### **Document Info**

Kara

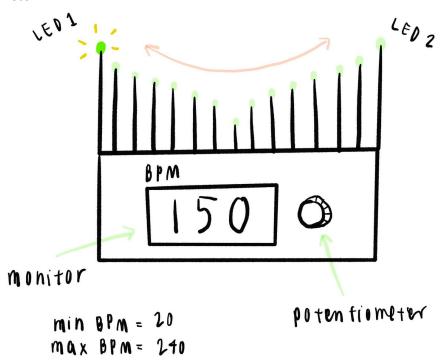
ART 385

Project 2

## **Re-state the Assignment**

Create a real-world hardware example with two inputs and two outputs.

## **Sketch**

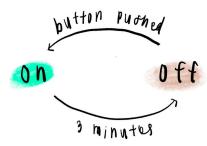


### Concept

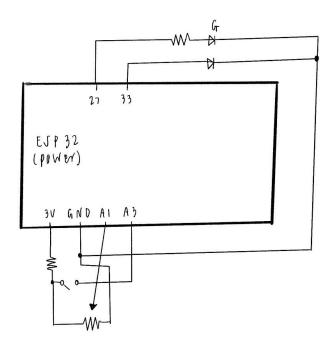
This is a metronome that can be used in various musical settings. The BPM can be adjusted by turning the potentiometer. It goes from 20 BPM to 240 BPM. The two LEDs blink alternately, according to the BPM. The serial monitor displays the current BPM. This metronome automatically turns off after 3 minutes, the average song length. Ideally, the metronome would also have multiple LEDs blinking in between the two LEDs as well as sound beeping according to the BPM.

# **State Diagram**

# metronome State Diagram



## Schematic diagram



## Video

 $\underline{https://youtu.be/rl8naYql4Y8}$