MEMORANDUM

To: Chuck Bland, Lecturer, Department of Electrical Engineering, Cal Poly SLO

Austin Dailey

From: Connor Spackman

Nam Nguyen

Date: 02/08/2023

RE: Final Lab Report

Block Diagram:

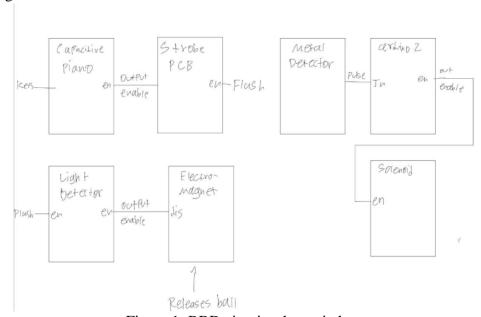


Figure 1: BBD circuit schematic layout

Schematic of Each Subsystem:

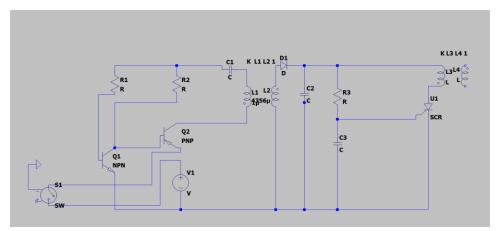


Figure 2: Strobe circuit schematic

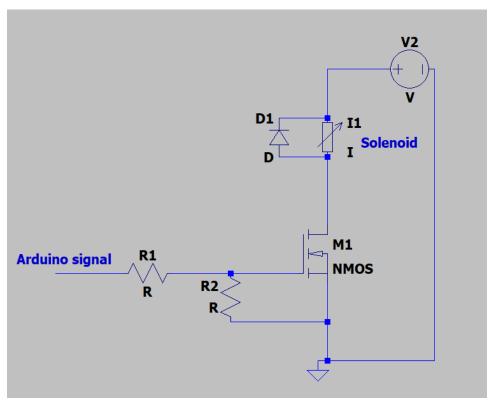


Figure 3: solenoid with FET as switch schematic

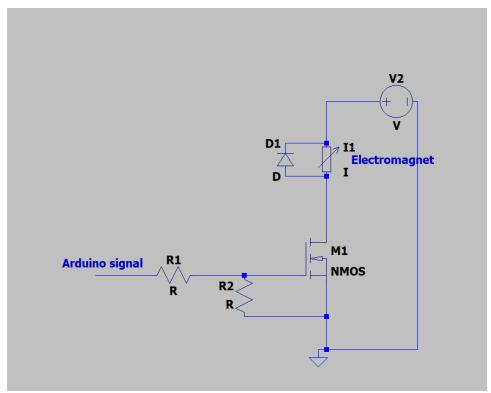


Figure 4: electromagnet with FET as switch schematic

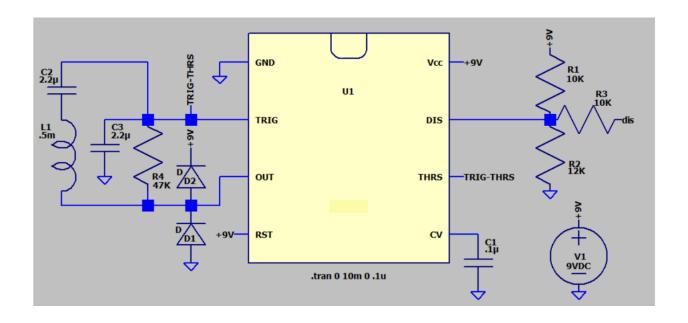


Figure 5: Metal Detector with TLC555

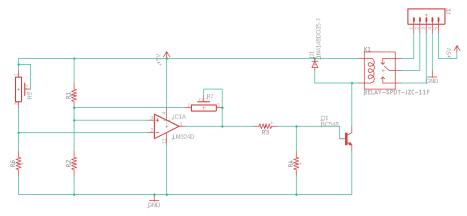
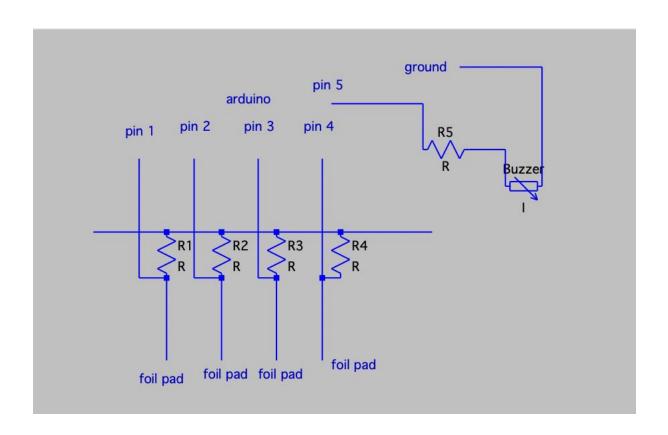
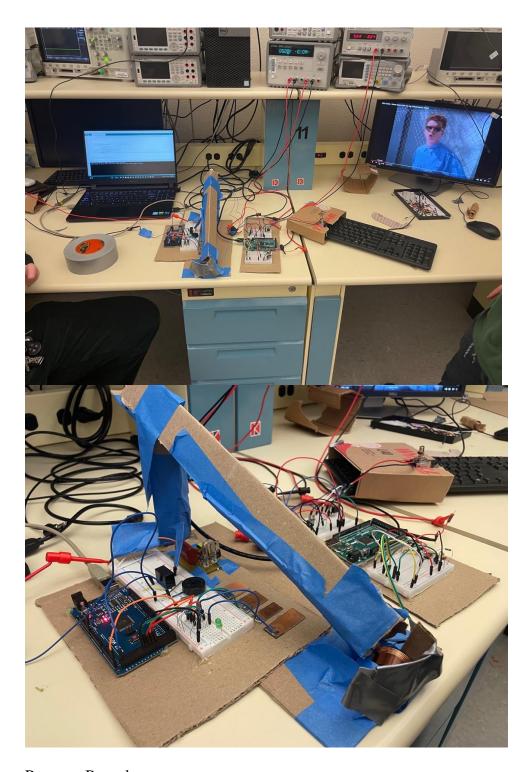


Figure 6: Light detector schematic

Figure 7: Capacitive Touch Sensor Piano



Picture of actual Machine:



Reuse or Recycle:

All of the cardboard in our project will be recycled along with the blue painter's tape. The breadboards will be returned to Connor and Austin to use in future projects as will the Arduino.

The wires, diodes, resistors and other electrical parts will be kept for future projects that any of the group members would like to use them for. The light detector and strobe light circuits will either be put on displaced or donated to future students in need.