



FAB LAB
BARCELONA

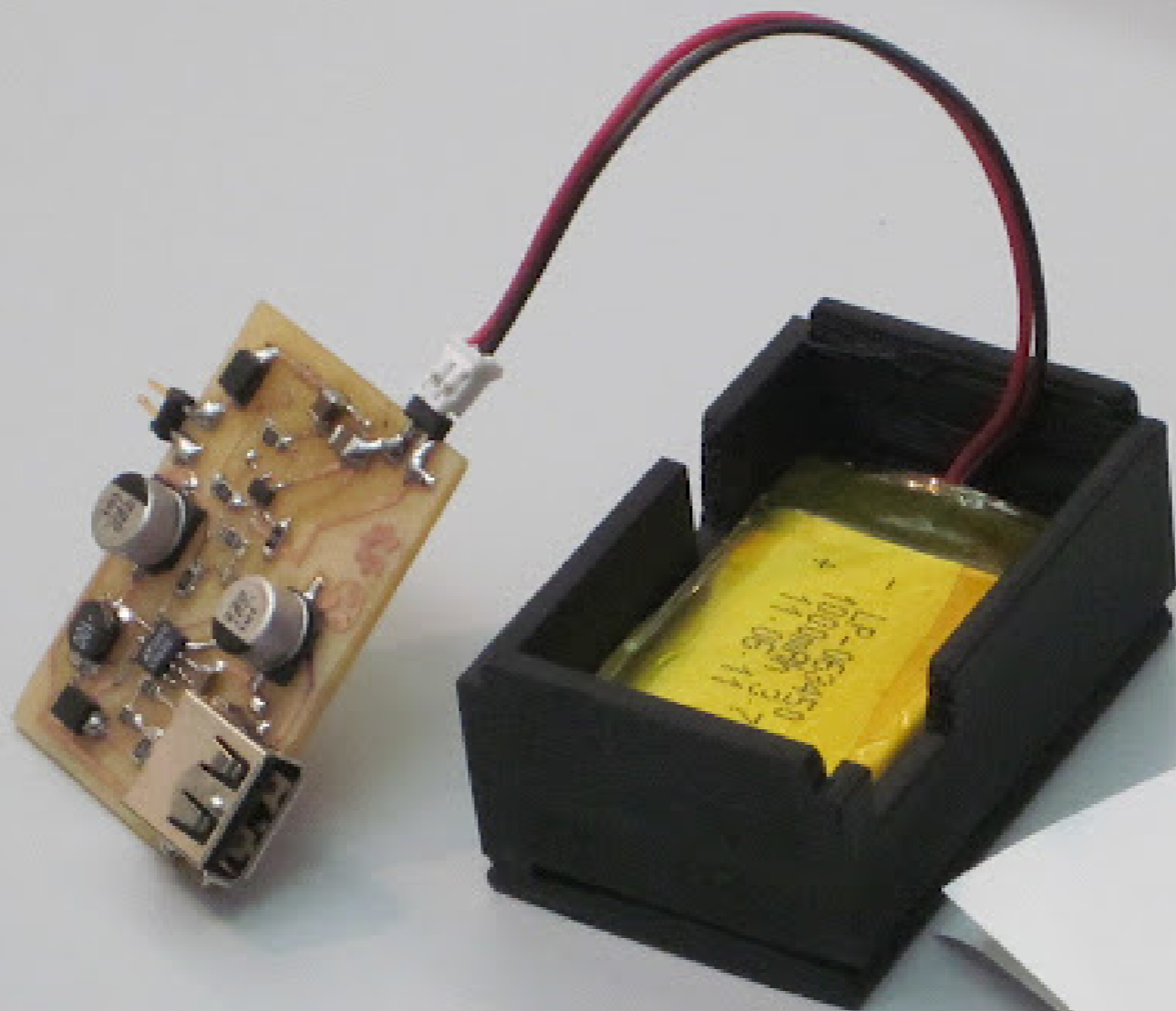
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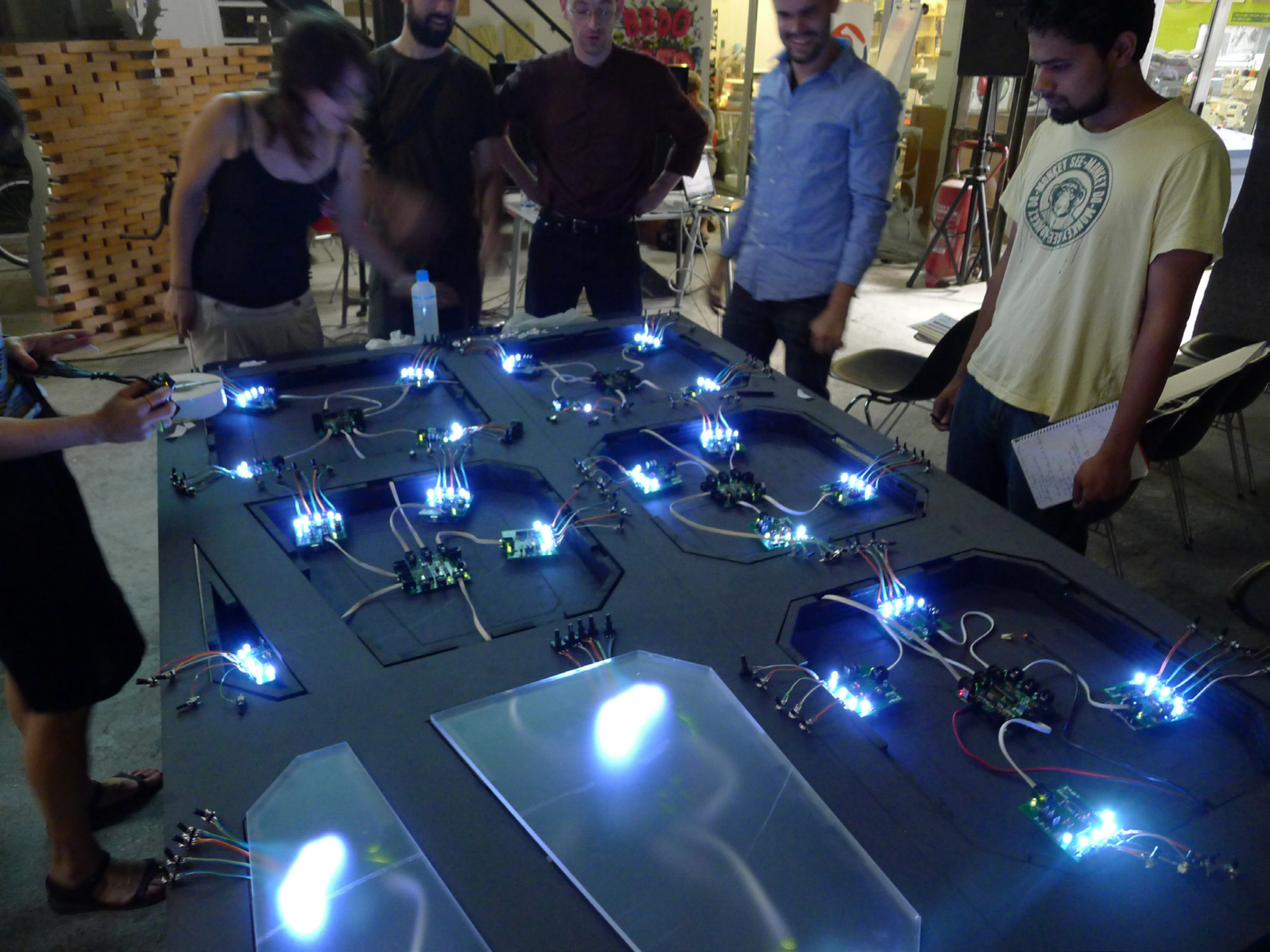
Institute for
advanced
architecture
of Catalonia













THERMOPLASTIC - PET FLAKES

CONVERTED BOTTLES INTO GRANULAR MATERIAL [RECYCABLED]



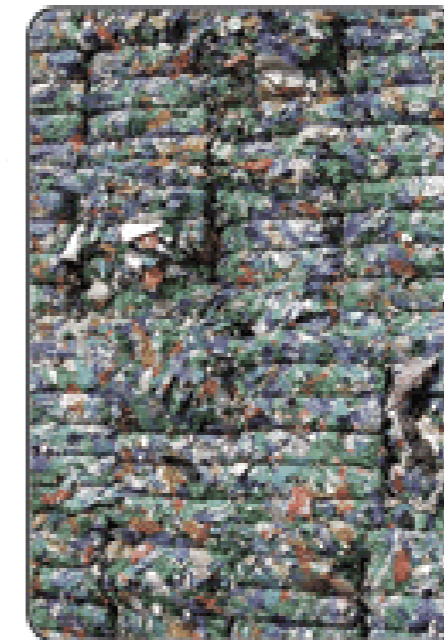
= 18 grams of Fakes



Melting Temperature 230 C - 240 C

Viscosity 0.65 - 0.75

Material Quality / Trash Dumps



Converted into Flakes Through

/ grinding

/ floatation [eliminate foreign materials]

/ washing

/ centrifugation

Re - Used 500 - 1000 times

Lifespan 300 years

Bottles made of PET are recycled to reuse the material out of which they are made and to reduce the amount of waste going to landfills.

Polyethylene terephthalate (PET) is one of the most commonly used food grade packaging plastics due to its chemical inertness and appealing physical properties. PET is commonly recycled, and has the number "1" as its recycling symbol.

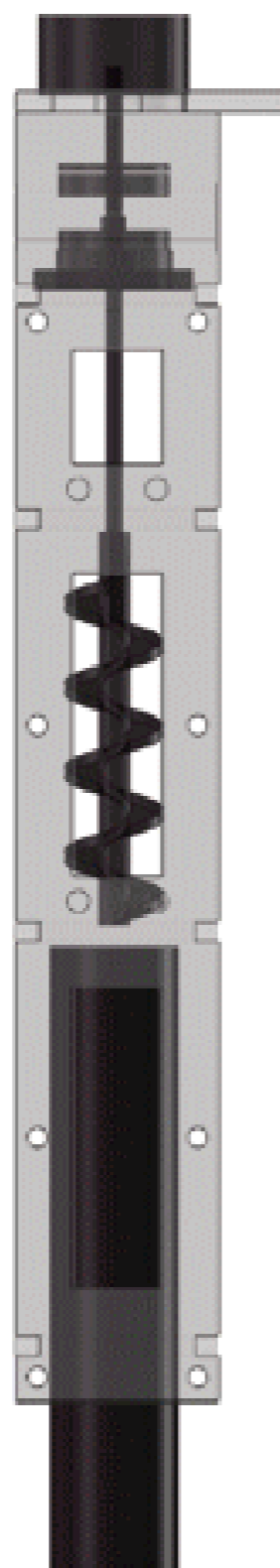
PET Worldwide 5.1 billion Tons

2.5 Million Plastic Bottles / Hour [U.S.]

[www.pcipetpackaging.co.uk]

NOZZLE DESIGN / ARDUINO CONTROLER

ATTACHEMENT ON SHOPBOT USING ARDUINO TO CONTROL TEMPARTURE AND SPEED



Moter

[control pressure]

[different directions]

[speed rate]

Material Feeding

[Pet flakes]

[different colors]

Helix

[feed the steal tube]

[different speeds]

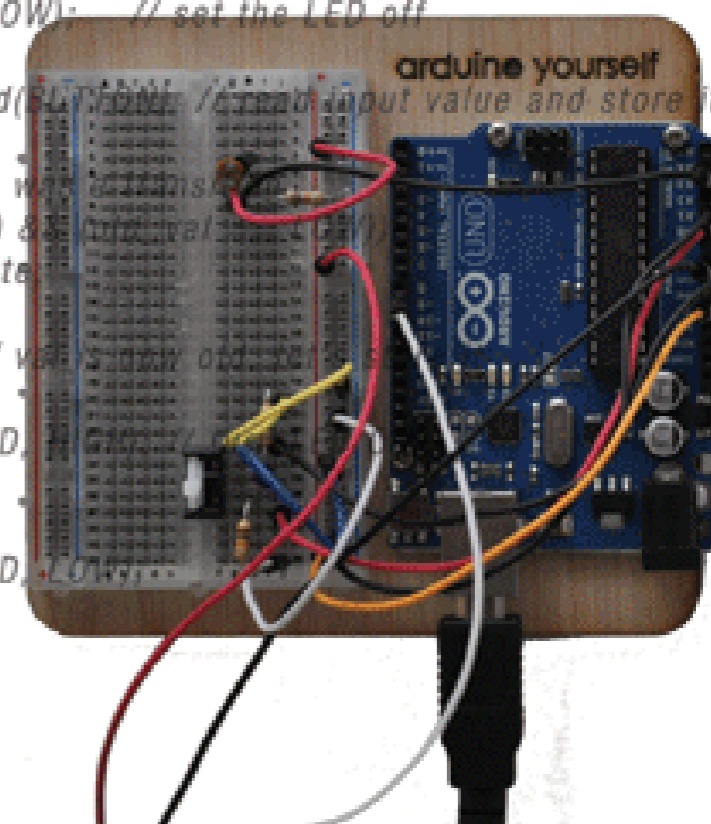
Steal Tube

[230 - 240 degrees]

[main extruder]

Script Arduino [temperature sensor - button]

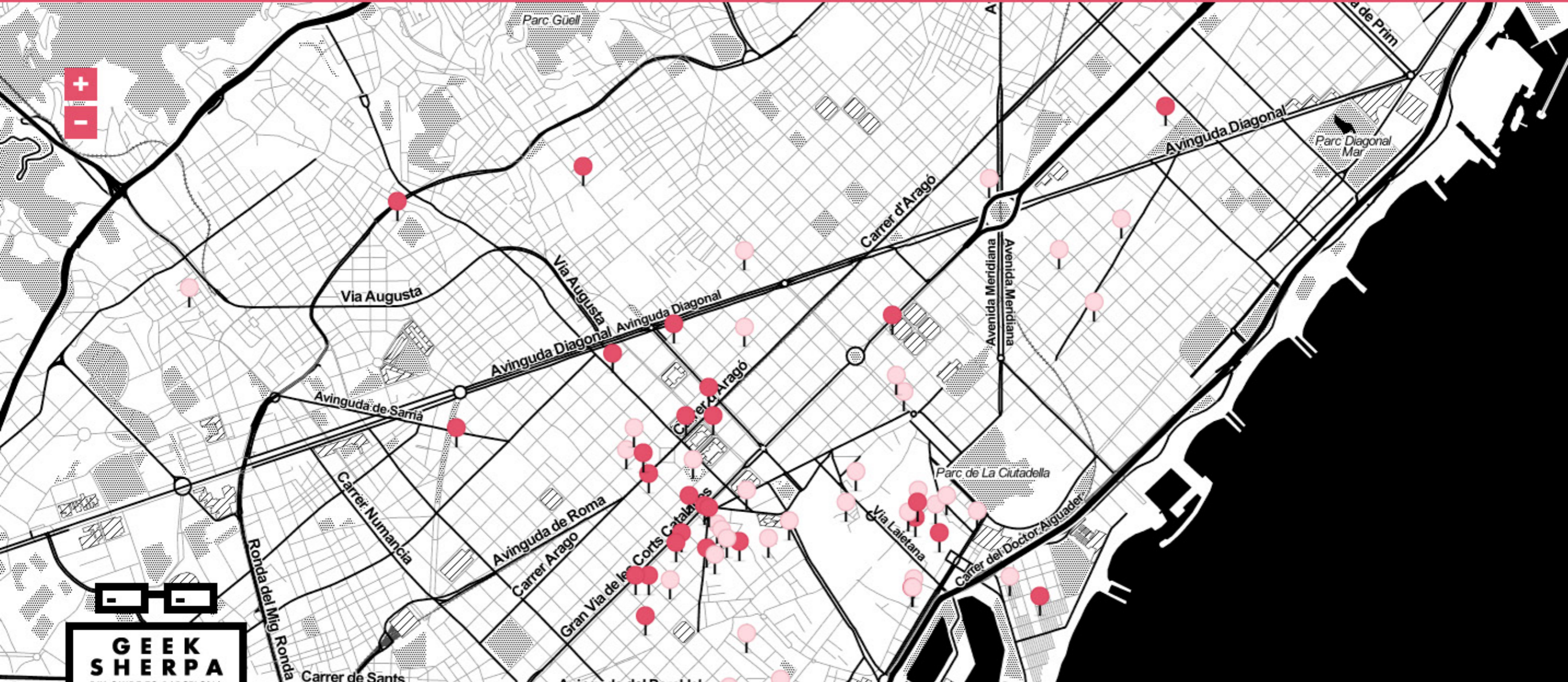
```
#define LED 8 // the pin for the LED
#define BUTTON 7 // the input pin where the
// pushbutton is connected
int val = 0; // val will be used to store the state
// of the input pin
int old_val = 0; // this variable stores the previous
// value of "val"
int state = 0; // 0 = LED off and 1 = LED on
void setup() {
  pinMode(LED, OUTPUT); // tell Arduino LED is an output
  pinMode(BUTTON, INPUT); // and BUTTON is an input
  pinMode(9, OUTPUT);
}
void loop(){
  digitalWrite(9, HIGH); // set the LED on
  delay(1); // wait for a second
  digitalWrite(9, LOW); // set the LED off
  delay(1);
  val = digitalRead(BUTTON); // read input value and store it
  // yum, fresh
  // check if there was a change
  if ((val == HIGH) && (val != old_val)) {
    state = 1 - state;
  }
  old_val = val; // value of the input pin
  if (state == 1) {
    digitalWrite(LED, HIGH);
  }
  else {
    digitalWrite(LED, LOW);
  }
}
```







LA GUÍA



BETA

PROYECTOS



SMART CITIZEN - SENSORES CIUDADANOS

Conviértete en un sensor inteligente de la ciudad, generando y compartiendo datos reales en abierto sobre contaminación del aire, acústica y muchos más

Por: Fab Lab Barcelona

CATEGORÍAS

Social, Tecnológico, Educativo

PROYECTO

NECESIDADES

COFINANCIADORES (134)

MENSAJES (60)

NOVEDADES (5)



SmartCitizen.Me
from Fab Lab Barcelona

03:30

HD vimeo

Spanish

Share

COMPARTE ESTE PROYECTO

Twitter

<http://www.goteo.org/project/smart-citizen-sens>

DIFUNDE ESTE PROYECTO

EN MARCHA!
MÍNIMO CONSEGUIDO

COFINANCIACIÓN **2ª ronda**



COFINANCIA ESTE PROYECTO

Ver más

NECESIDADES NO MONETARIAS

SE BUSCA



Otros sensores ciudadanos
Personas que ya dispongan de
algunos sensores abiertos en



<http://www.fablabbcn.org>

<http://www.iaac.net>









PROGRAMA
OFICIAL DE
PATROCINI



Fab10 Barcelona from Fab Labs to Fab Cities