

The background of the slide is a dark blue field filled with a complex network of glowing white nodes and connecting lines, resembling a social media graph or a molecular structure. The nodes are small spheres, and the lines are thin, creating a web-like pattern that extends across the entire frame.

Social Media Simulator

How users words affect the **public opinions**

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MAIN IDEA

TO SIMULAT HOW PUBLIC OPINION PRODUCED WITH A HYBRID MEDIUM



Some interesting Thing on social media:

People get angry more easily
People affect by others more easily
Public opinion is hard to predict

I think public opinion can be influenced by what everyone says.
And it would be interesting to see **how public opinion produced.**

Inspiration from Cyborg

*It is certainly true that postmodernist strategies, like my cyborg myth, **subvert myriad organic wholes** (for example, **the poem**, the primitive **culture**, the biological organism).*

-A Cyborg Manifesto

Maybe A new way to communication with each other, by new **MEDIUM**, which is blurred, mixed; hybrid.

SPECIFIC CONCEPT

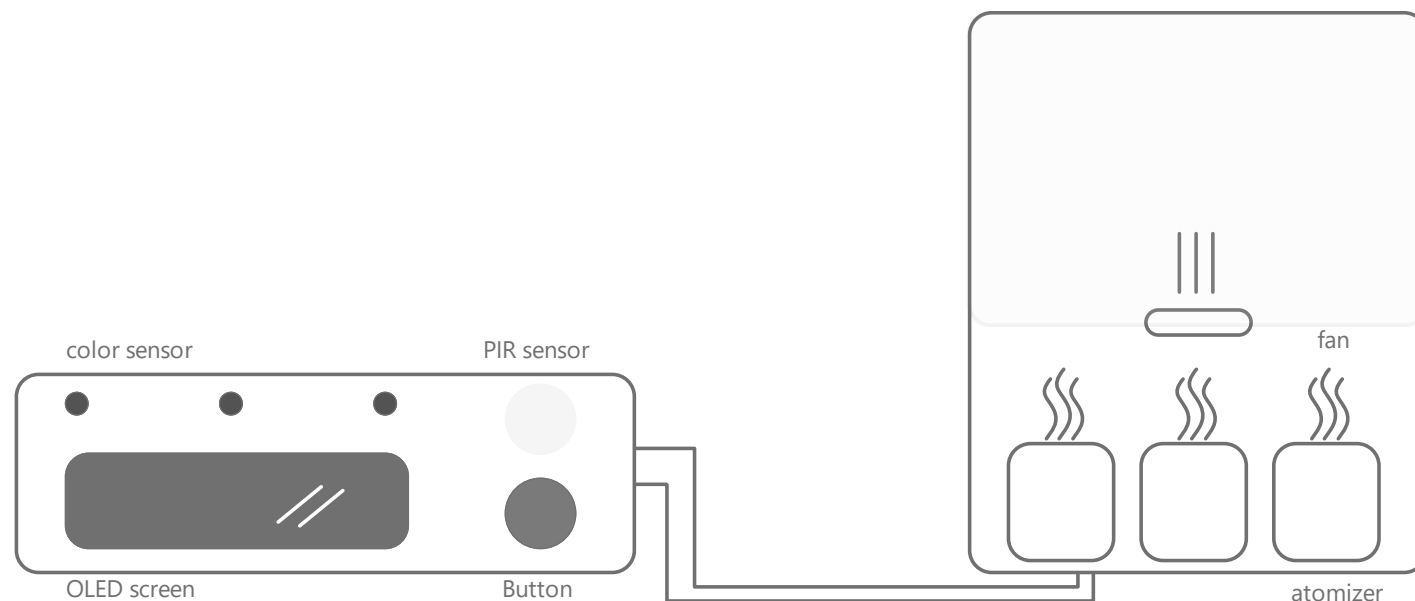
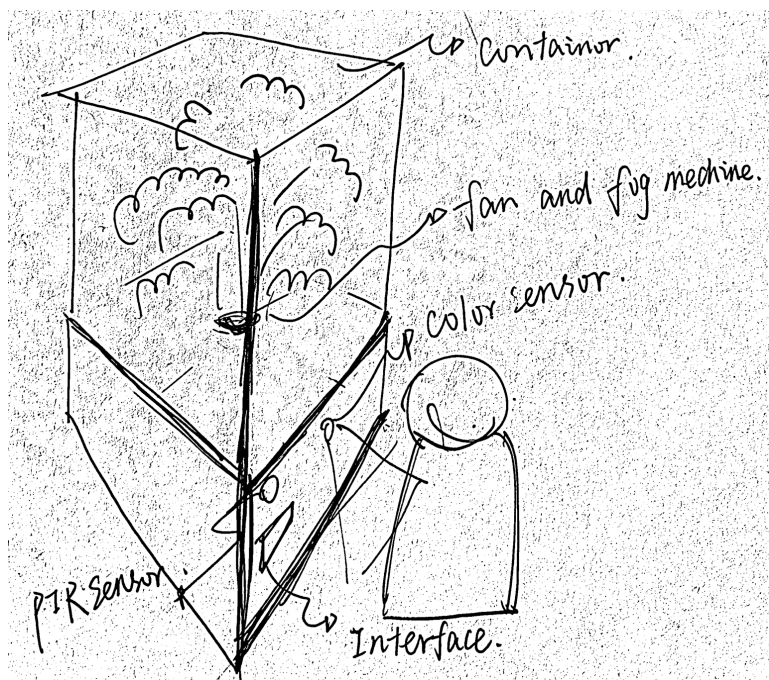
Colorful fog mix in one container



Thinking of medium

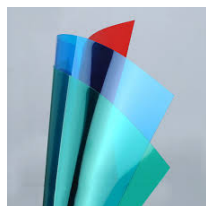
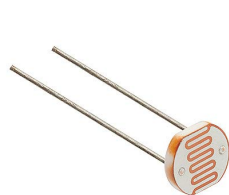
- Bubble
- Fog
- screen

Finally, I choose fog, different color represent different opinion



DEVELOPMENT PROCESS

Color sensor



```
void procedata() // 数据处理
{
    static int Rinput[5] = {
        0,0,0,0,0
    }, Binput[5] = {
        0,0,0,0,0
    }, Ginput[5] = {
        0,0,0,0,0
    };

    for(int i = 4; i > 0; i--){
        Rinput[i] = Rinput[i-1];
        Binput[i] = Binput[i-1];
        Ginput[i] = Ginput[i-1];
    }

    if(countR < 2500)
        Rinput[0] = countR;
    else
        Rinput[0] = Rinput[1];

    if(countB < 2500)
        Binput[0] = countB;
    else
        Binput[0] = Binput[1];

    if(countG < 2500)
        Ginput[0] = countG;
    else
        Ginput[0] = Ginput[1];
}
```

```
color_test_final
int redvalue = analogRead(A0); //读取RGB数值并开启装置
int redtime = 10*redvalue;
Serial.print(redtime);
digitalWrite(redlight, HIGH);
delay(redtime);
digitalWrite(redlight, LOW);
int greenvalue = analogRead(A1);
int greentime = 10*greenvalue;
digitalWrite(greenlight, HIGH);
delay(greentime);
digitalWrite(greenlight, LOW);
int bluevalue = analogRead(A2);
int bluetime = 10*bluevalue;
digitalWrite(bluelight, HIGH);
delay(bluetime);
digitalWrite(bluelight, LOW);
digitalWrite(fan, LOW); //关闭
}

if (buttonval == LOW){
    digitalWrite(bluelight, LOW);
    digitalWrite(greenlight, LOW);
    digitalWrite(redlight, LOW);
    digitalWrite(fan, LOW);
}
```

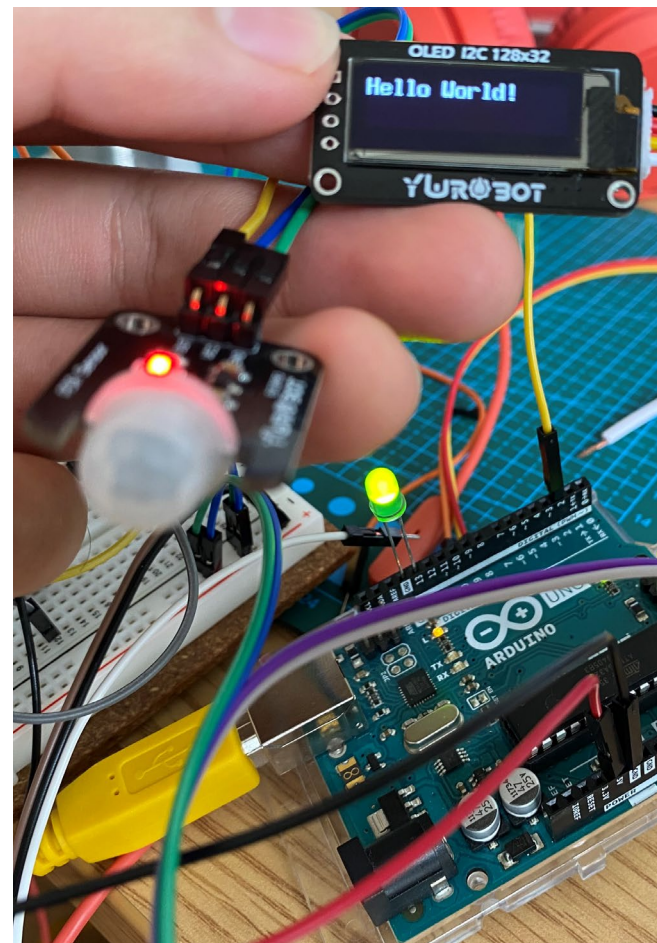
上传成功。

项目使用了 2588 字节，占用了 (8%) 程序存储空间。最大为 32256 字节。
全局变量使用了184字节，(8%)的动态内存，余留1864字节局部变量。最大为2048字节。

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Arduino/Genuino Uno 在 COM4

PIR and OLED screen



```
OLED12832_Hello_World | Arduino ...
文件 编辑 项目 工具 帮助

OLED12832_Hello_World
#include "U8glib.h"

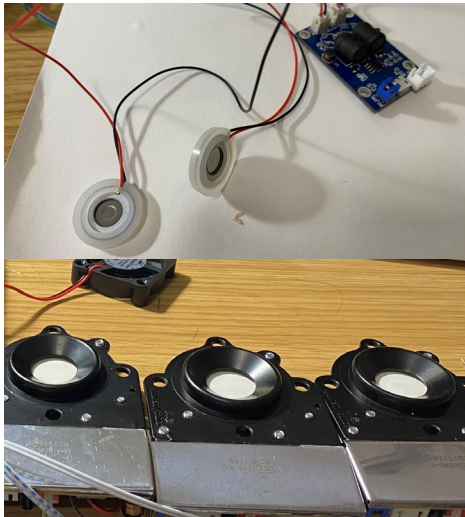
U8GLIB_SSD1306_128X32 u8g(U8G_I2C_OPT_NONE);

void setup(void) {
    u8g.setFont(u8g_font_8x13B);
    u8g.setFontRefHeightText();
    u8g.setFontPosTop();
}

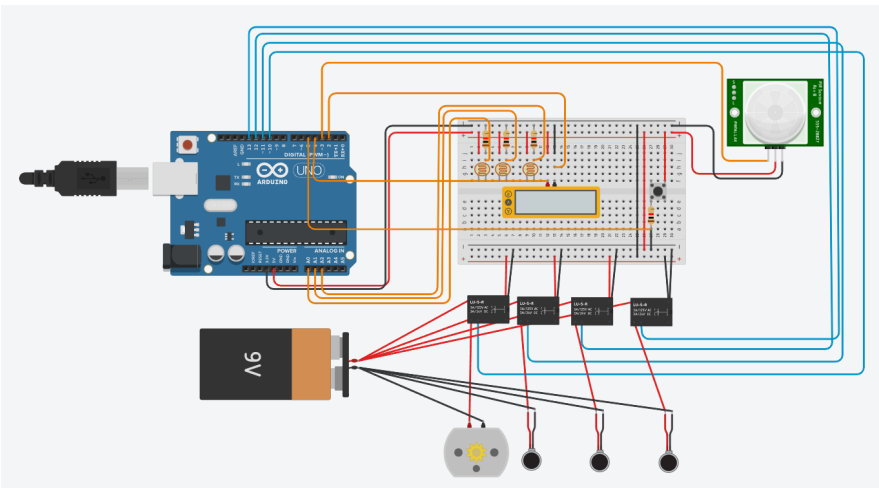
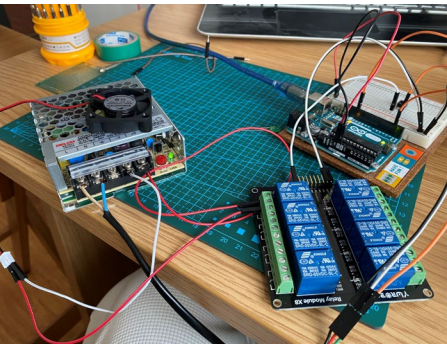
void loop(void) {
    int i;
    for (i = 1000; i >= 0; i--) {
        u8g.firstPage();
        do {
            u8g.setColorIndex(1);
            u8g.drawStr(0, 0, "Hello World!");
            u8g.setPrintPos(0, 17);
            u8g.print(i);
            delay(300);
            u8g.setColorIndex(0);
        } while ( u8g.nextPage() );
    }
}
```

DEVELOPMENT PROCESS

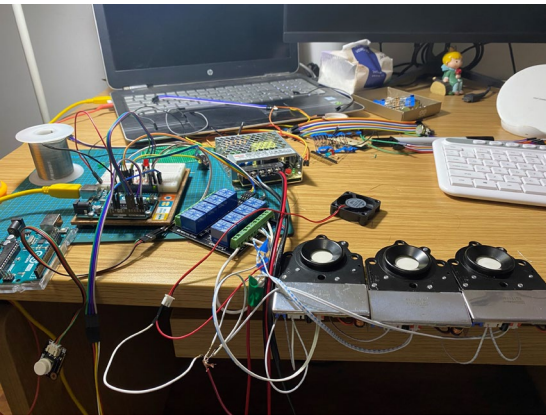
Atomizer and fan



electromagnetic relay & 24V power



Whole circuit test



Final code

```
final | Arduino 1.8.10
文件 编辑 项目 工具 帮助

final $

if(pirstate == HIGH){
  digitalWrite(led,HIGH);

  u8g.firstPage();
  do {
    u8g.drawStr(0, 0, "Hello World!");
    u8g.setPrintPos(0, 17);

  } while ( u8g.nextPage() );

  int buttonval = digitalRead(button);
  if (buttonval == HIGH) { //按下按钮
    digitalWrite(fan,HIGH); //打开风扇
    int redvalue = analogRead(A0); //读取RGB数据并开启装置
    int greenvalue = analogRead(A1);
    int bluevalue = analogRead(A2);

    Serial.print("red");
    Serial.println(redvalue);
    Serial.print("green");
    Serial.println(greenvalue);
    Serial.print("blue");
    Serial.println(bluevalue);
    int redtime = 10*redvalue;
    digitalWrite(redlight, HIGH);
    delay(redtime);
    digitalWrite(redlight, LOW);
    int greentime = 10*greenvalue;
    digitalWrite(greenlight, HIGH);
    delay(greentime);
    digitalWrite(greenlight, LOW);
    int bluetime = 10*bluevalue;
    digitalWrite(bluelight, HIGH);
    delay(bluetime);
    digitalWrite(bluelight, LOW);
    digitalWrite(fan, LOW); //关闭

  }
  if (buttonval == LOW) {
    digitalWrite(bluelight, LOW);
    digitalWrite(greenlight, LOW);
    digitalWrite(redlight, LOW);
    digitalWrite(fan, LOW);
  }

  delay(3000);
  digitalWrite(2, LOW);
  u8g.firstPage();
  do {
    u8g.drawStr(0, 0, "");
    u8g.setPrintPos(0, 17);

  } while ( u8g.nextPage() );
}

上传成功。
项目使用了 8424 字节，占用了 (26%) 程序存储空间。最大为 32256 字节。
全局变量使用了 442 字节，(21%) 的动态内存，余留1606字节局部变量。最大为2
```

```
final | Arduino 1.8.10
文件 编辑 项目 工具 帮助

final $

#include "U8glib.h"
U8GLIB_SSD1306_128X32 u8g(U8G_I2C_OPT_NONE);

int redvalue = 0; //红色数据
int redlight = 10; //红色装置

int greenvalue = 0; //绿色数据
int greenlight = 11; //绿色装置

int bluevalue = 0; //蓝色数据
int bluelight = 12; //蓝色装置

int fan = 13; //设置风扇引脚
int pir = 9; //pir传感器
int button = 2; //开关

int redtime = 0; //红灯灯亮持续时间
int greentime = 0; //绿灯灯亮时间
int bluetime = 0; //蓝灯灯亮持续时间

int led = 3;
int pirstate = 0;
void setup() {
  Serial.begin(9600); //开始串口监视器
  pinMode(button, INPUT); //设置按钮输入
  pinMode(pir, INPUT);

  pinMode(led, OUTPUT);
  pinMode(redlight, OUTPUT);
  pinMode(greenlight, OUTPUT);
  pinMode(bluelight, OUTPUT);
  pinMode(fan, OUTPUT);

  u8g.setFont(u8g_font_hv13B);
  u8g.setFontHeightText(1);
  u8g.setPrintPos(0, 17);
  // put your setup code here, to run once:
}

void loop() {
  // put your main code here, to run repeatedly:
  pirstate = digitalRead(pir);

  if(pirstate == HIGH){
    digitalWrite(led,HIGH);

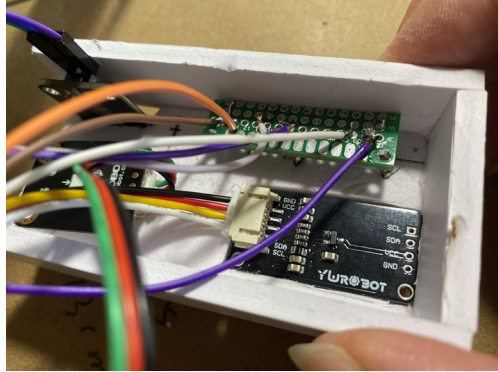
    u8g.firstPage();
    do {
      u8g.drawStr(0, 0, "Hello World!");
      u8g.setPrintPos(0, 17);

    } while ( u8g.nextPage() );

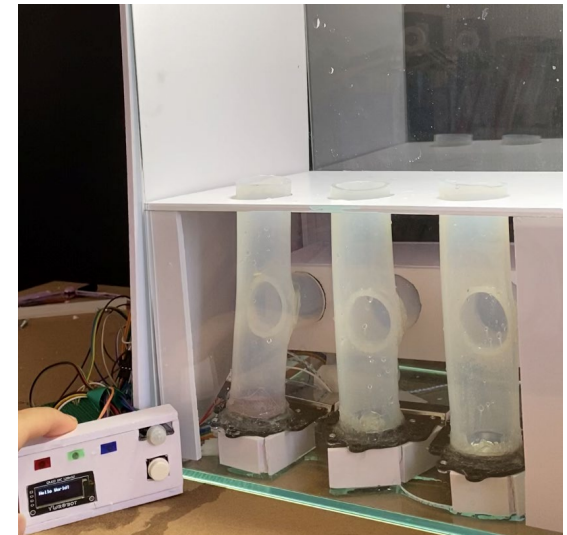
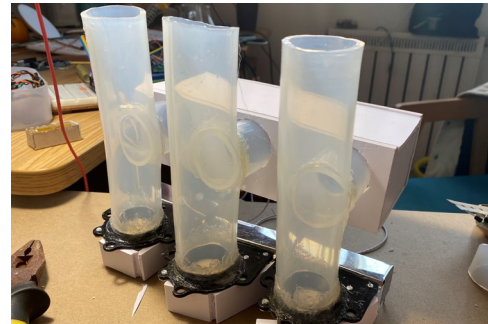
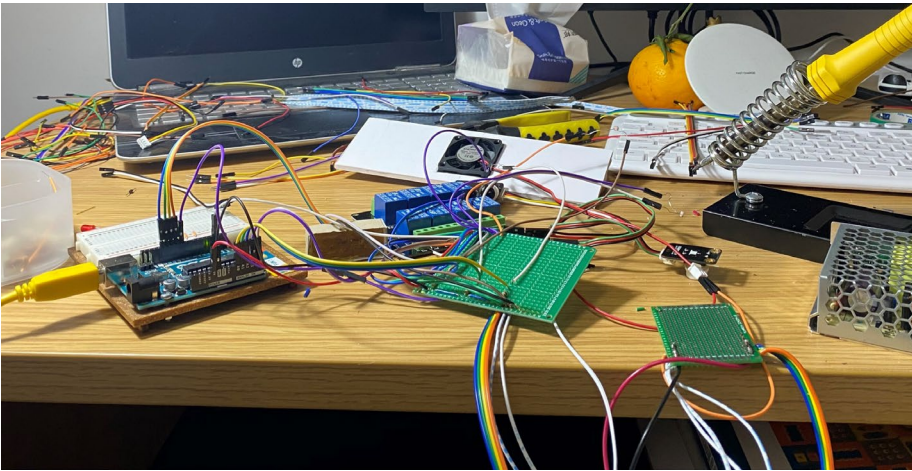
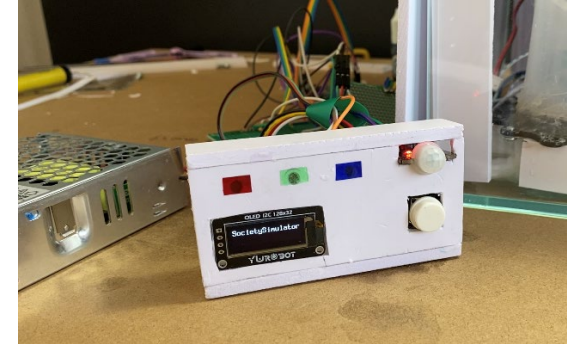
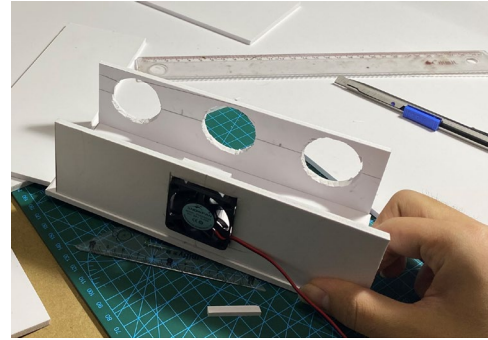
    int buttonval = digitalRead(button);
    if (buttonval == HIGH) { //按下按钮
```


DEVELOPMENT PROCESS

Soldering circuit



Make the appearance



Final effect video: <https://www.youtube.com/watch?v=4RZZQe3UeaM>

Github link: <https://github.com/msc-creative-computing/p-comp-labs-FengLinLi2010>