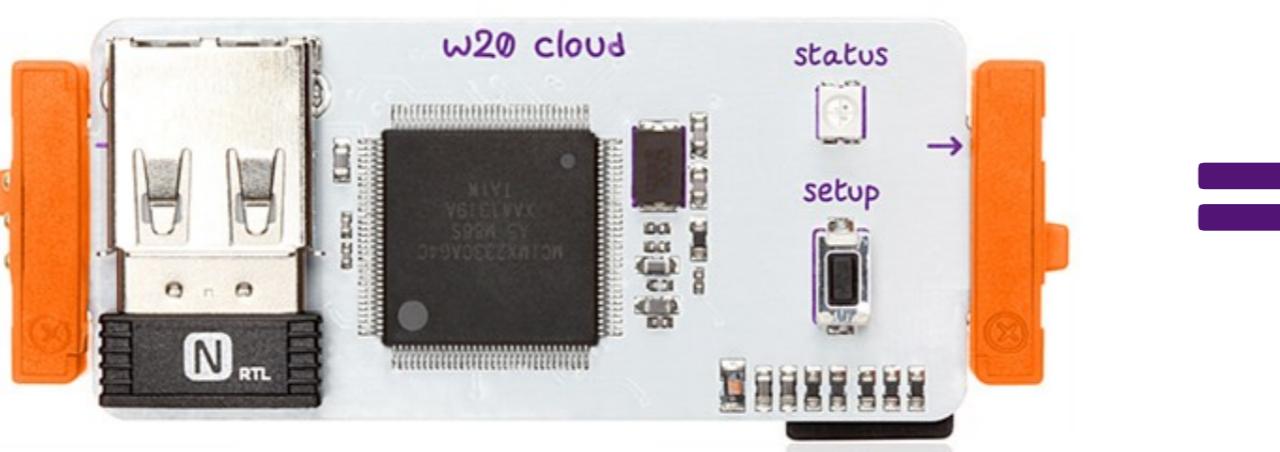
EXAMPLES IN THE COMMUNITY

The ButterBot by Milind in Pune, India

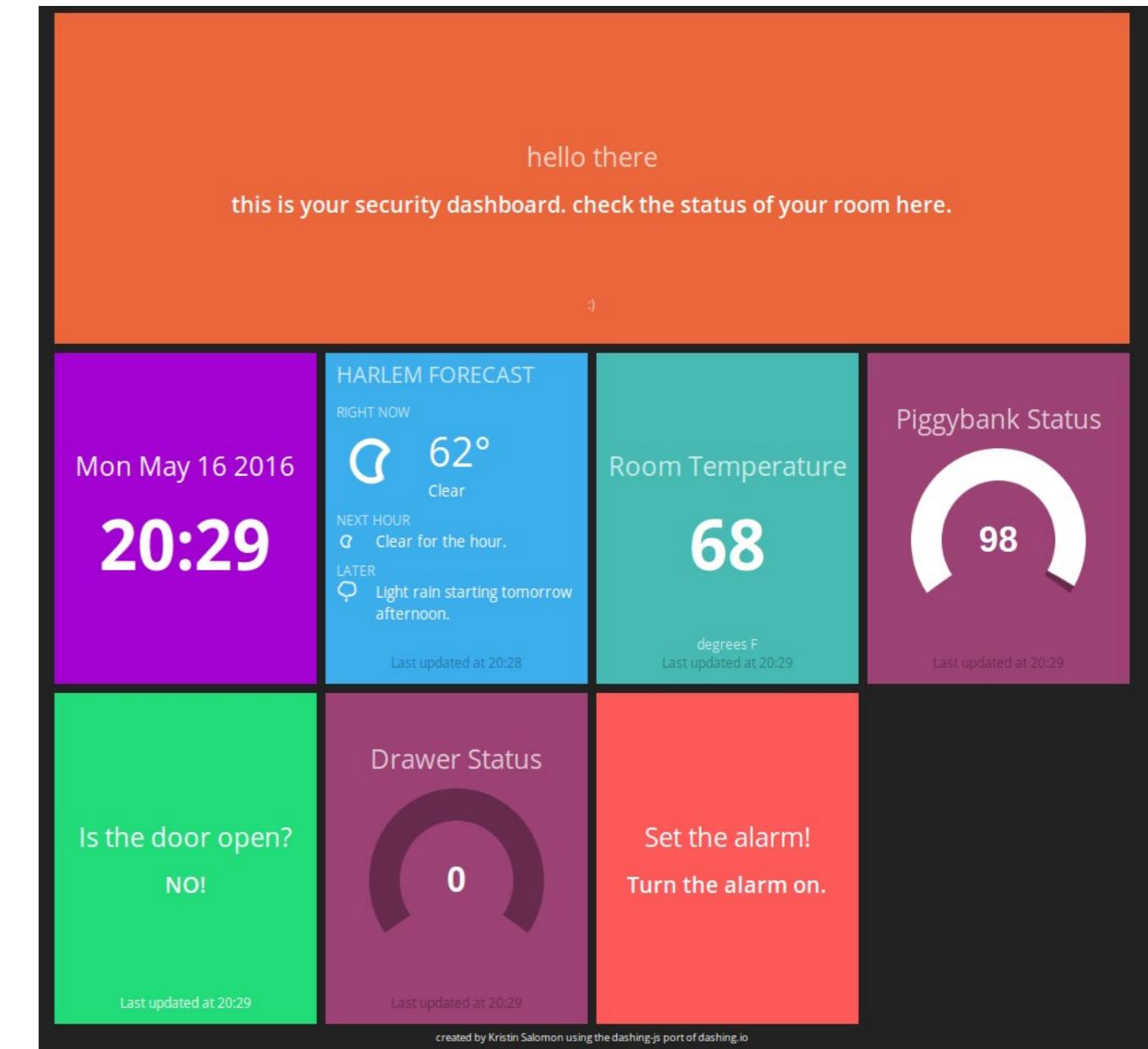




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created by Kristin Salomon using the dashing.js port of dashing.io

THANK YOU!