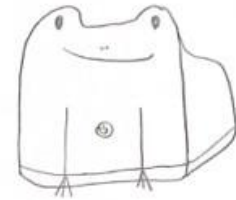
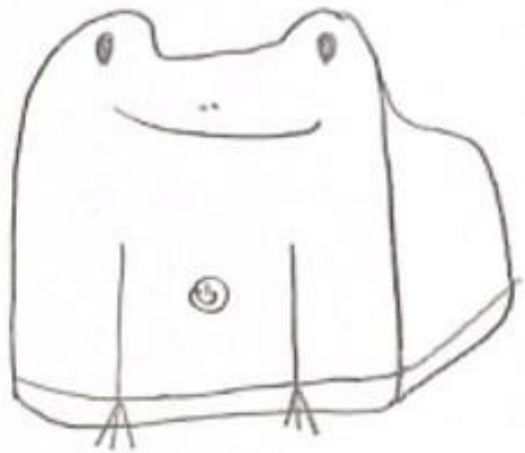




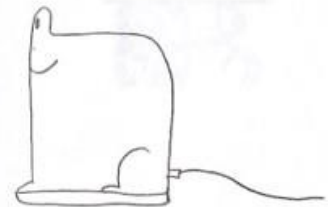
# Fröge light

A light that gives you the time

Solene Yunqi Marie

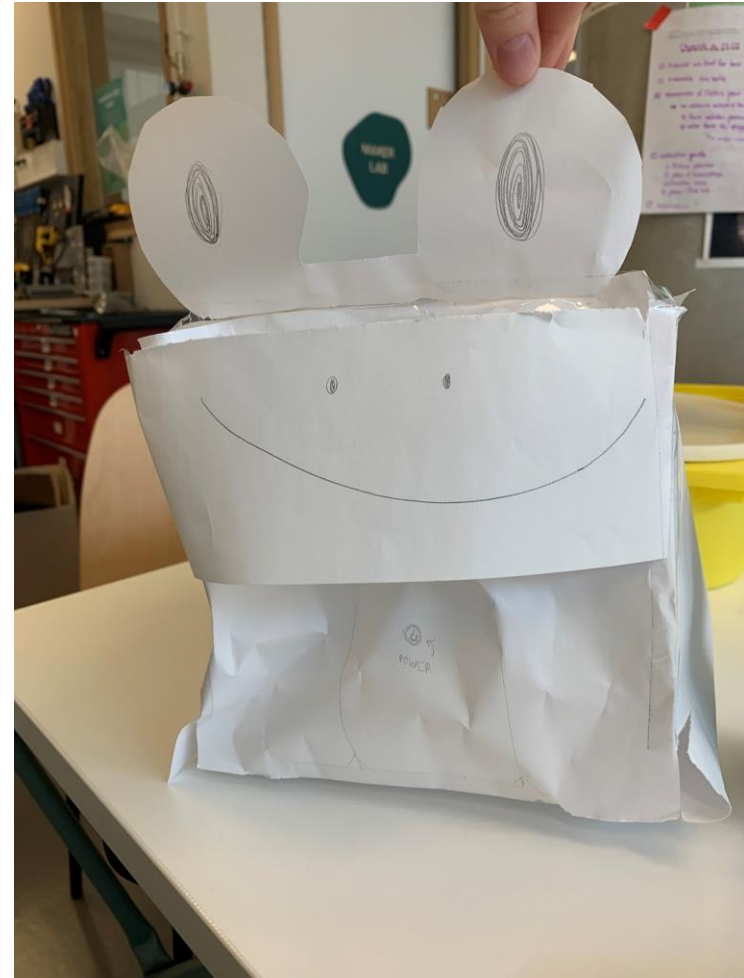


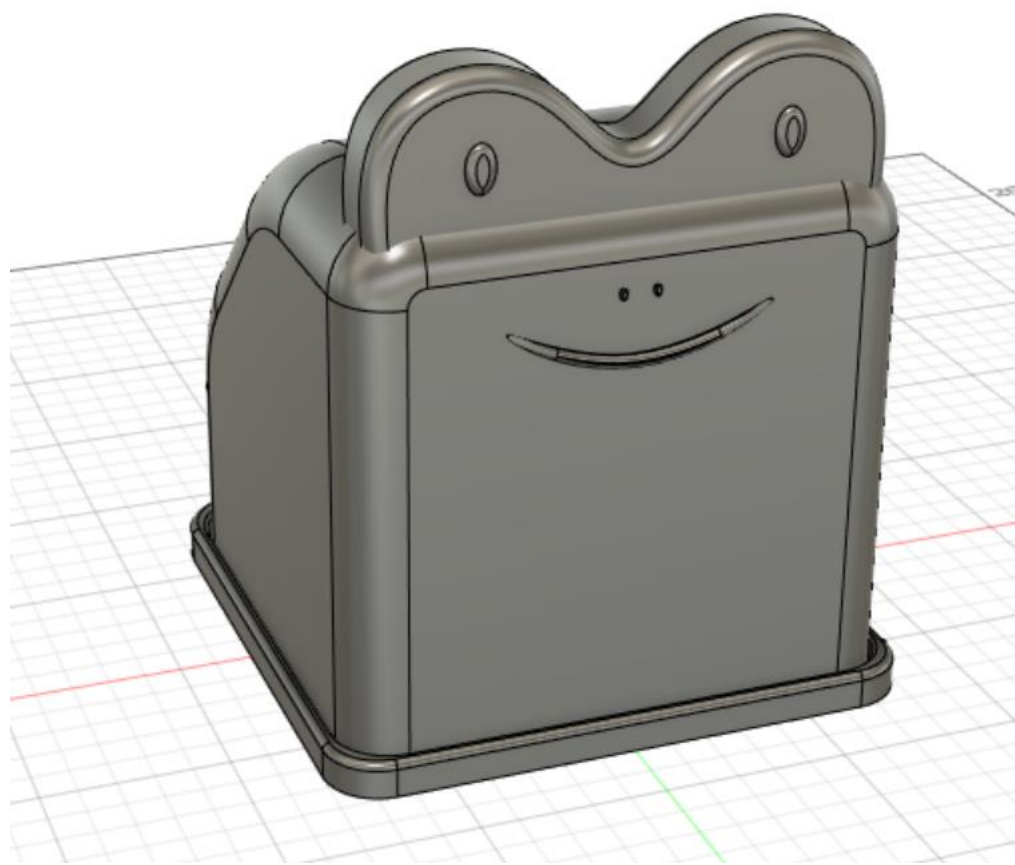
charging port

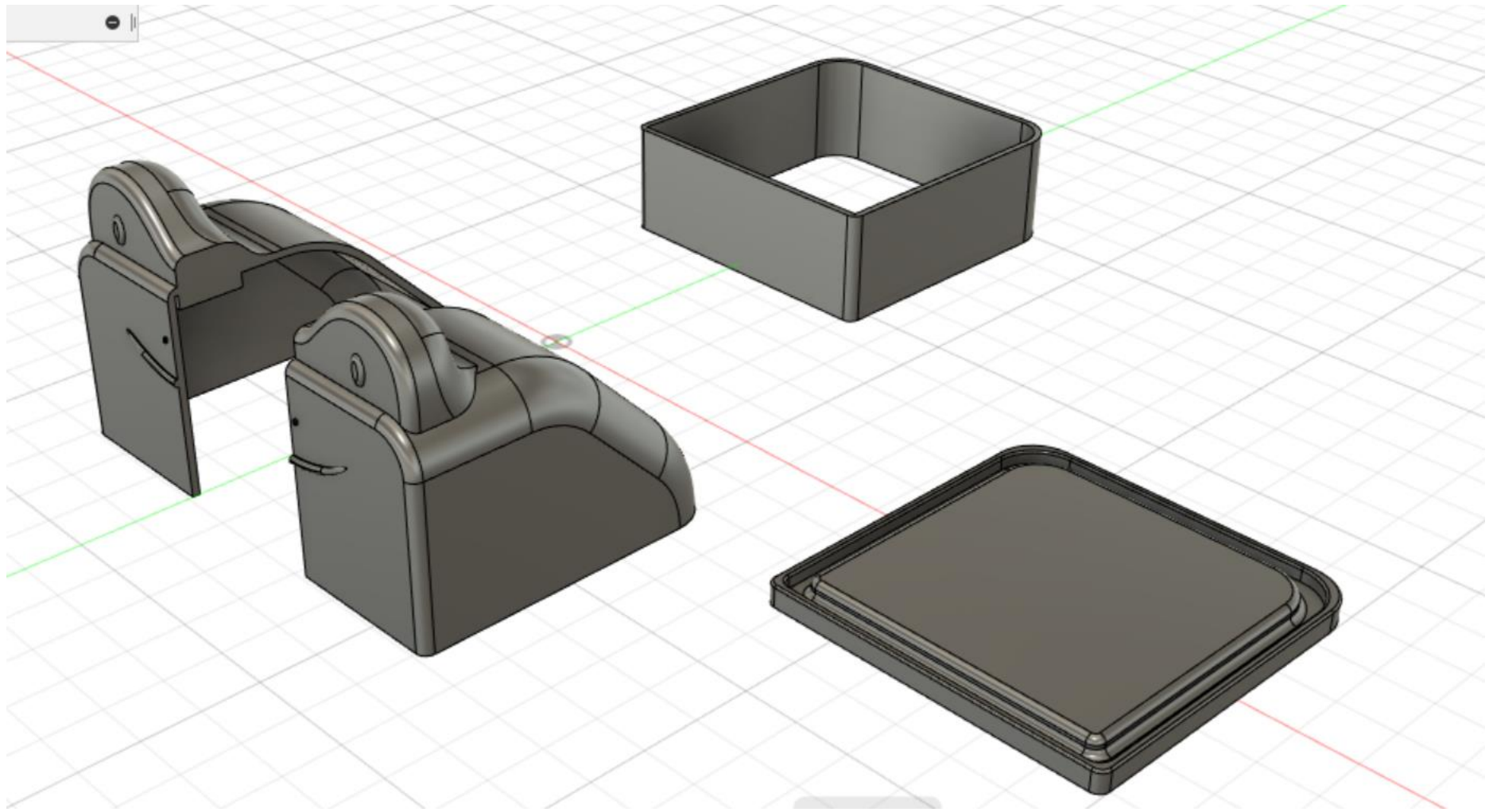


charging ♡

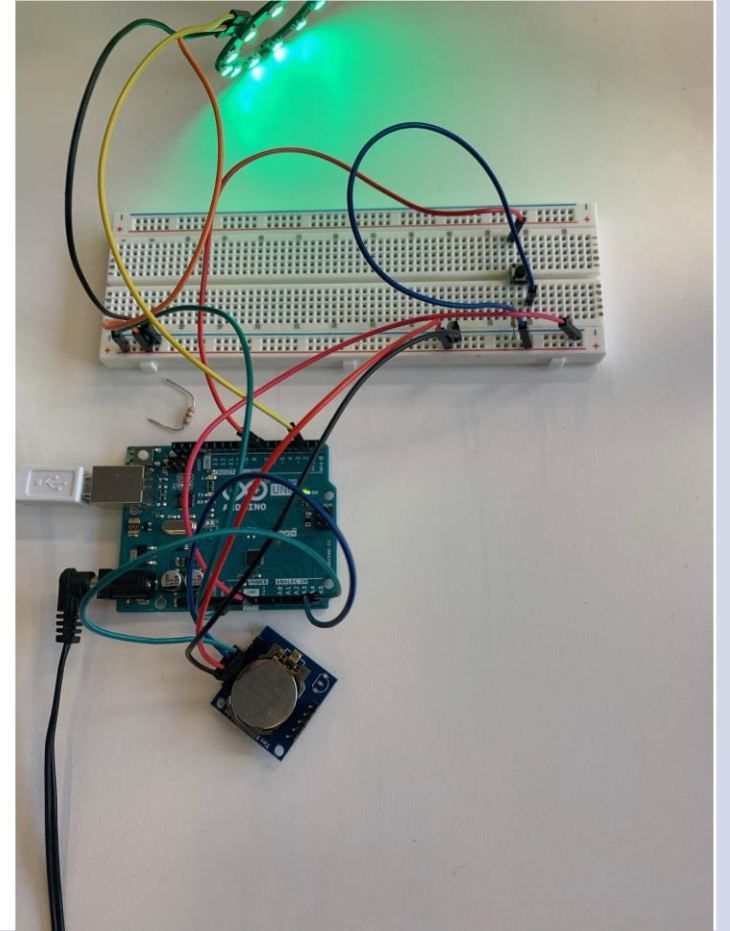
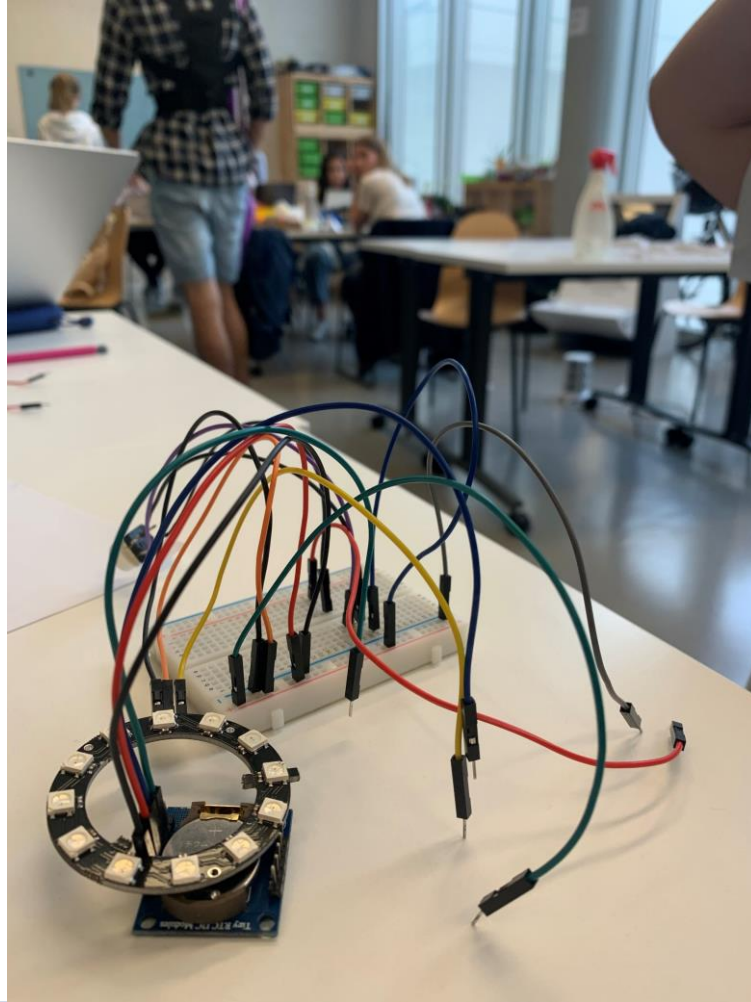
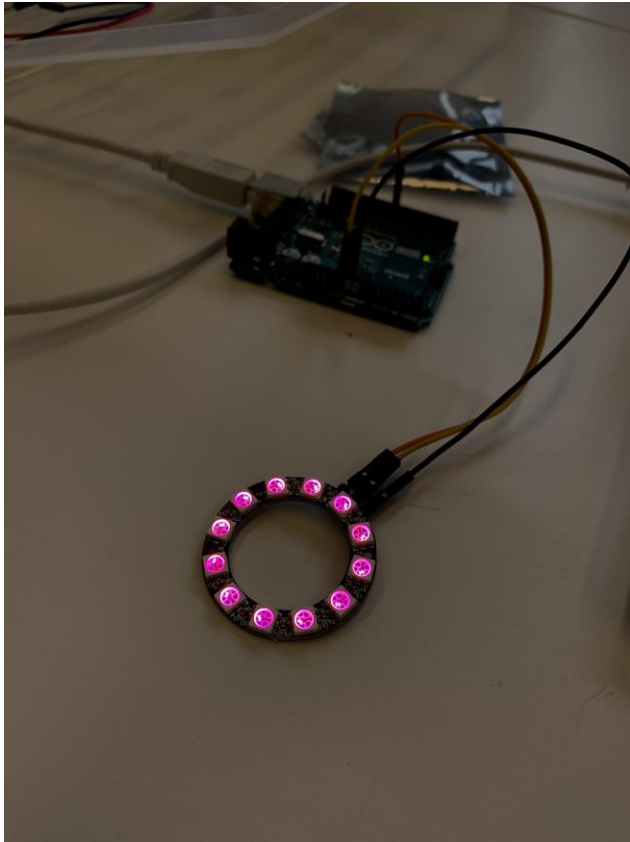
Light Time  
aka Frog

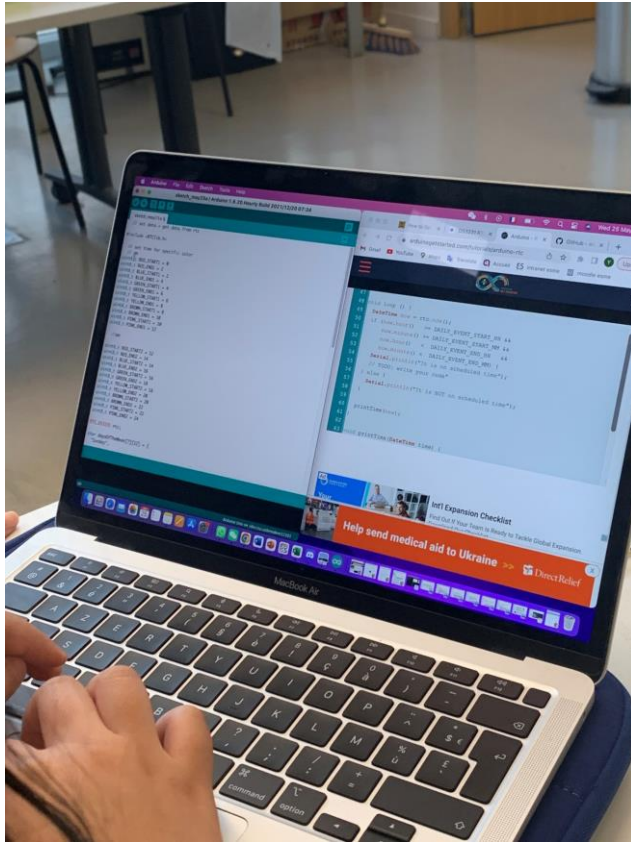












```

void setup()
{
  rtc.begin();
  pixels.begin();
  Serial.begin(9600);
  pinMode(2, OUTPUT);
  pinMode(buttonpin, INPUT);
  pixels.setBrightness(100);

  if (!rtc.isrunning()) {
    Serial.println("RTC is NOT running!");
    rtc.adjust(DateTime(__DATE__, __TIME__));
  }
}

void loop()
{
  DateTime now = rtc.now();

  if (now.hour() >= PURPLE_START1 && now.hour() < BLUE_START1) {
    for (int i = 0; i <= 11; i++) {

      pixels.setPixelColor(i, pixels.Color(200, 105, 255));
      pixels.show();
      red, green, blue = 200, 105, 255;
    }
  }
}

```

```

Adafruit_BusIO_t *i2c = (Adafruit_BusIO_t *) &I2C;
Adafruit_DS1307 rtc(i2c);

#define INTERVAL 500 // Time (in milliseconds) to pause between pixels

void setup()
{
  Serial.begin(9600);
  pixels.begin();
  Serial.begin(9600);
  pinMode(2, OUTPUT);
  pinMode(buttonpin, INPUT);
  pixels.setBrightness(100);

  if (!rtc.isrunning()) {
    Serial.println("RTC is NOT running!");
    rtc.adjust(DateTime(__DATE__, __TIME__));
  }
}

void loop()
{
  DateTime now = rtc.now();

  if (now.hour() >= PURPLE_START1 && now.hour() < BLUE_START1) {
    for (int i = 0; i <= 11; i++) {

      pixels.setPixelColor(i, pixels.Color(200, 105, 255));
      pixels.show();
      red, green, blue = 200, 105, 255;
    }
  }

  else if (now.hour() >= BLUE_START1 && now.hour() < PURPLE_START1) {
    for (int i = 0; i <= 11; i++) {

      pixels.setPixelColor(i, pixels.Color(255, 0, 0));
      pixels.show();
      red, green, blue = 255, 0, 0;
    }
  }

  else if (now.hour() >= PURPLE_START1 && now.hour() < ORANGE_START1) {
    for (int i = 0; i <= 11; i++) {

      pixels.setPixelColor(i, pixels.Color(0, 120, 255));
      pixels.show();
      red, green, blue = 0, 120, 255;
    }
  }

  else if (now.hour() >= ORANGE_START1 && now.hour() < YELLOW_START1) {
    for (int i = 0; i <= 11; i++) {

      pixels.setPixelColor(i, pixels.Color(80, 200, 80));
      pixels.show();
      red, green, blue = 80, 200, 80;
    }
  }

  else if (now.hour() >= YELLOW_START1 && now.hour() < GREEN_START1) {
    for (int i = 0; i <= 11; i++) {

      pixels.setPixelColor(i, pixels.Color(250, 220, 80));
      pixels.show();
      red, green, blue = 250, 220, 80;
    }
  }

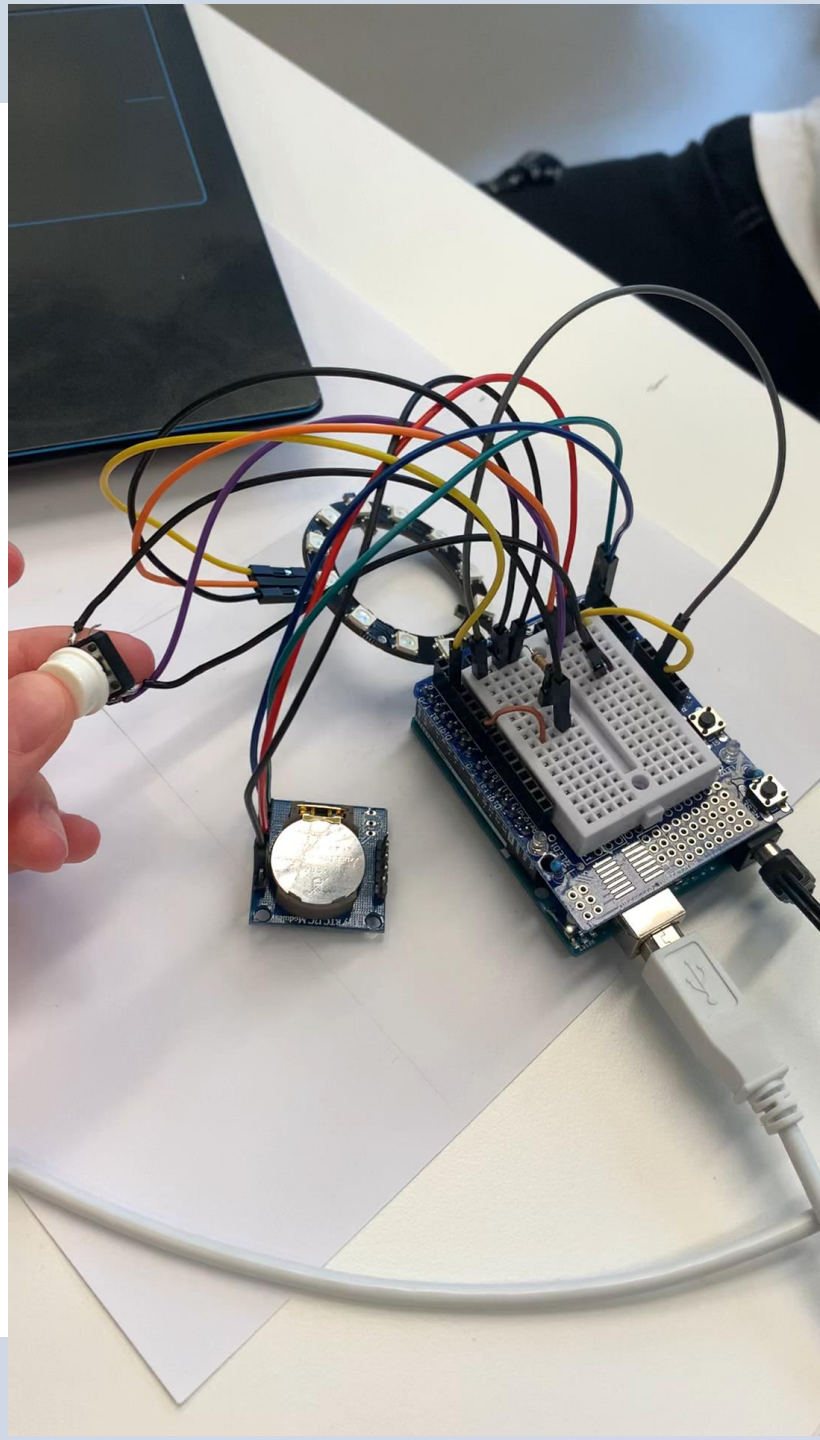
  else if (now.hour() >= GREEN_START1 && now.hour() < RED_START1) {
    for (int i = 0; i <= 11; i++) {

      pixels.setPixelColor(i, pixels.Color(255, 120, 15));
      pixels.show();
      red, green, blue = 255, 120, 15;
    }
  }

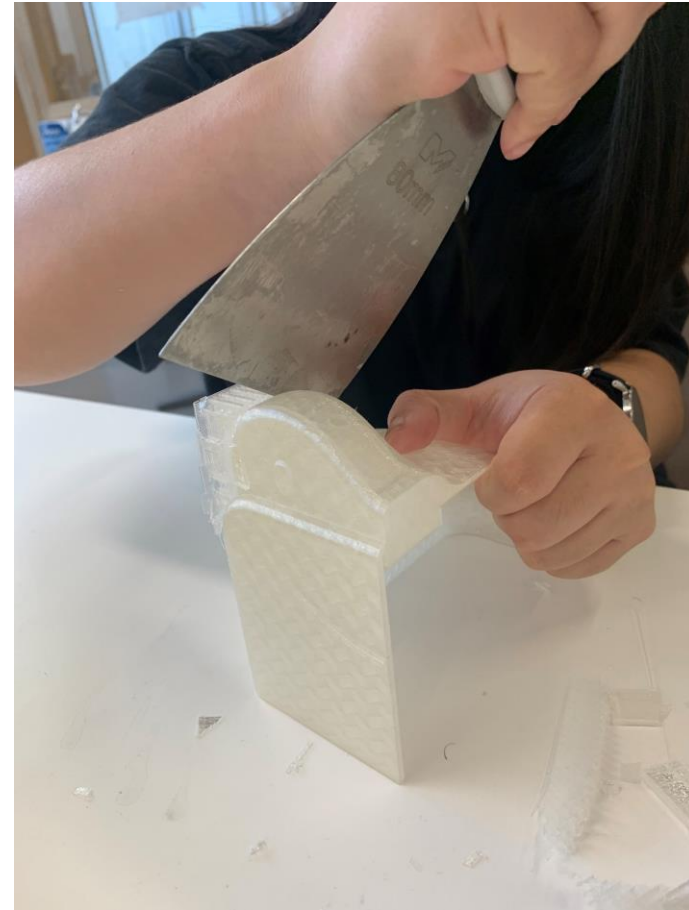
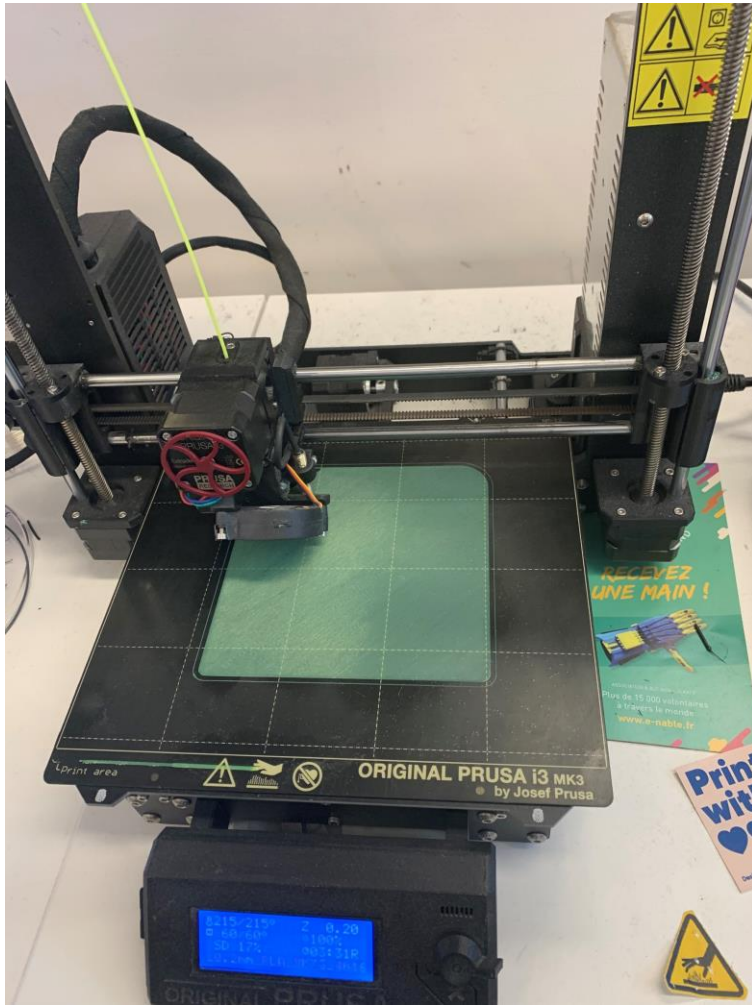
  digitalWrite(buttonpin, LOW);

  if (button == 1 && button == 0) {
    if (led_state == 0) {
      led_state = 1;
    }
    for (int i = 0; i <= 11; i++) {
      pixels.setBrightness(100);
      pixels.show();
    }
  }
  else {
    for (int i = 0; i <= 11; i++) {
      pixels.setBrightness(0);
      pixels.show();
    }
    led_state = 0;
  }
}

```

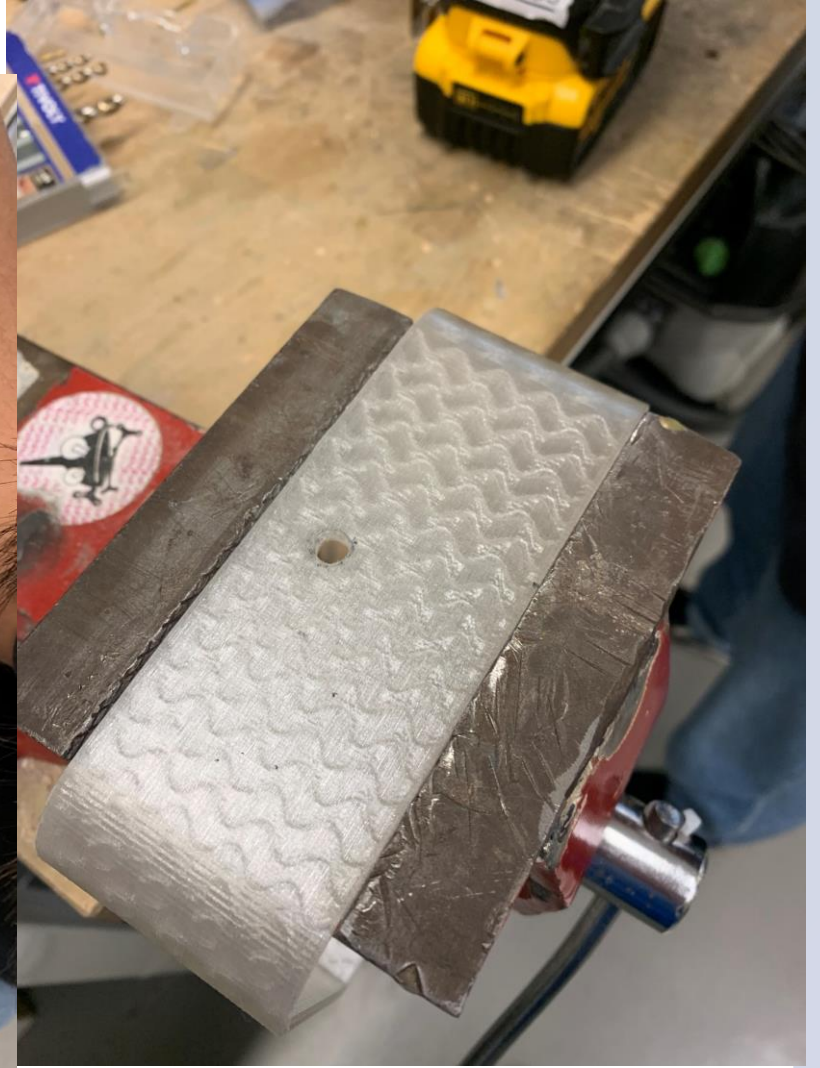




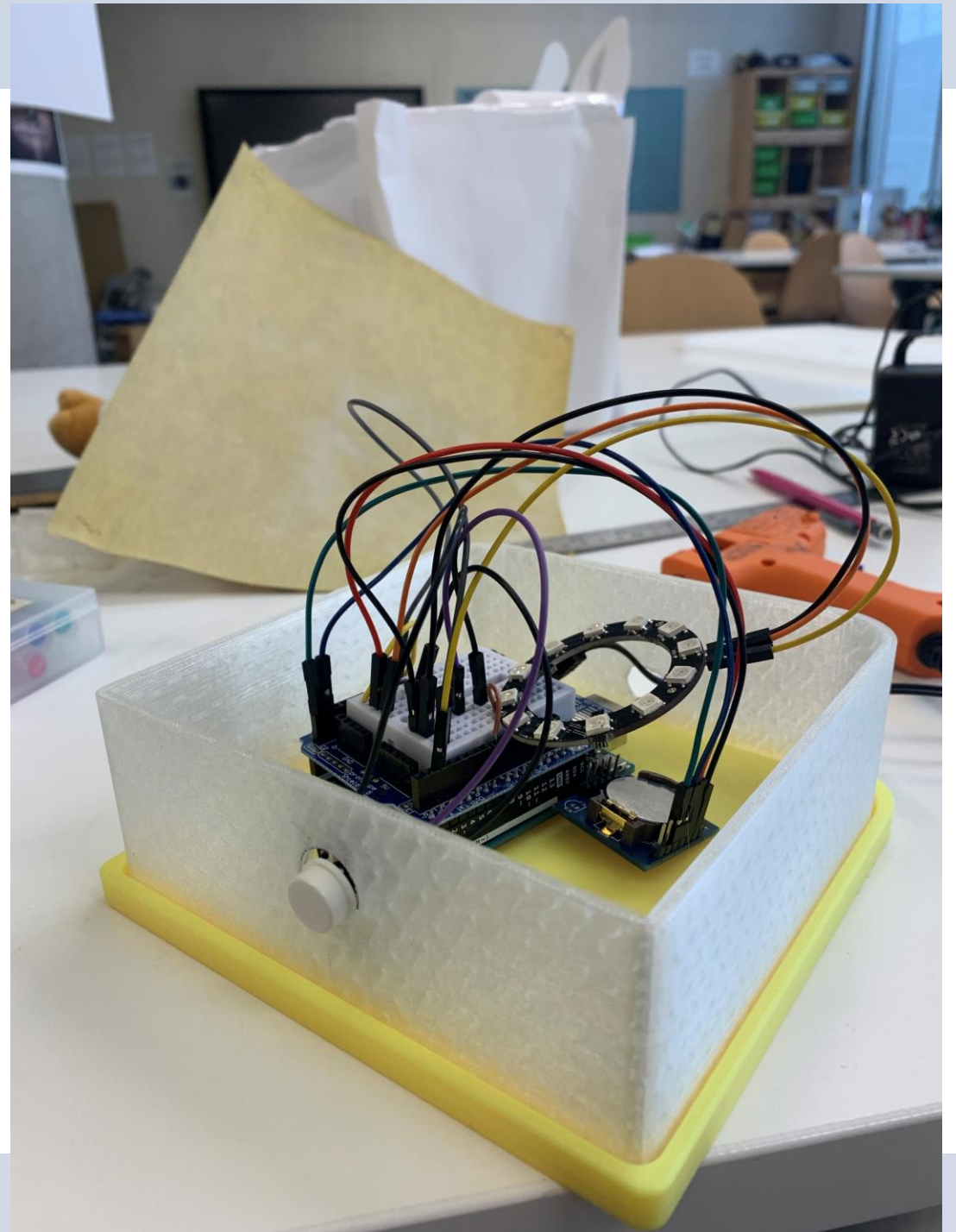
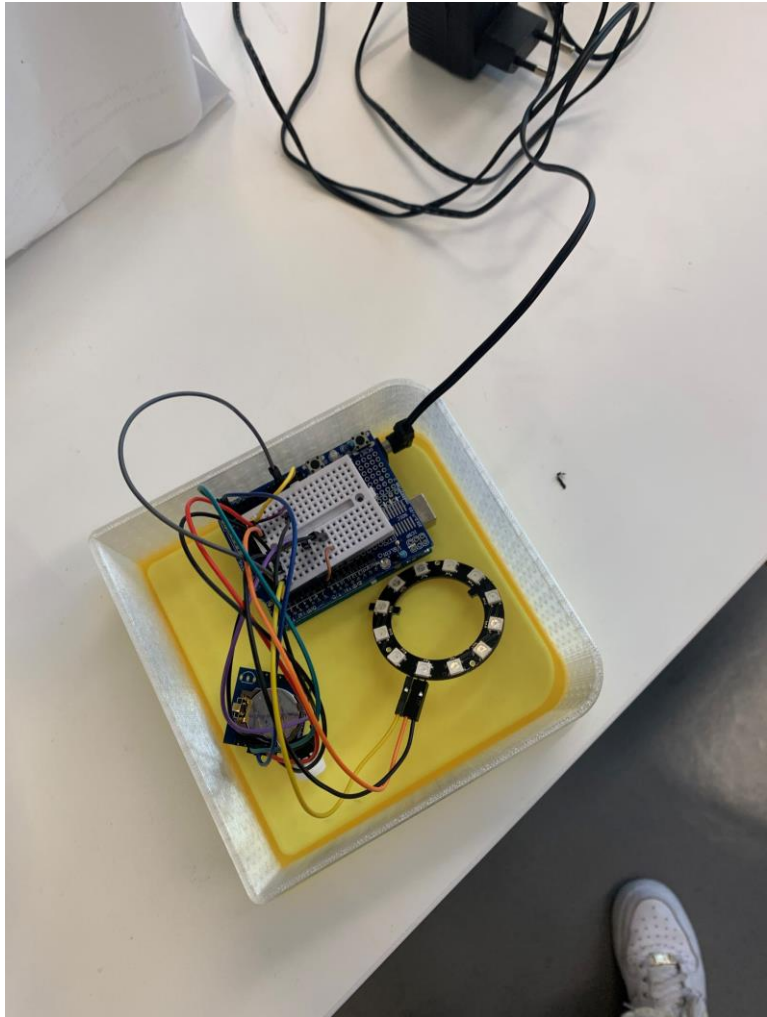






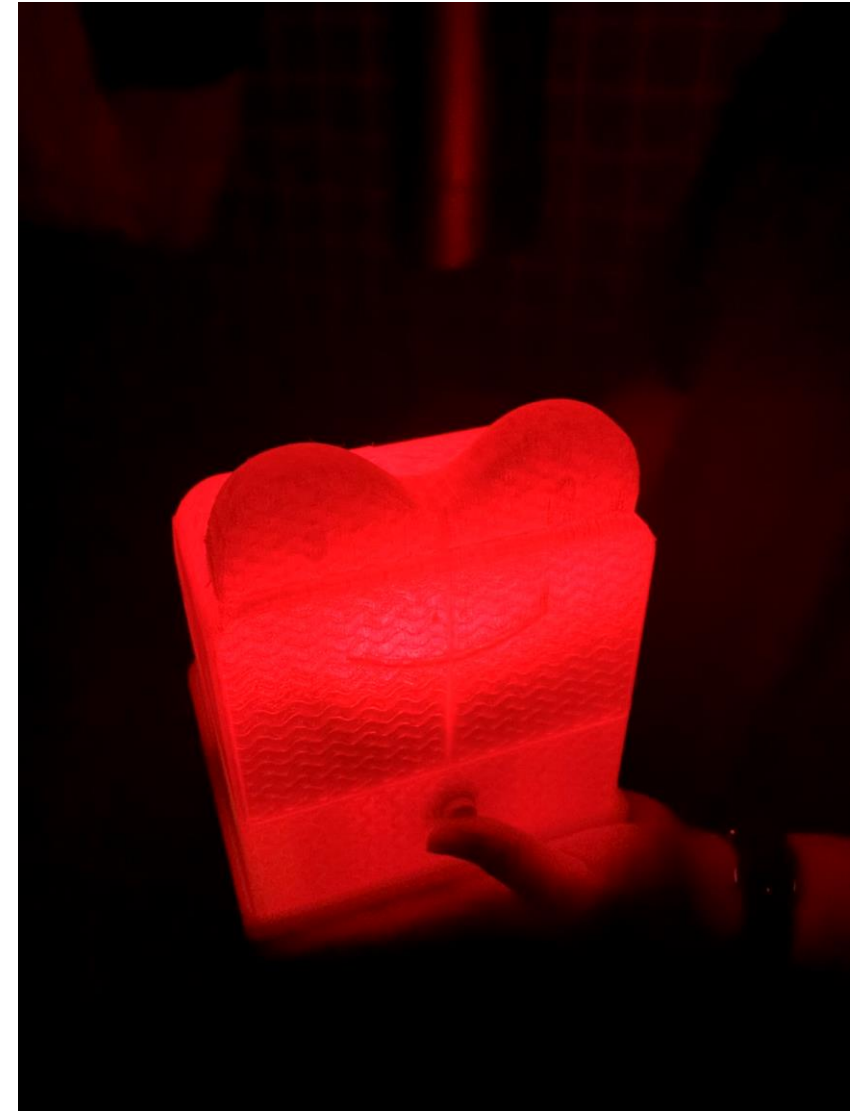




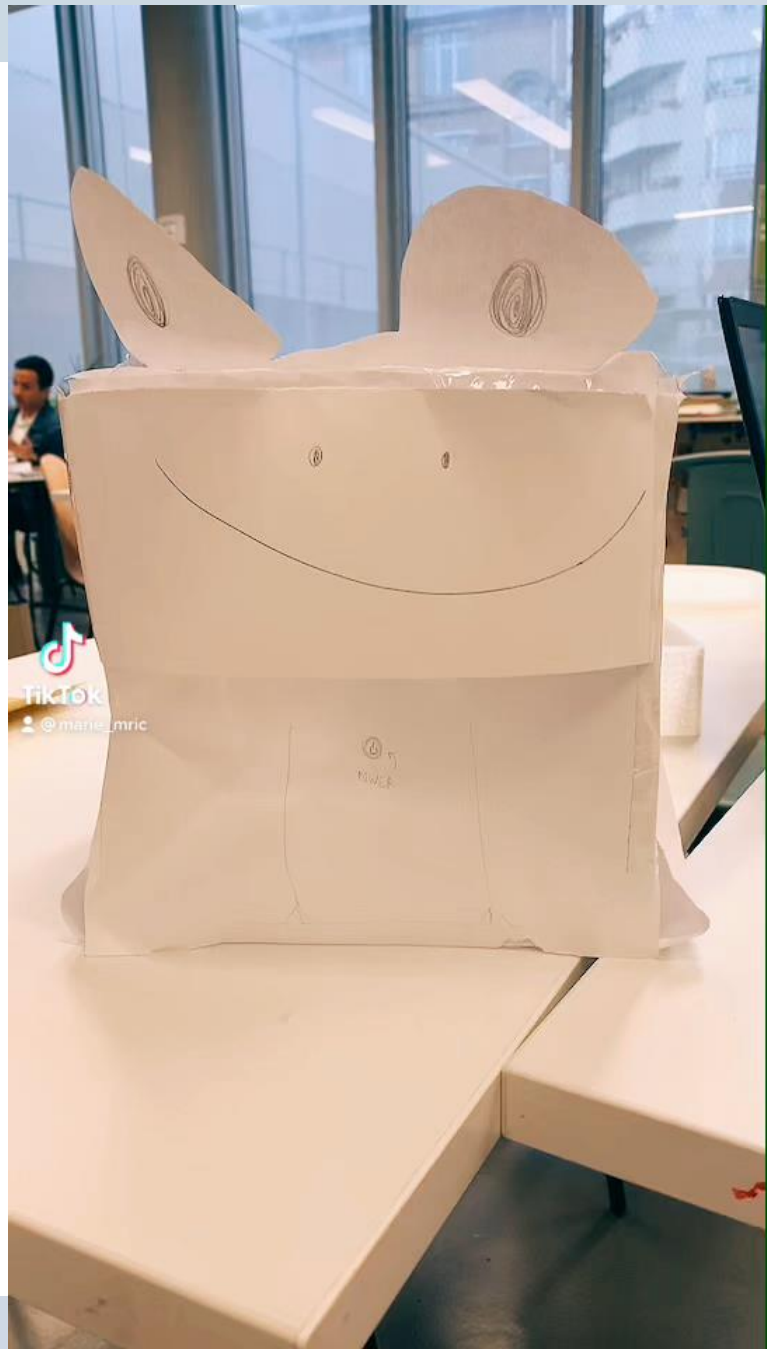












# Components

- Arduino Uno
- Real time clock
- LED ring 12
- Cables
- Button
- Resistor
- Arduino Power cable
- 3D printed frog !



# Colour code AM/PM

- 1 and 2 : Red
- 3 and 4 : Purple
- 5 and 6 : Blue
- 7 and 8 : Green
- 9 and 10 : Yellow
- 11 and 12 : Orange