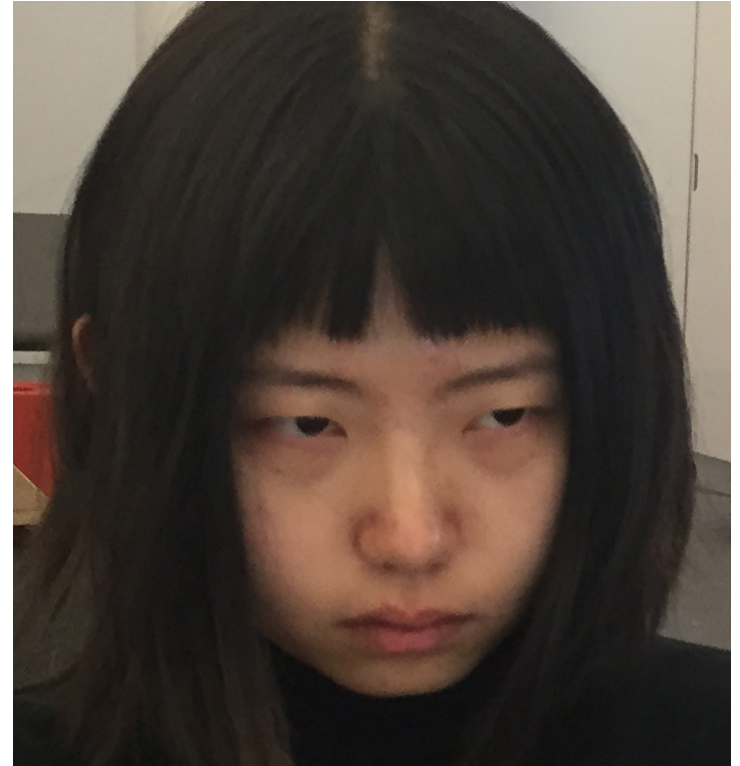


Click Twice

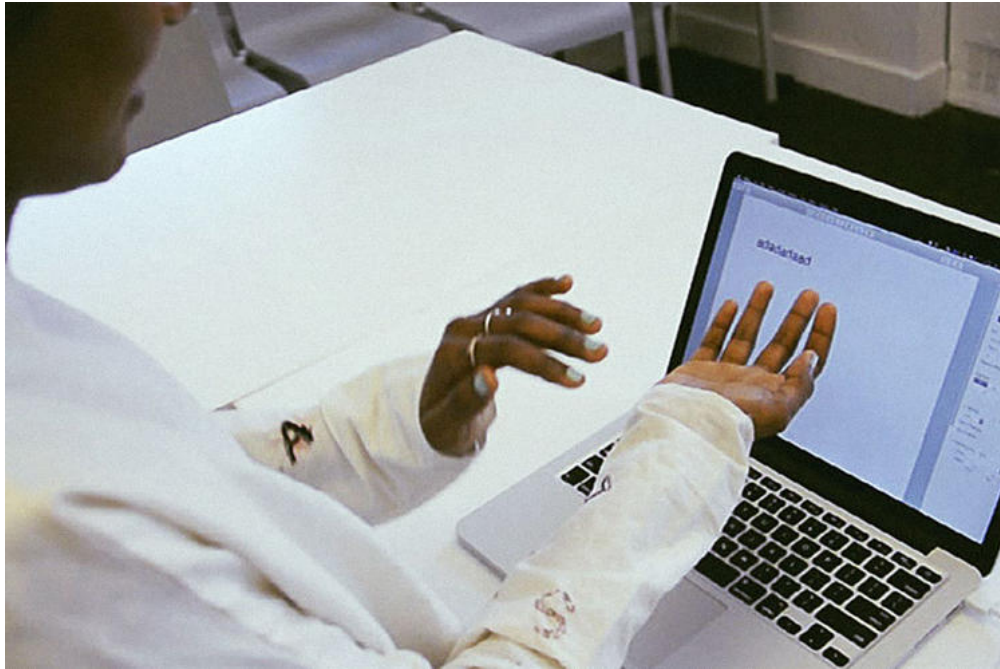
A system that transfers the online experience to real life...
and uploads it back online

Yumeng Wang
Core Studio/Lab: Systems, Midterm

Too Much Time Online?



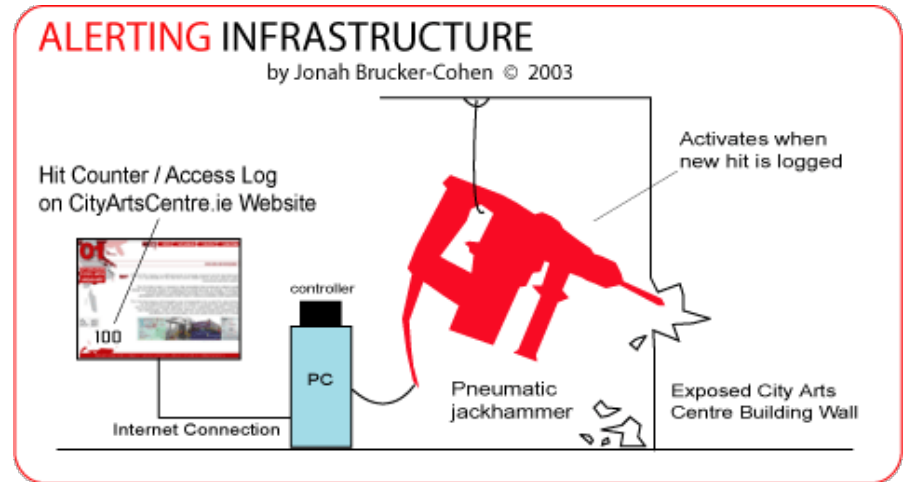
Reference



keyBod - Nitcha Fame Tothong, 2015

Wearable keyboard to let the users type with their bodies and help correcting bad habits while using the computer

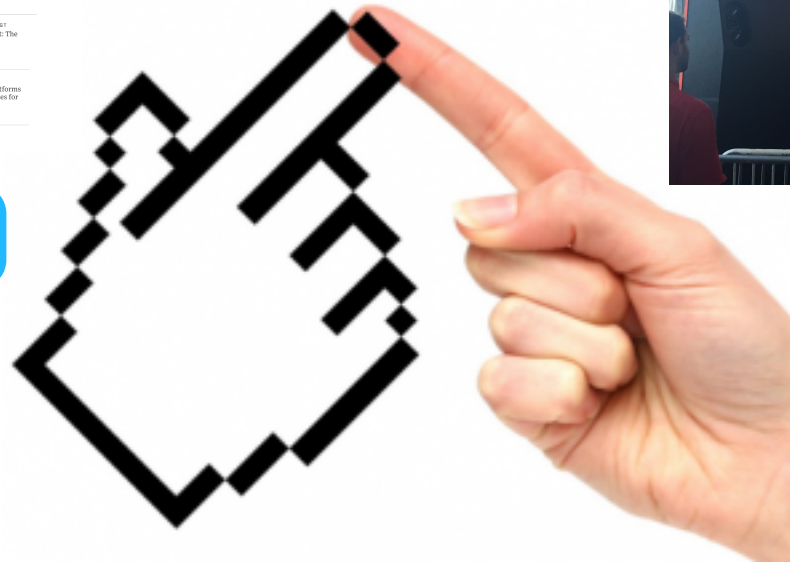
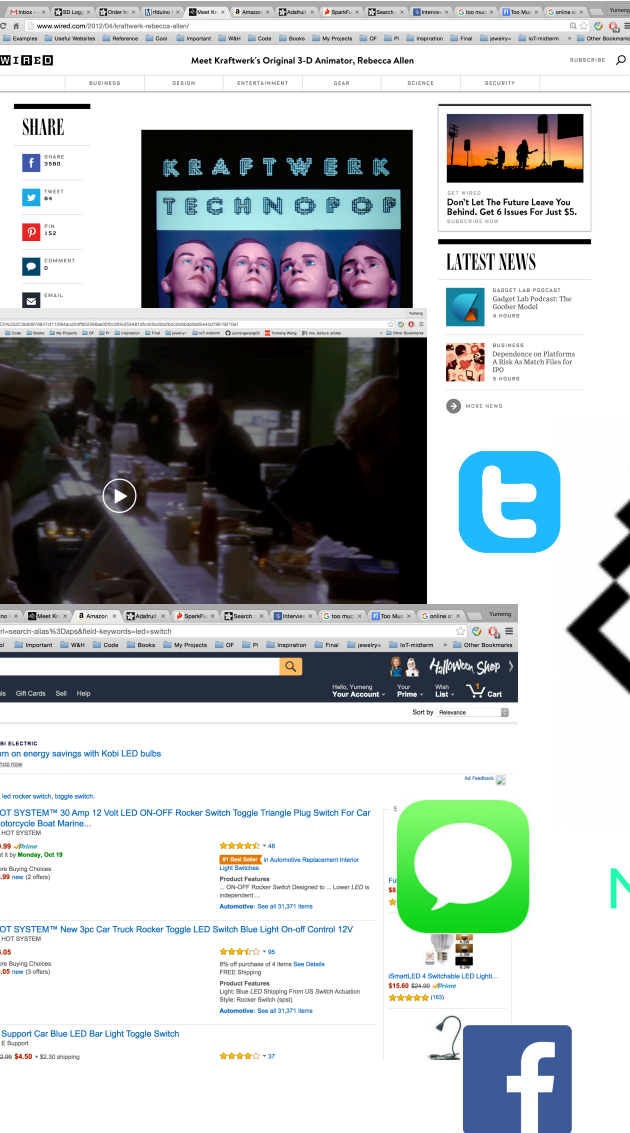
Reference



Alerting Infrastructure! - Jonah Brucker-Cohen, 2003

A web site Hit Counter Destroys a Building

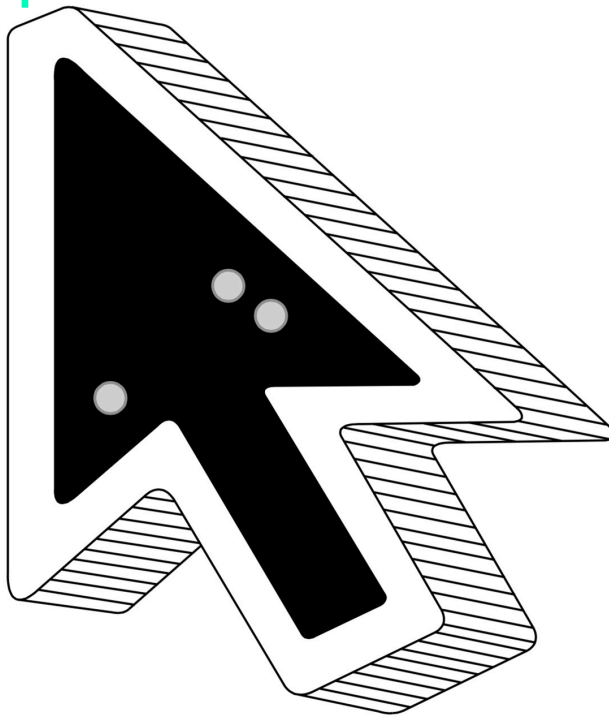
Duality - Online vs. Offline



Migrate the online experience
to offline **literally** and
transfer it back online



16.8cm
/6.6in

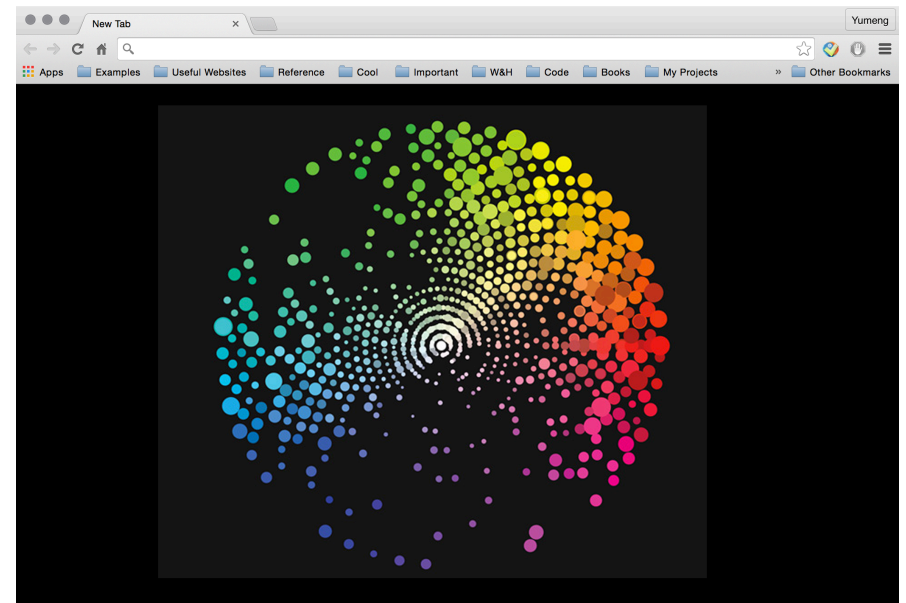


Laser Pointer

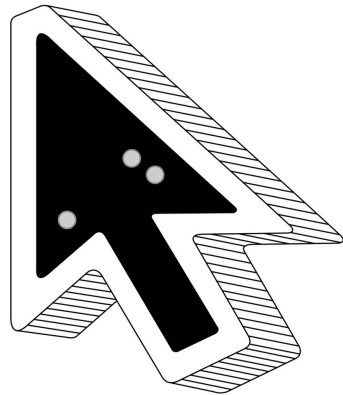
Color Recorder

GPS Data Logger

UPLOAD



Components - Cursor



Silicon
Acrylic

Body



Arduino Uno



RFduino



RFID tag



Battery 6v

Laser Pointer

Left
Button



Button



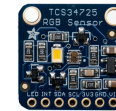
Laser diode

Color Recorder

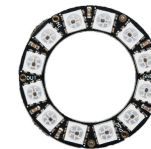
Right
Button 1



Button



RGB Color Sensor



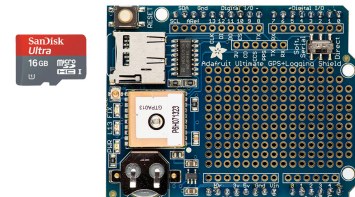
NeoPixel ring

GPS Recorder

Right
Button 2



Button

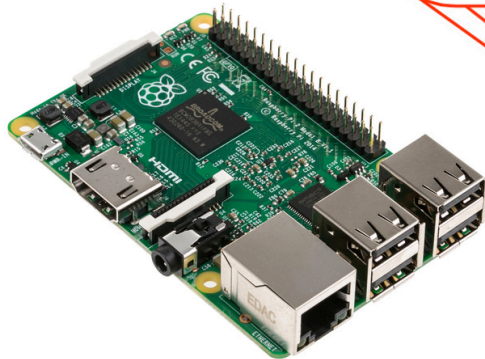


GPS logger shield

Components -Upload Button

Acrylic

UPLOAD



Raspberry Pi (server)



RFduino



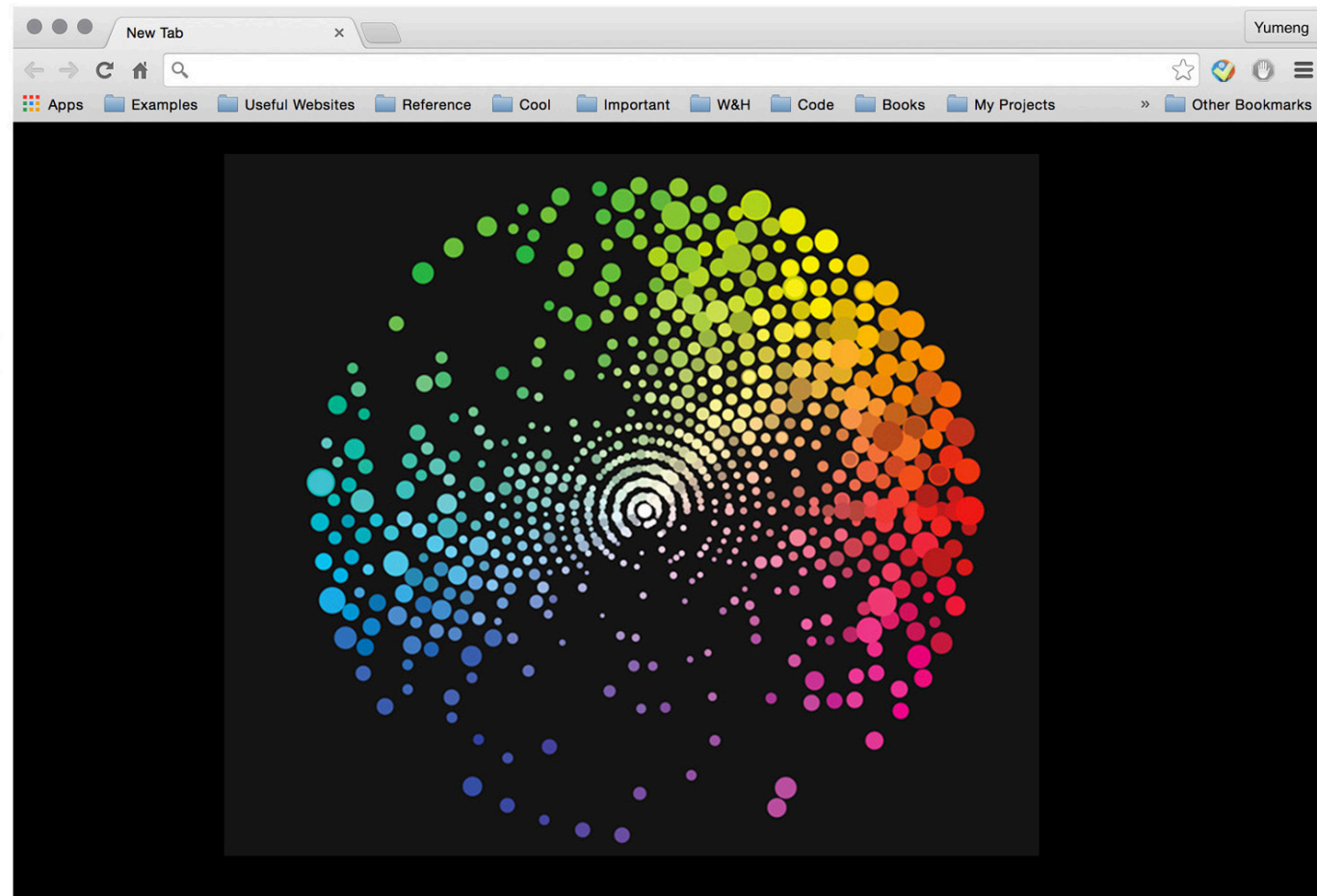
RFID module



Components - Website

GPS and color data recorded from the “cursor” will be “uploaded” to the database, and then visualized on the website by using p5.js.

Parse (database)
Socket.io
p5.js



Hurdles

- Cold start of the GPS module takes 34 seconds (too long).
- Logging GPS data and color RGB data to two separate .txt files onto the SD card.
- Arduino reads the files from the SD card and send them to the RFduino connected to the Raspberry Pi.
- Having a database on Raspberry Pi to store the GPS and color data.
- The data input as variables in the p5.js sketch.
- Casting silicon for the enclosure.
- Enclosure might block or weaken the GPS signal