don't forget your...

alex samuel

How many times have you run out the door without your sunglasses, gloves or umbrella

...even when you knew the forcast?

How can we create a non-invasive reminder to grab daily essentials that are easily forgotten?

For people who...

- don't drive cars daily
- are early adapters
- are busy, busy, busy

Control The Weather

Bootcamp - Code

After finding out that the NOAA released XML feeds of it's up-to-the-minute weather data, I knew I wanted to create a sketch using this information. Since the weather is something we interact with daily (whether or not we want to), I decided the sketch needed to incorporate key and mouse functions. So, I learned how to import XML data and use it to control images and text on the screen. In this sketch, users can see a visual representation of the current weather for LA and for NYC. They can also draw "storm fronts" across the country by dragging the mouse. Visually, I was inspired by weather maps.

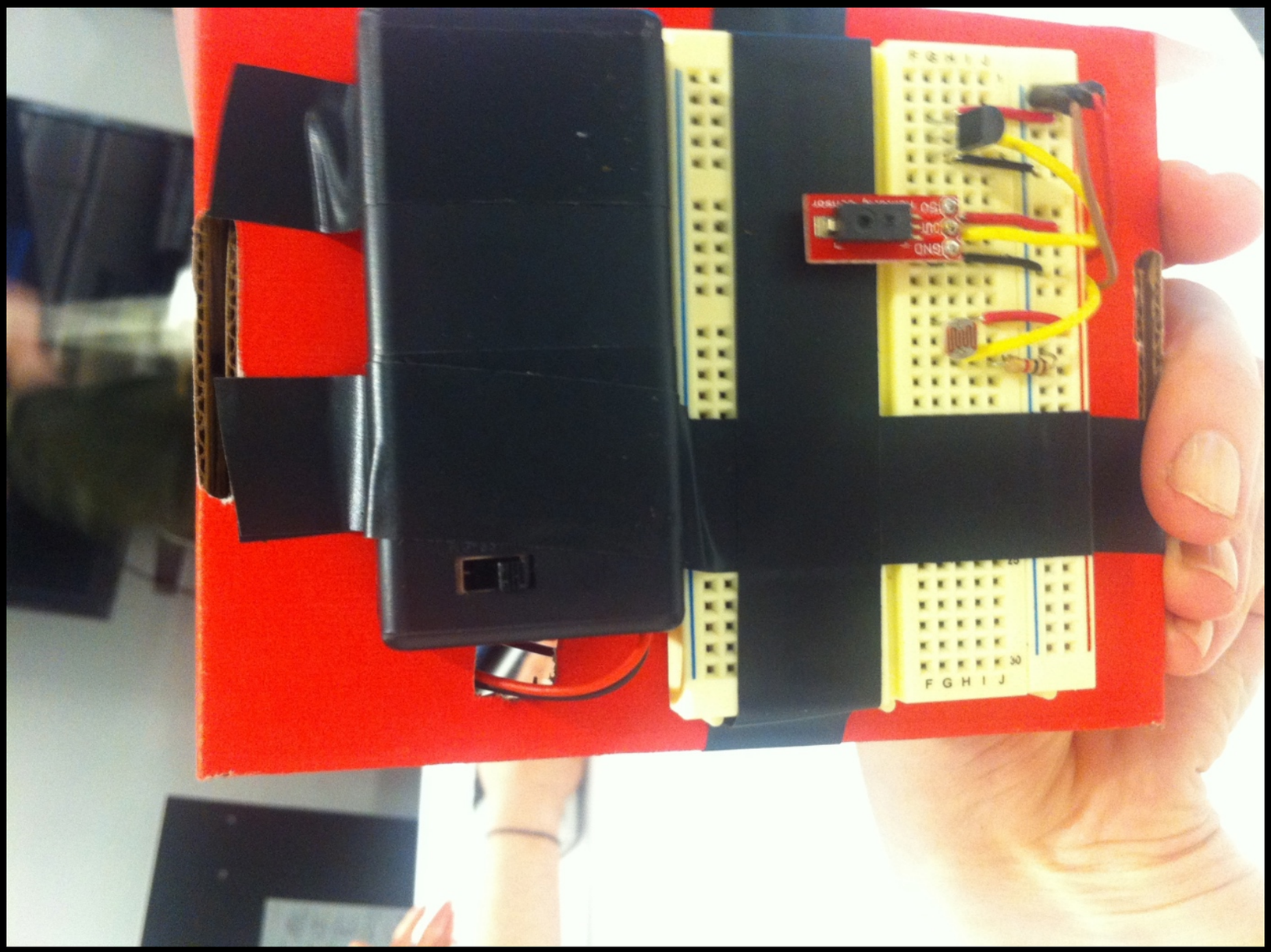
My Bootcamp Coding Final

Adidas Megalizer by Didier Brun + Sid Lee

Sensemaker's Air Quality Egg

I tackled this question for my midterm, too...

Don't forget your...

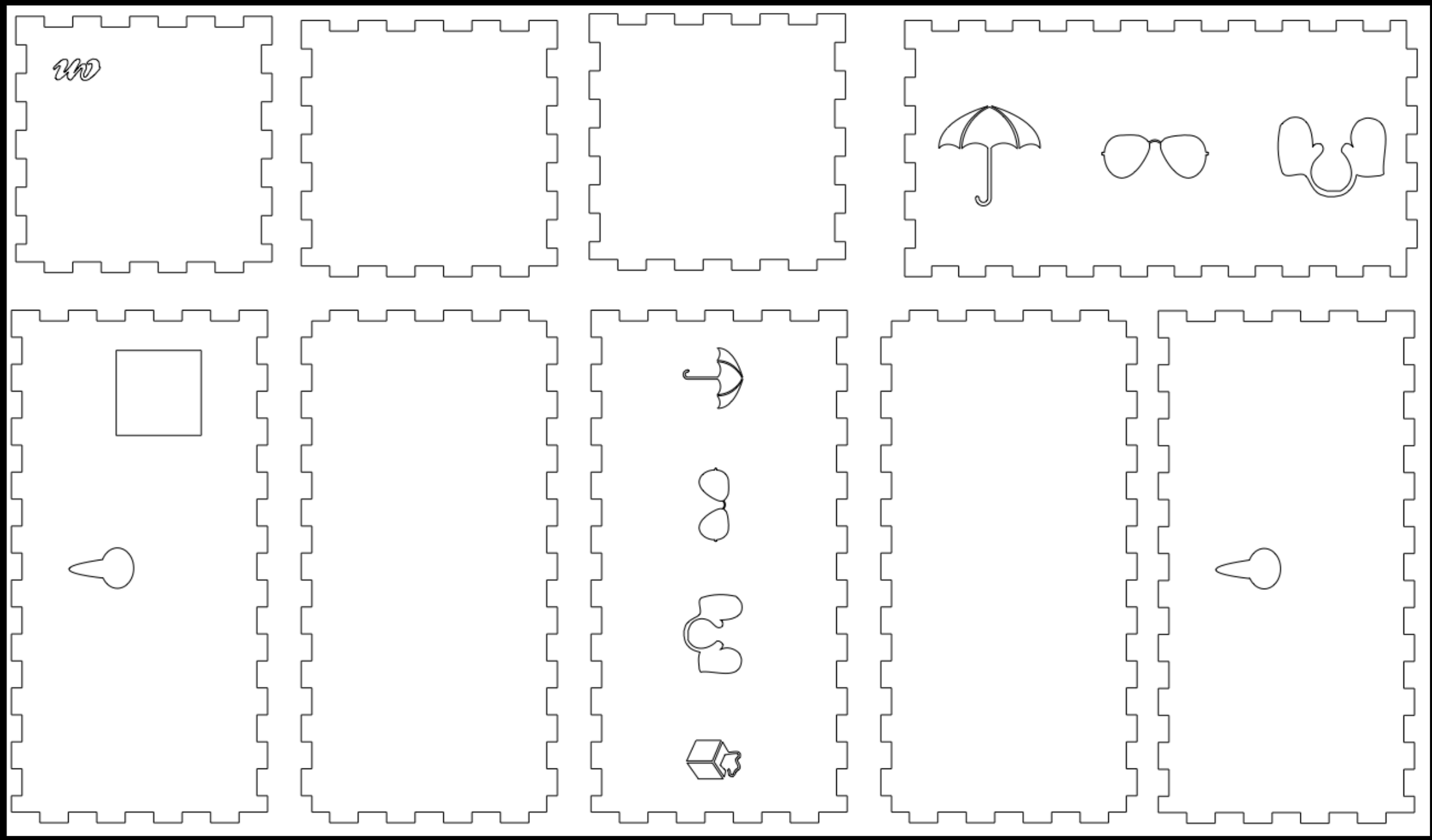

F G H I J
30
UNO
ARDUINO

a couple problems...

a couple problems...

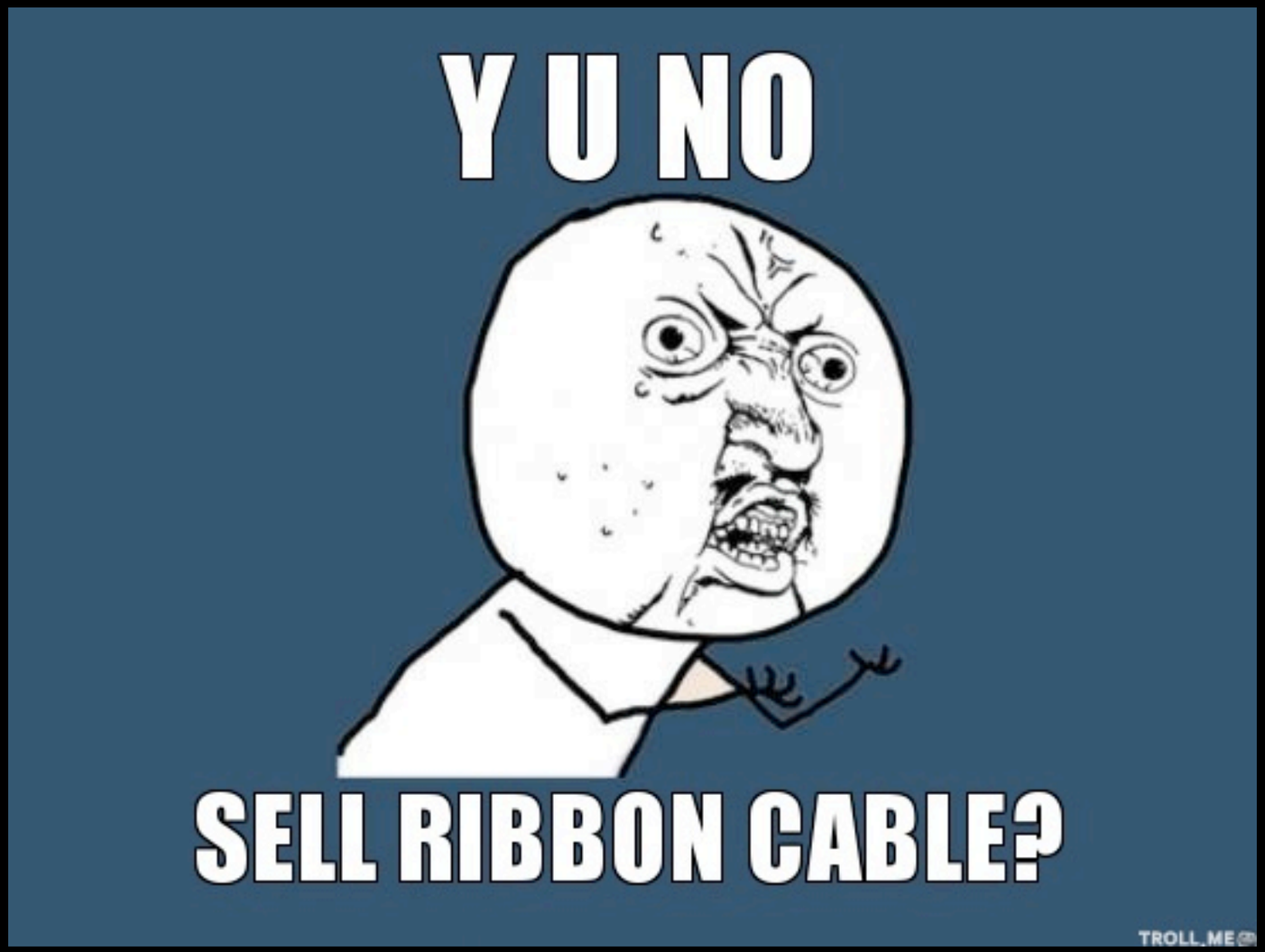
- ugly
- not wireless
- only one unit

so, this time I laser cut boxes.



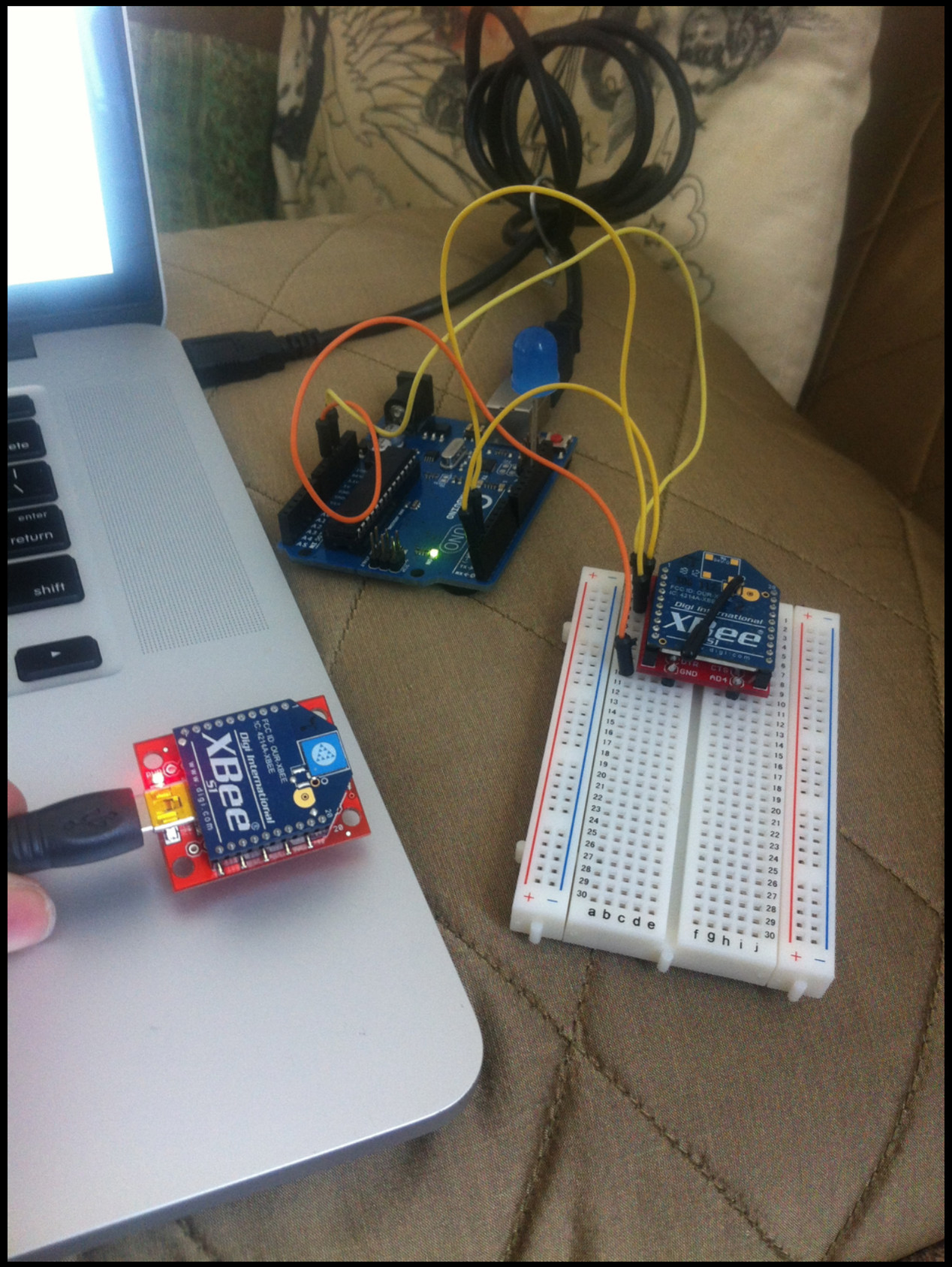
http://boxmaker.rahulbotics.com/ + illustrator

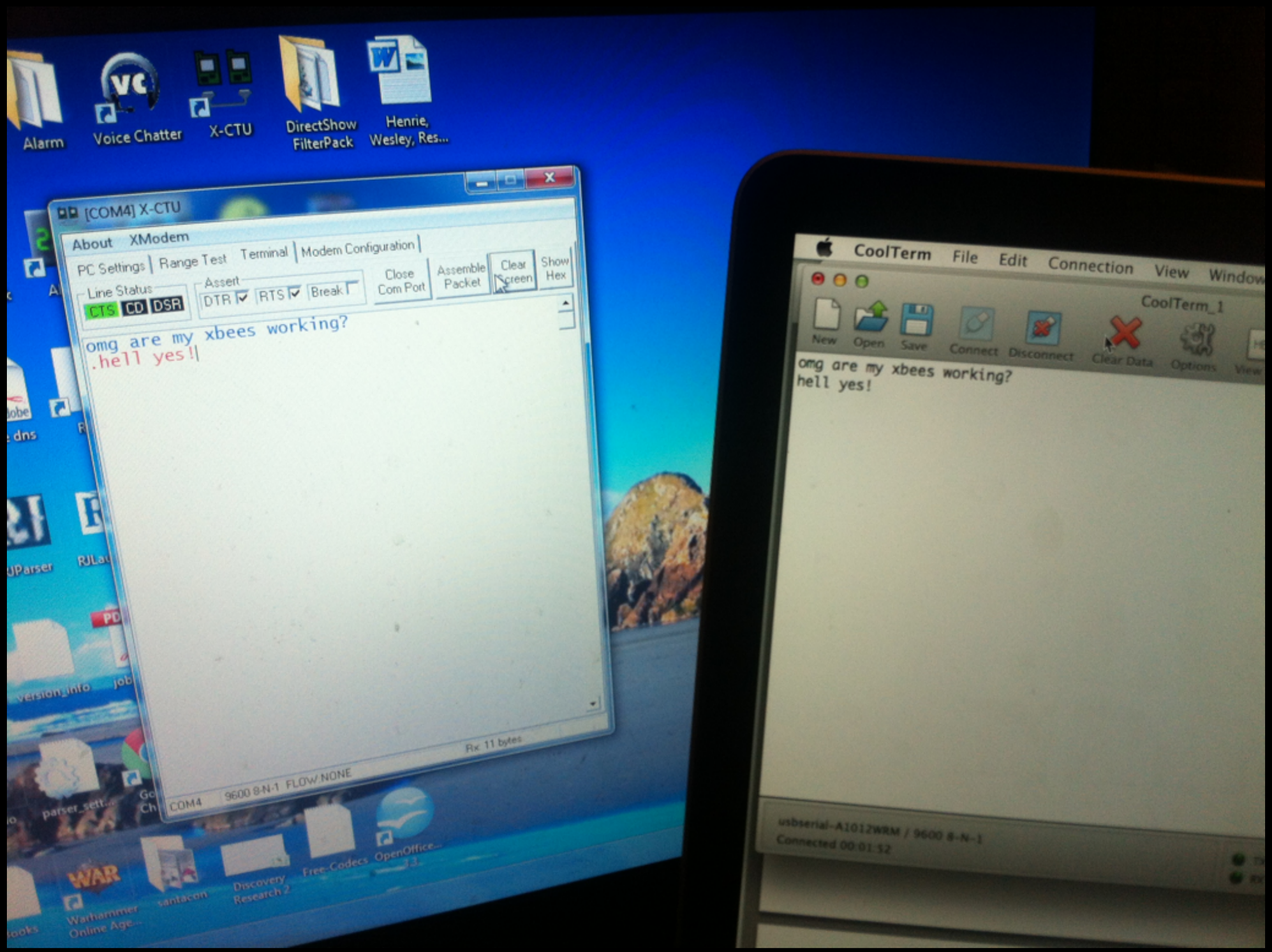
i also wanted to incoporate a dust sensor, but...

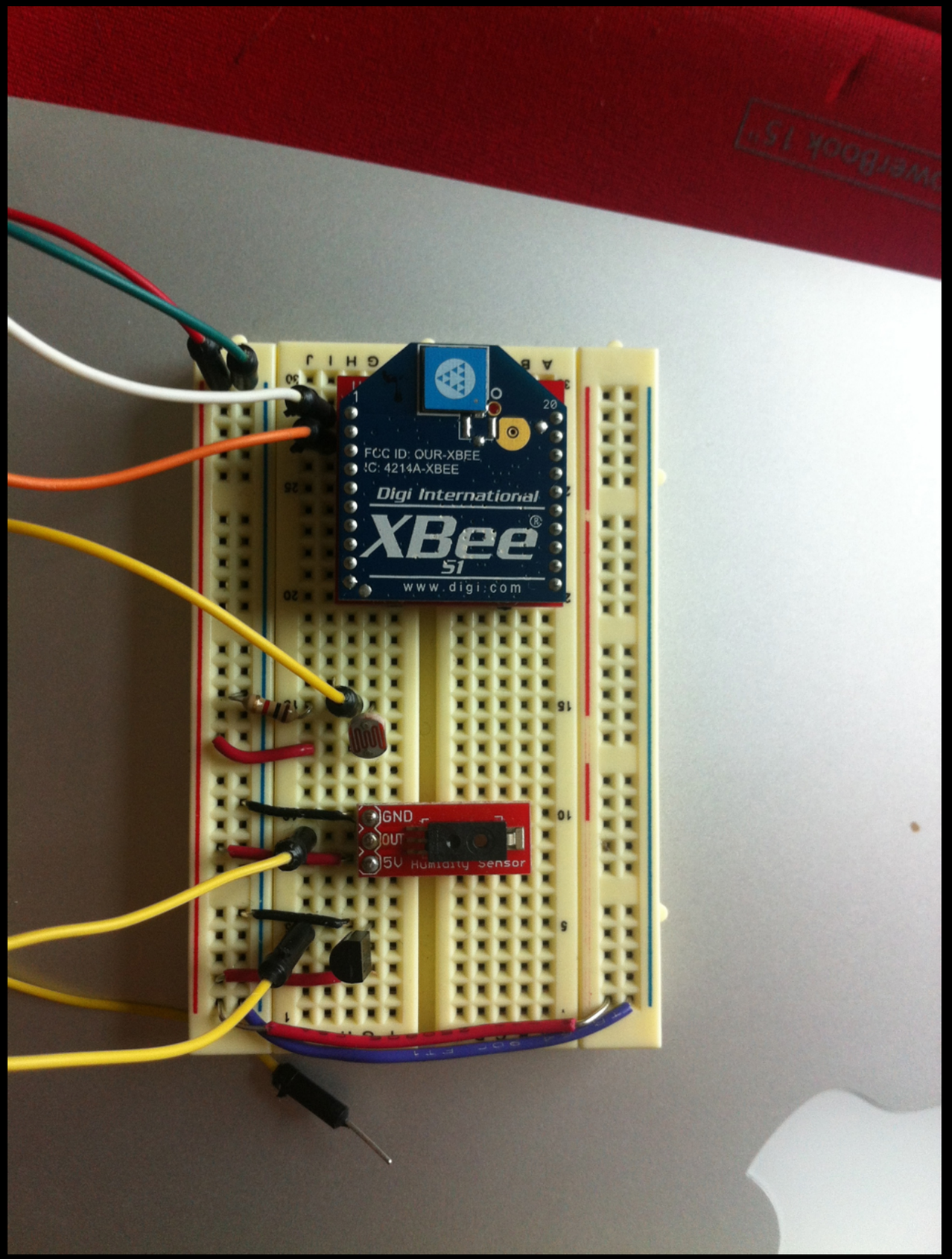

Y U NO
SELL RIBBON CABLE?
TROLL_ME

(it ended up being a hot mess of wires.)

so, I stuck to the sensors I had and began to work on incorporating xbees.


shift
enter
return
XBee
Digi International
www.digi.com
GND
AD4
a b c d e
f g h i j


Alarm
Voice Chatter
X-CTU
DirectShow FilterPack
Henrie, Wesley, Res...
[COM4] X-CTU
About XModem
PC Settings | Range Test | Terminal | Modem Configuration
Line Status
CTS CD DSR
Assert
DTR RTS Break
Close Com Port
Assemble Packet
Clear Screen
Show Hex
omg are my xbees working?
.hell yes!
COM4 9600 8-N-1 FLOW NONE
Rx: 11 bytes
CoolTerm File Edit Connection View Window
CoolTerm_1
New Open Save Connect Disconnect Clear Data Options
omg are my xbees working?
hell yes!
usbserial-A1012WRM / 9600 8-N-1
Connected 00:01:52
version_info
parser_sett...
Warhammer Online Age...
santacon
Discovery Research 2
Free-Codecs
OpenOffice...


FCC ID: OUR-XBEE
IC: 4214A-XBEE
Digi International
XBee
S1
www.digi.com
GND
OUT
5V Humidity Sensor

xbee_sensor | Arduino 1.0.1

xbee_sensor

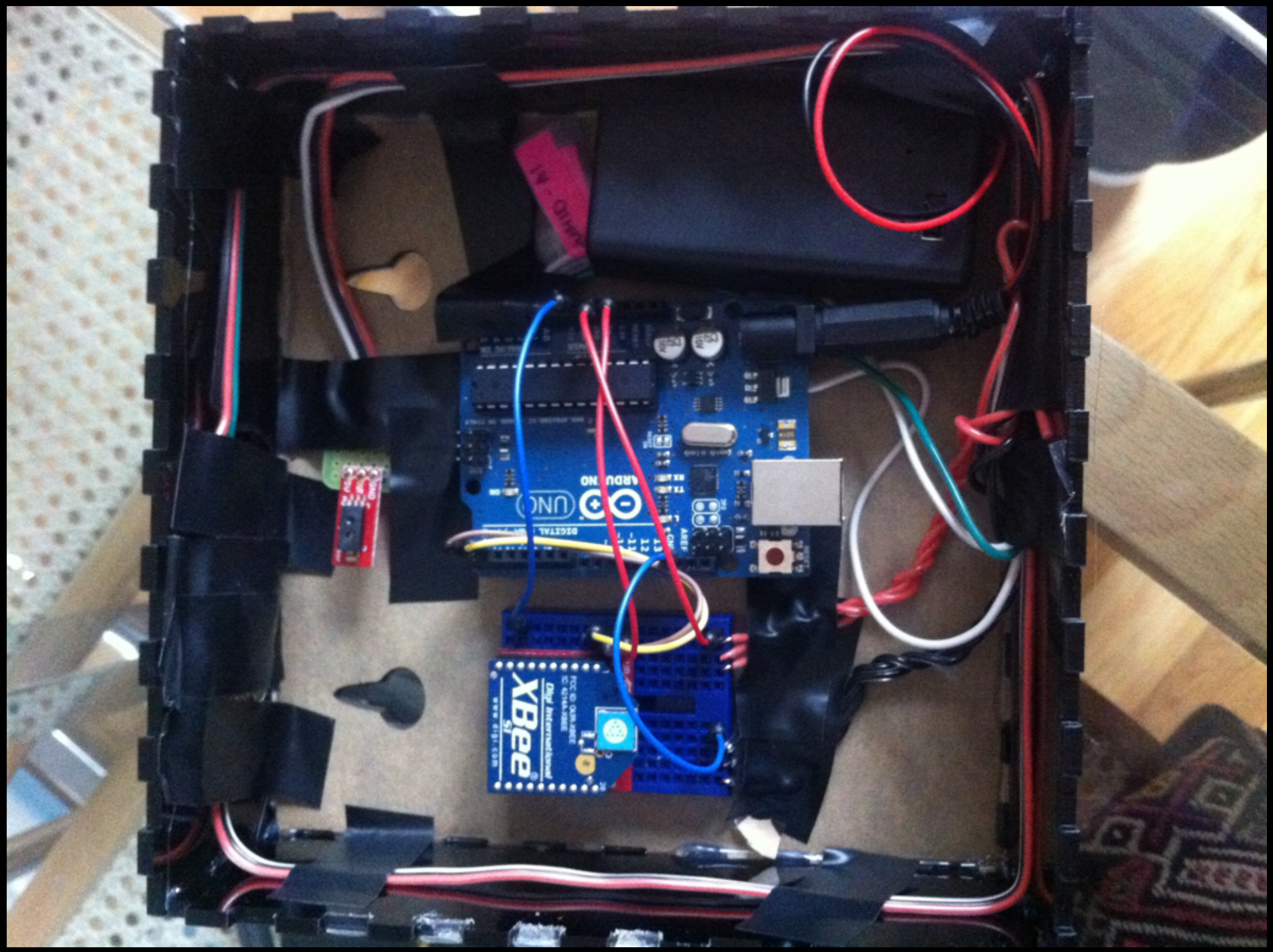
```
//SENSOR INT - TEMP
int sensorPinTemp = A0;

//SENSOR INT - HUMID
float sensorPinHumid = A1;
float humidityValue = 0;
float relHumid = 0;

//SENSOR INT - SUNNIES
int sensorPinSunnies = A2;
int sunniesValue = 0;
int newSunniesValue;


void setup() {
  Serial.begin(9600);


}

void loop(){

  /////Serial Read//////////////////////////////////
  // while (Serial.available() == 0);
  //int val = Serial.read() - '0';
```

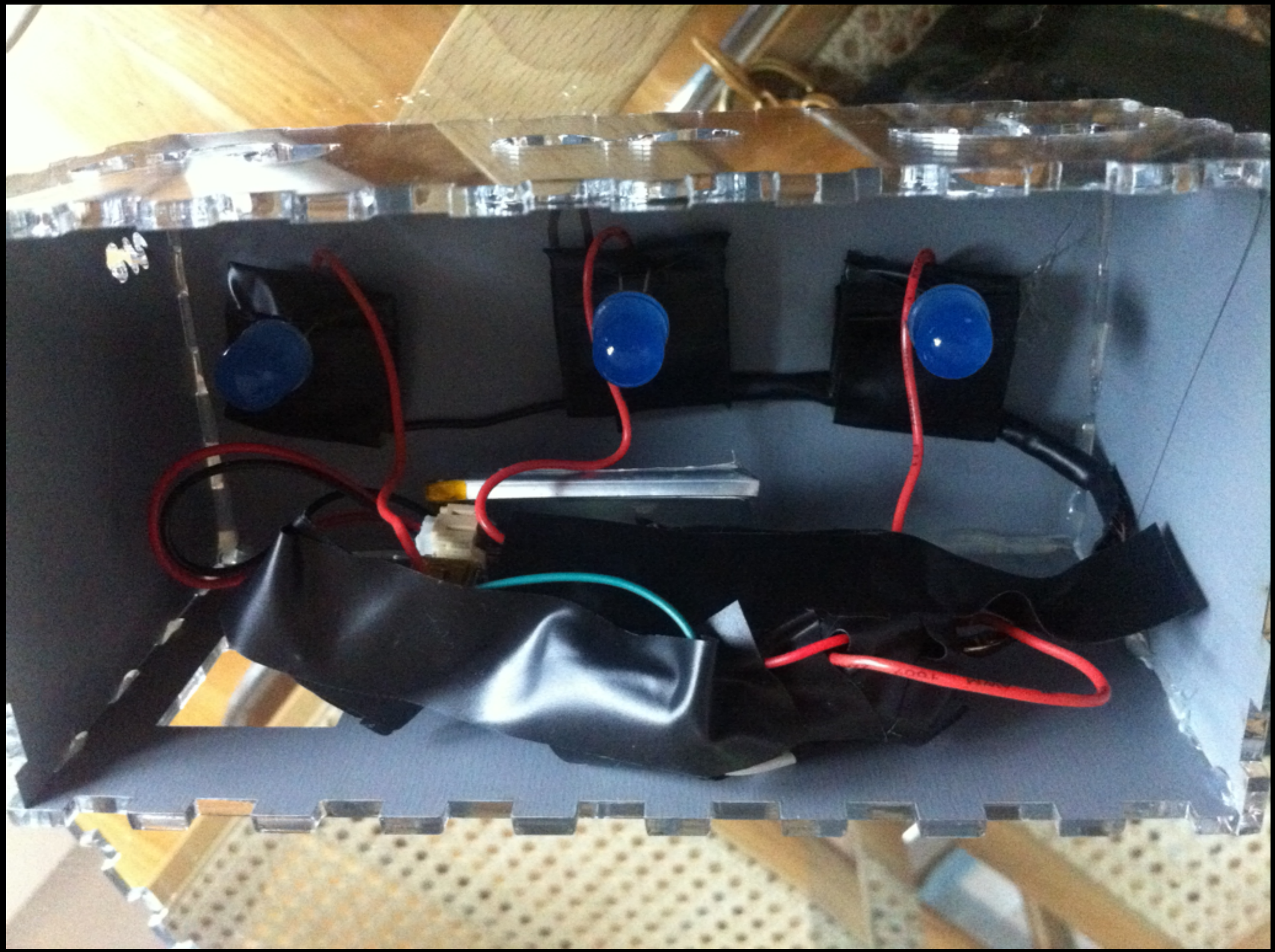
xbee_led | Arduino 1.0.1

xbee_led

```
//LED Pins
int ledUmbrella =  11;      // the number of the LED pin
int ledSunglasses = 9;      // the number of the LED pin
int ledMittens =  7;       // the number of the LED pin
//int ledTissues =  8;      // the number of the LED pin
int ledPower =  13;       // the number of the LED pin


void setup() {
  Serial.begin(9600);

  // set the pin as output:
  pinMode(ledUmbrella, OUTPUT);
  pinMode(ledSunglasses, OUTPUT);
  pinMode(ledMittens, OUTPUT);
  //pinMode(ledTissues, OUTPUT);
  pinMode(ledPower, OUTPUT);

}

void loop(){
  while(Serial.available()){  //is there anything to read?
    char getData = Serial.read();  //if yes, read it

    digitalWrite(ledPower, HIGH);

    if(getData == 'U'){
```

when everything was working, I packed it up.


UNO
ARDUINO
XBee



and set it up.

Tuesday, 1:47 AM (on my roof) 43°

Tuesday, 1:47 AM (in my room) 43°

it works!

Don't forget your...

https://vimeo.com/55873321

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- using xbees with two arduinos is way simpler than using just one.
- the serial output can be used for way more than seeing things in the serial monitor
- i really like coding (but the physical part can get super frustrating).

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- more accessible on/off switches

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- easily replaceable LEDs and batteries

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- hinges for easy access inside

in my next iteration...

- more accessible on/off switches
- easily replaceable LEDs and batteries
- hinges for easy access inside
- multiple at-home units per sensor unit (or access toAirQuality Egg's Cosm database).

thank you!

email: samua407@newschool.edu
code: https://github.com/samua407/Final_Arduino.git