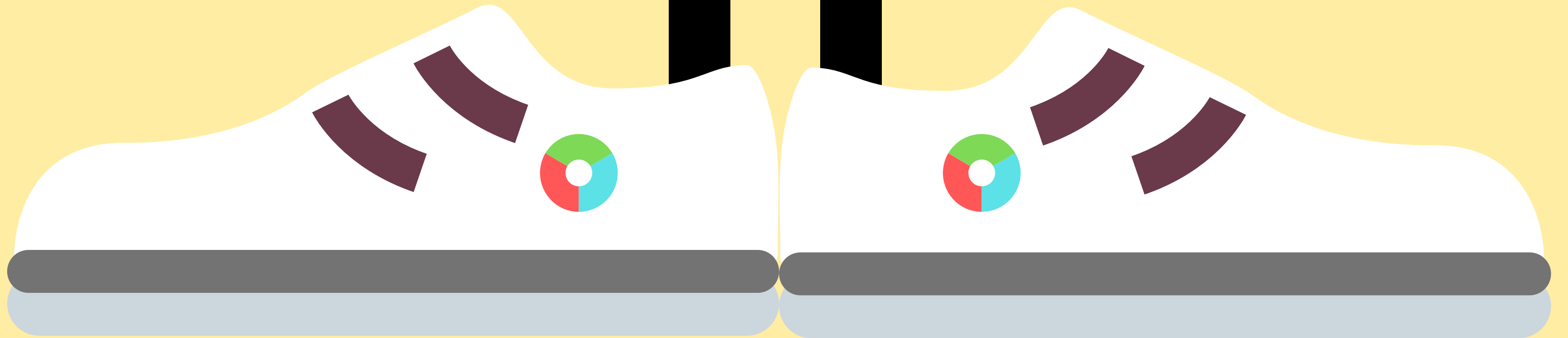


WE GOT SOLE



Why did we make it?

**love for shoes.
experiment with
wearable tech.**

Who is this for?

**art installation for a
shoe company**

**WE
GOT
SOLE**



**WE GOT SOLE
BLOCK
DIAGRAM**

**TURN
ON**

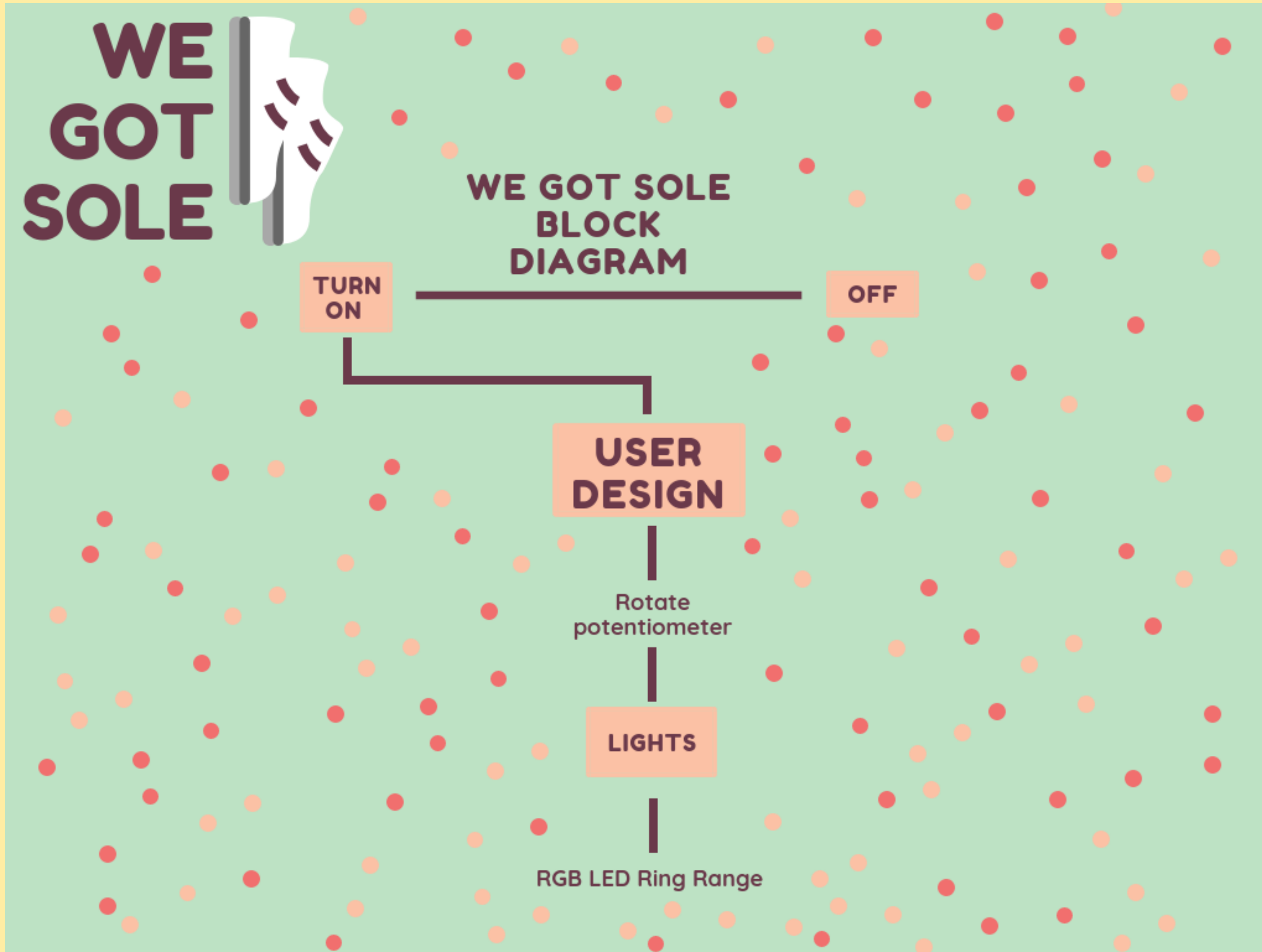
OFF

**USER
DESIGN**

Rotate
potentiometer

LIGHTS

RGB LED Ring Range



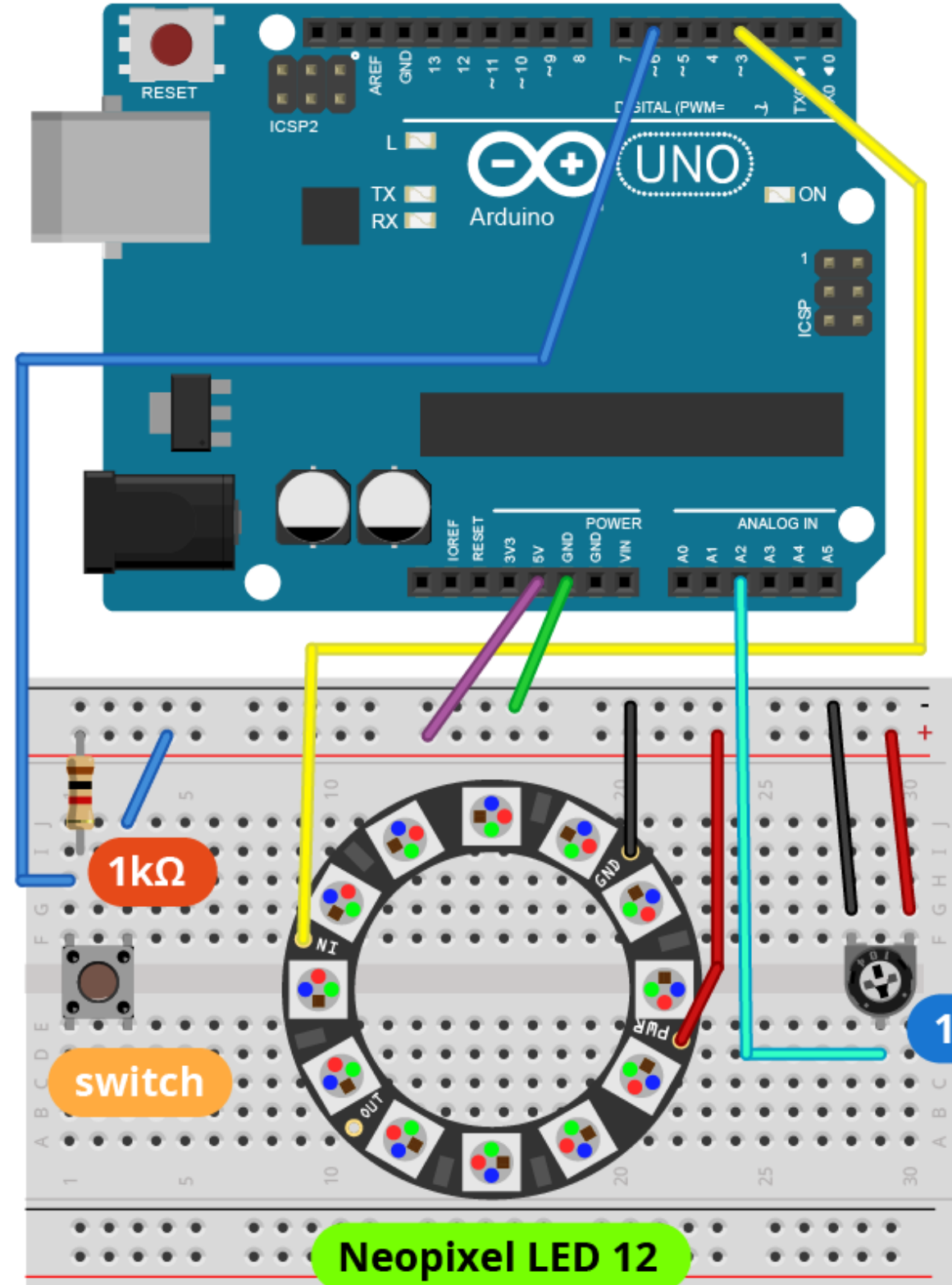
Purpose of Video

**brief history of sneaker
culture and adv. of
sneaker design**

Materials

- 1. Arduino Uno**
- 2. Jumper Wires**
- 3. 10k potentiometer**
- 4. New Balance Shoes**
- 5. Neopixel RGB LED Ring**
- 6. Velcro**
- 7. Paint**
- 8. 9V Battery**
- 9. Solderable Breadboard**

Circuit Diagram



**Changes we made:
-no more button switch**

10K Ω potentiometer

Neopixel LED 12

Code

```
#include <Adafruit_NeoPixel.h>
#define PIN 3
Adafruit_NeoPixel strip = Adafruit_NeoPixel(12, PIN, NEO_GRB + NEO_KHZ800);
int potPin = 2;
int val = 0;
int colorVal = 0;
int reading = 0;
int x;
int prevVal = 0;
int switchPin = 6;
boolean lastBtn = LOW;
boolean NeopixelColor = false;
boolean lastButton = LOW;

void setup() {
  // put your setup code here, to run once:
  strip.begin();
  strip.show();
  pinMode(switchPin, INPUT);
}
void loop() {
  // put your main code here, to run repeatedly:
  reading = analogRead(potPin);
  val = (reading/1024.0) * 13;
  colorVal = (reading/1024.0) * 255;
```

```
  if (digitalRead(switchPin) == HIGH && lastButton == LOW) else
  {
    delay(250); // Account for contact debounce
    NeopixelColor = !NeopixelColor;
  }
  if (NeopixelColor == false)
  {
    // Neopixel LED number code
    strip.setBrightness(40);
    if (val != prevVal)
    {
      for ( x = 0; x < val; x++)
      {
        strip.setPixelColor(x,255,0,255);
      }
      for (x=val; x<13; x++)
      {
        strip.setPixelColor(x,0,0,0);
        strip.show();
      }
      prevVal = val;
    }
  }
  else
  {
    strip.show();
  }
}
```