LIGHTRUNNERS: LIGHTNING YOUR CREW

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LIGHTRUNNERS: LIGHTNING YOUR CREW

- SMART CLOTHING
- PROXIMITY REACTION
- GROUP/TEAM

DESIGN

- TEXTILE VINYL
- PLOTTER
- THERMO ADHERED

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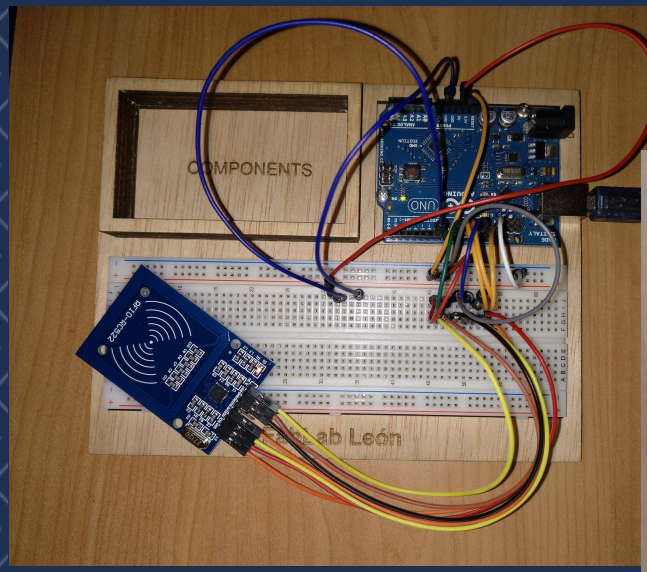
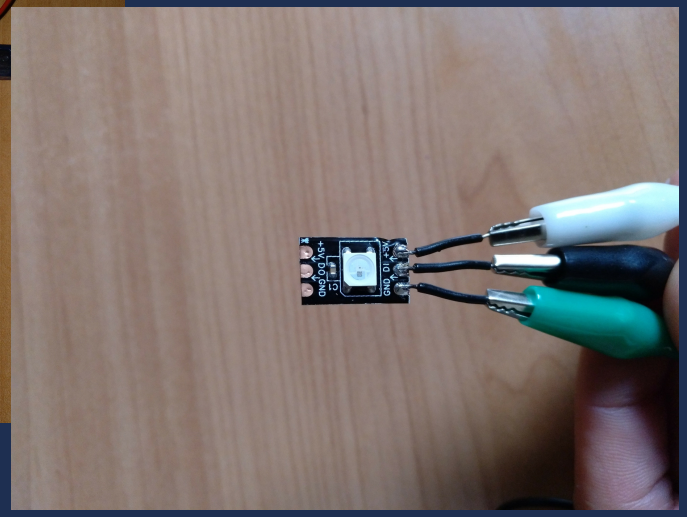
HARDWARE

- ARDUINO PROTOTYPE
- RFID
- NEOPIXELS





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SOFTWARE

- RFID CODE
- CARD UID (FRIEND OR NOT)
- NEOPIXELS CODE

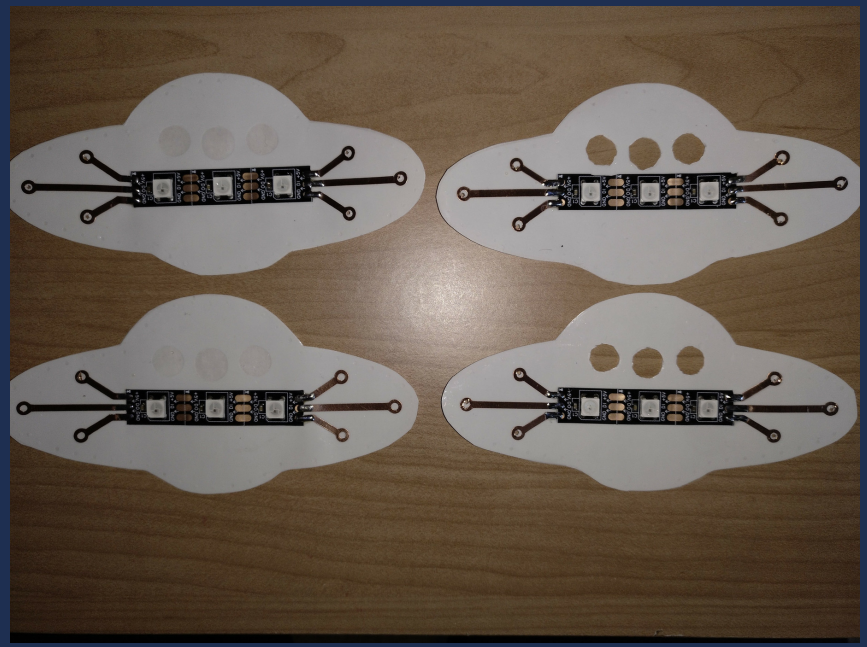
```
#include <SPI.h>
#include <MFRC522.h>
#include <Adafruit_NeoPixel.h>

#define NUM_LEDS 6 // Number of NeoPixels
#define PIN 7      // DIGITAL pin # where NeoPixels are connected

#define RST_PIN  9    //Pin 9 para el reset del RC522
#define SS_PIN  10   //Pin 10 para el SS (SDA) del RC522
MFRC522 mfrc522(SS_PIN, RST_PIN); ///Creamos el objeto para el RC522
Adafruit_NeoPixel strip = Adafruit_NeoPixel(NUM_LEDS, PIN, NEO_GRB + NEO_KHZ800);
```

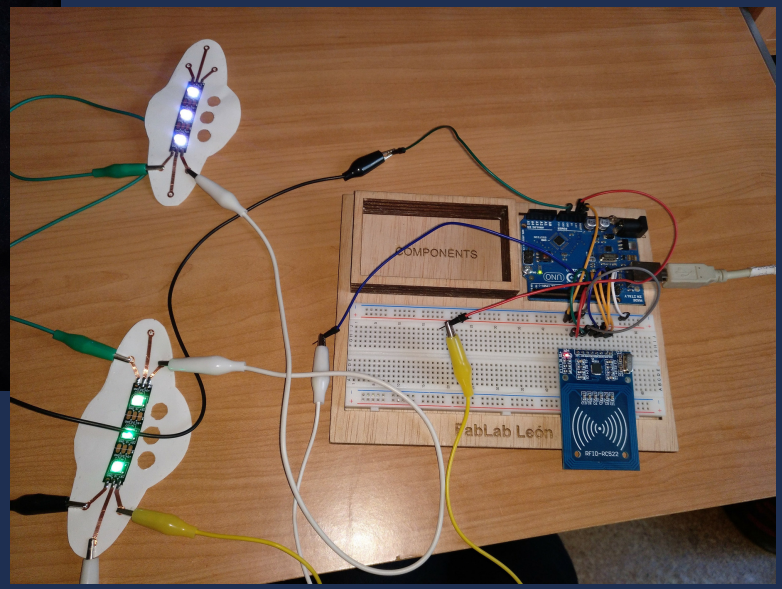
COMPONENTS

- DESIGN NEOPIXELS
- SPLIT TRIP
- PLOTTER
- FLEXIBLE COPPER
- SPECIAL VINYL



COMPONENTS

- SEW LEDS TO THE CLOTHES
- USE CONDUCTIVE THREAD TO LINK THE PIECES
- TEST



ASSEMBLY

- 2 WIRES:
- POWER SUPPLY (V + GND)
- LED PIN (+GND)

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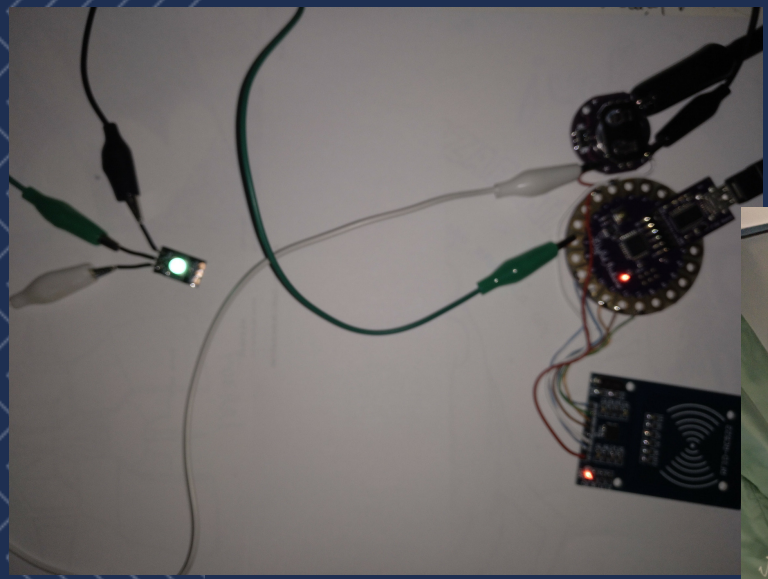
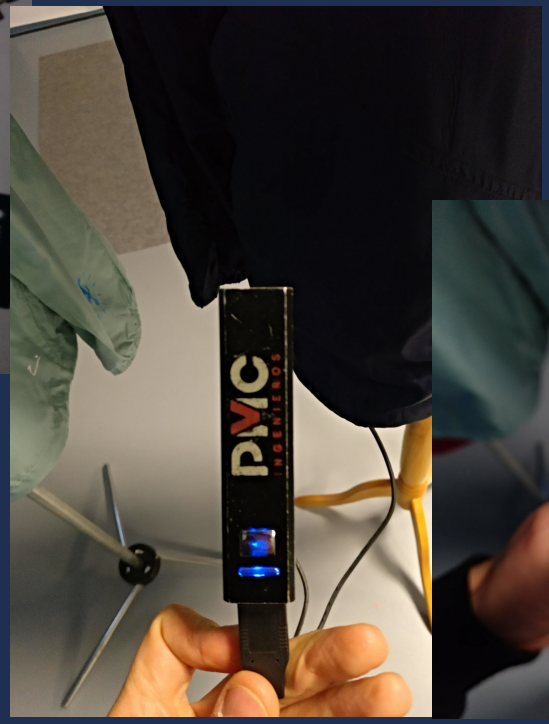
FINAL TESTS

- ARDUINO LILYPAD
- EXTERNAL POWER SUPPY(>5V)





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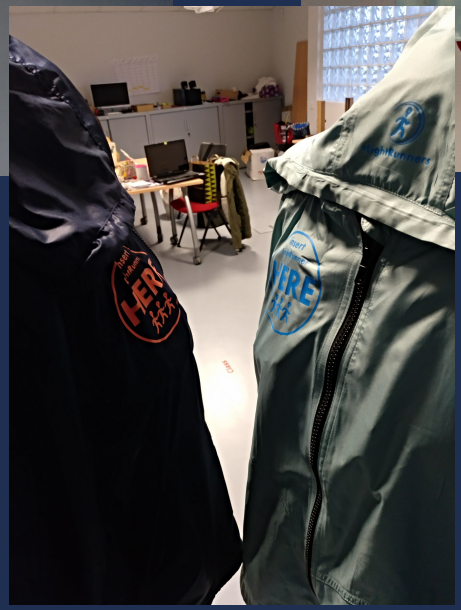
FINAL ASSEMBLY

- RFID + CARD (ACTIVATE THE SYSTEM)
- CARD SENSOR ON ARM (SWITCH OFF)

FINAL ASSEMBLY



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