

THE STABBING SIMULATOR



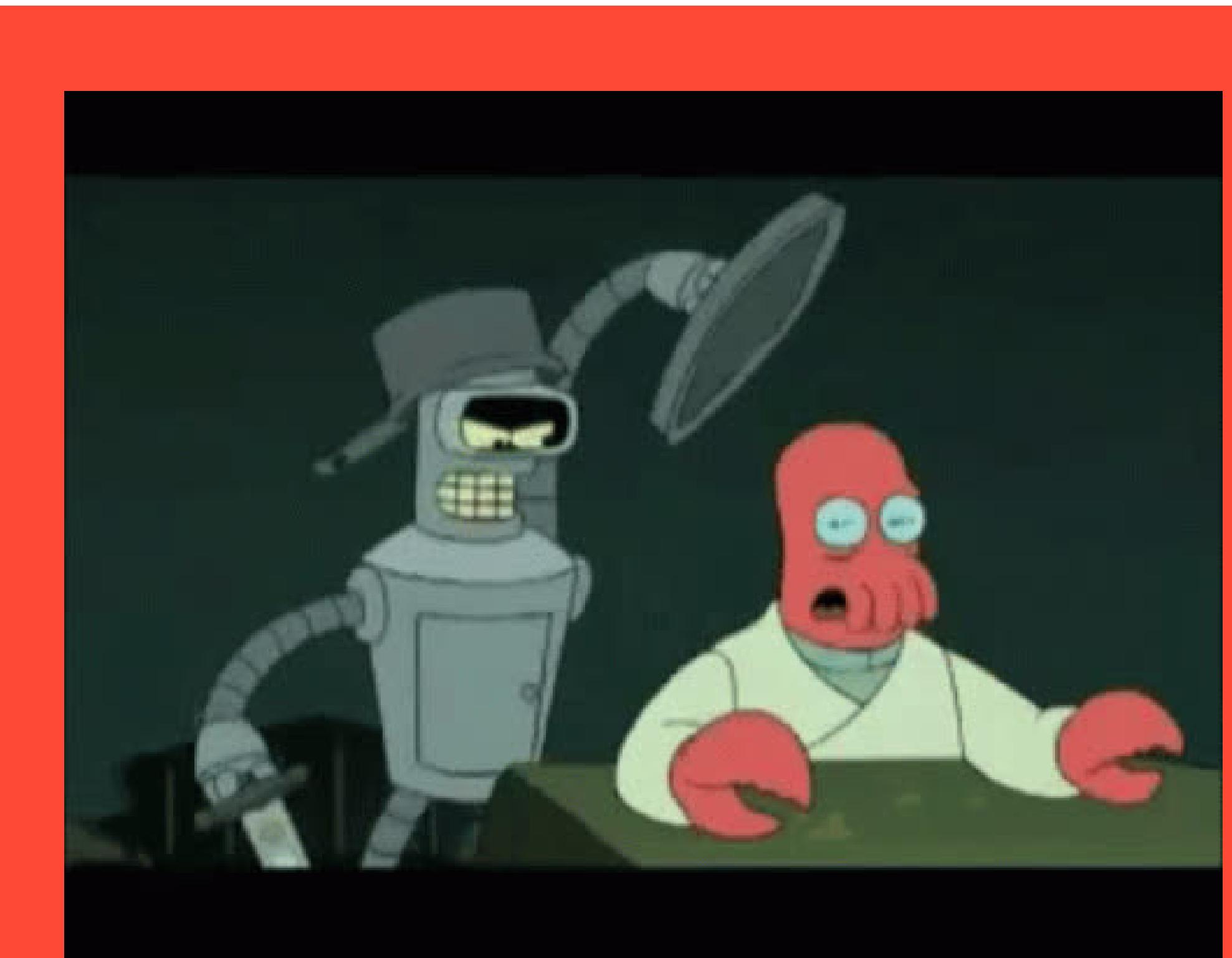
YETKIN, MAX, AGNESE, LO, FRANCESCO, TONI



CONCEPT: A MACHINE THAT'S MEAN

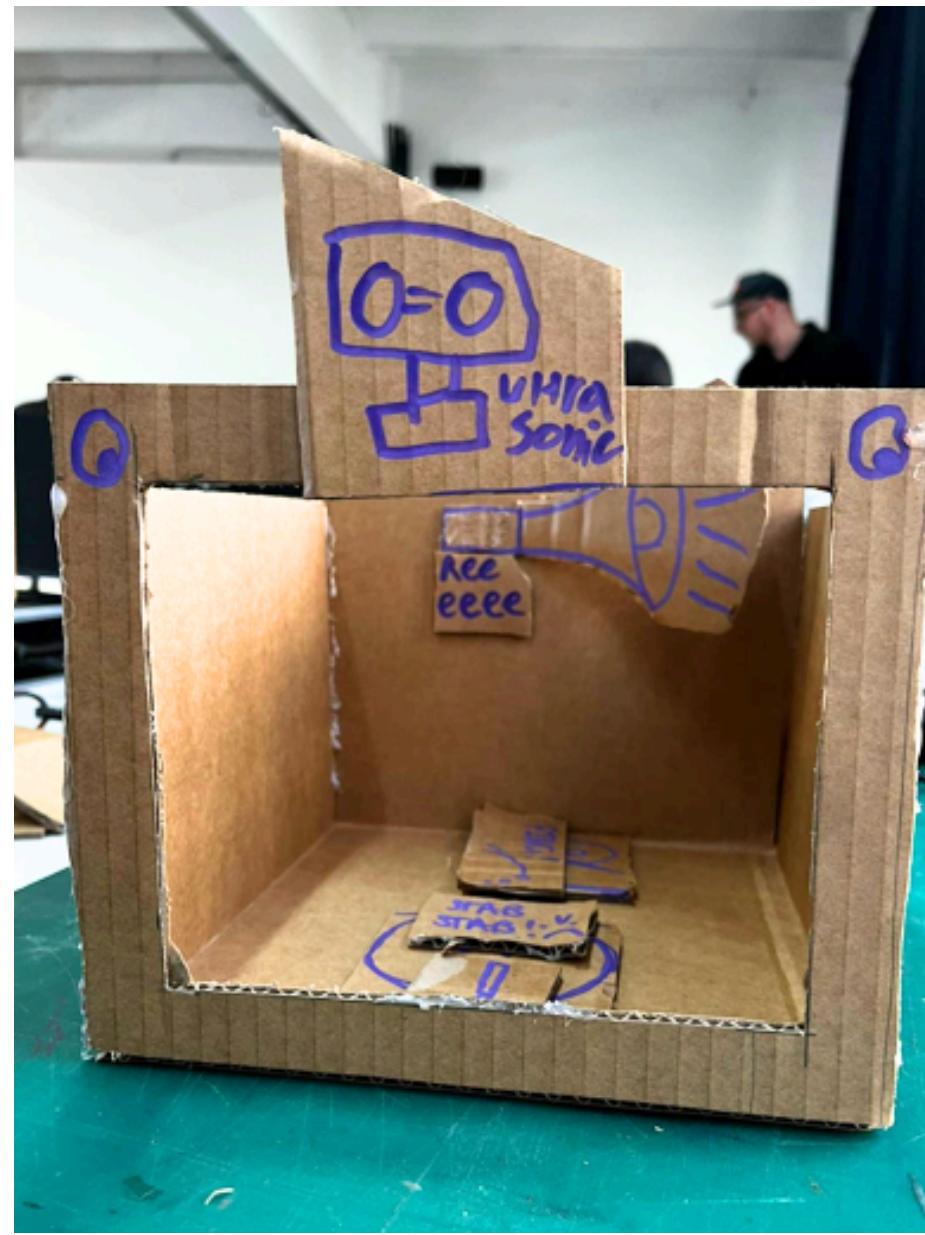
After years in which machines have served humans, supported them, and simplified their lives, we have finally created something... different.

Designed not to help, but to deceive humans (oh, how stupid they can be!) and annoy them with technological mischief.



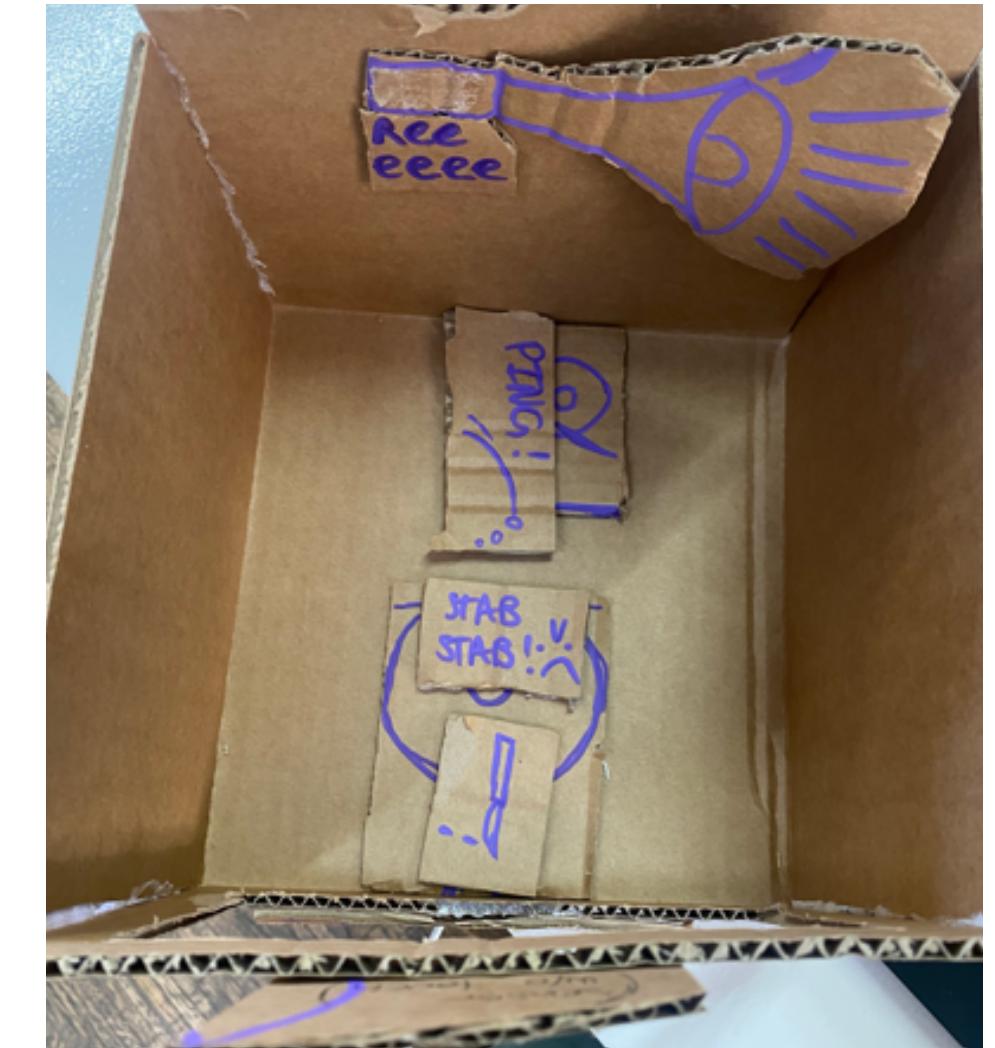
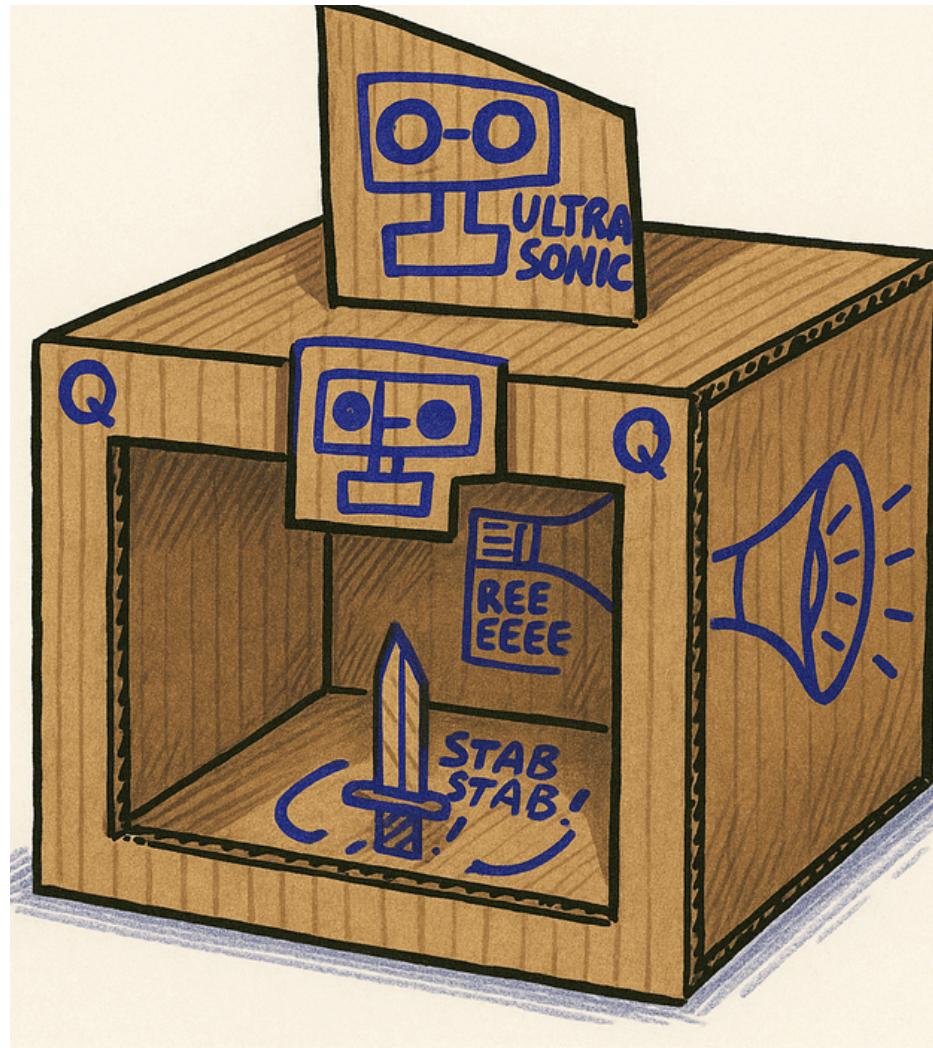
DESIGN PROCESS

From PC to stabbing machine...



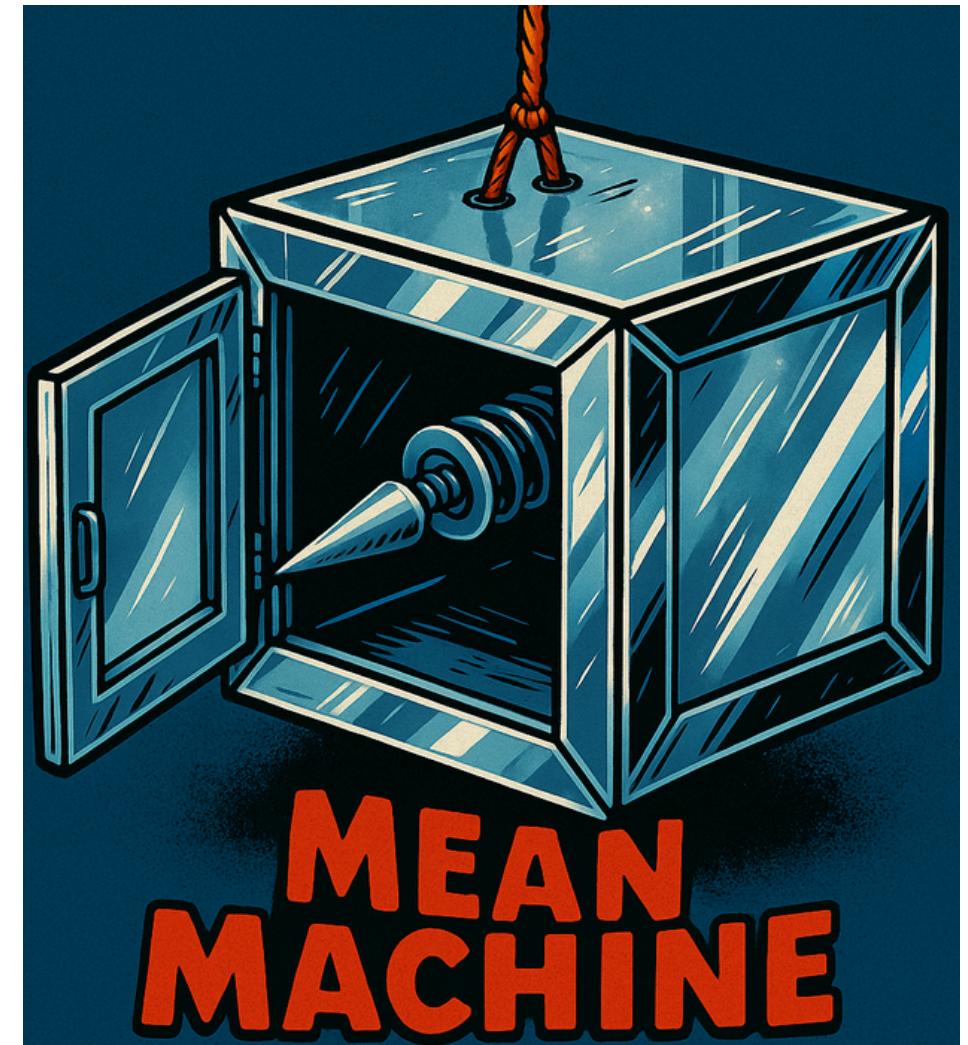
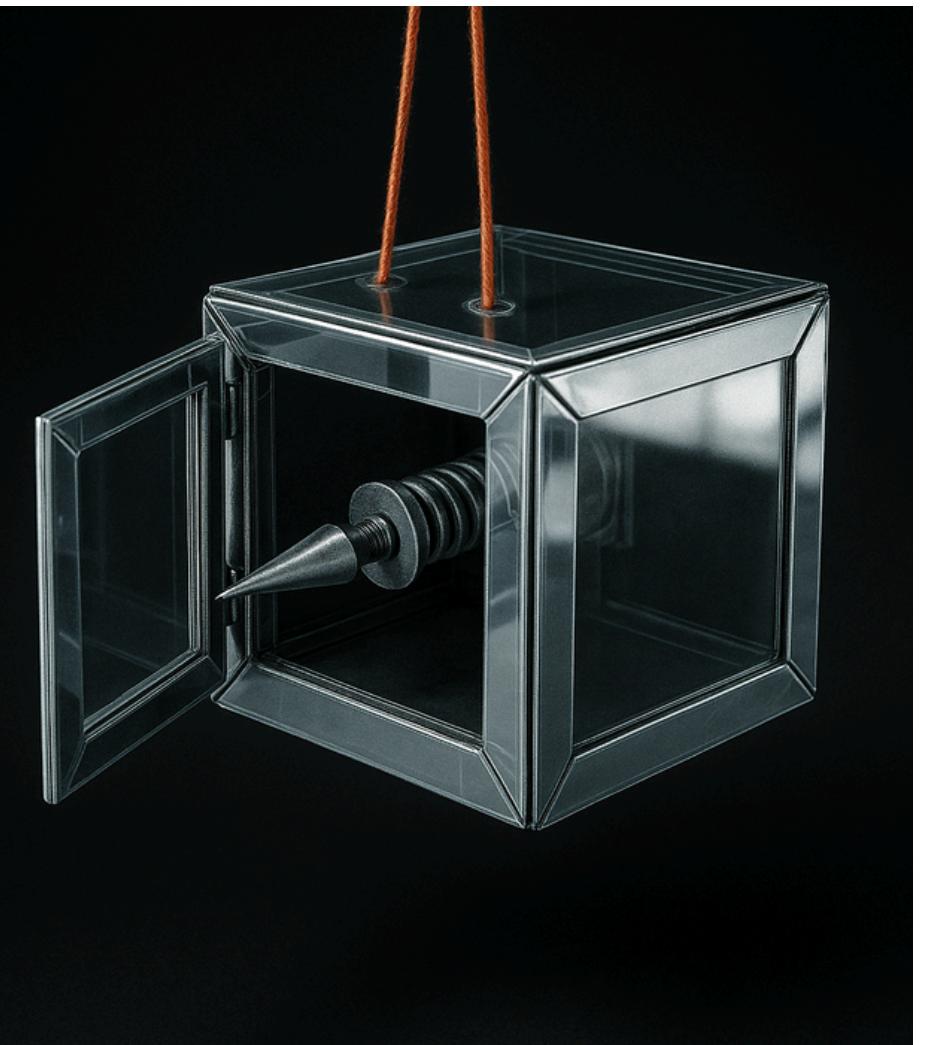
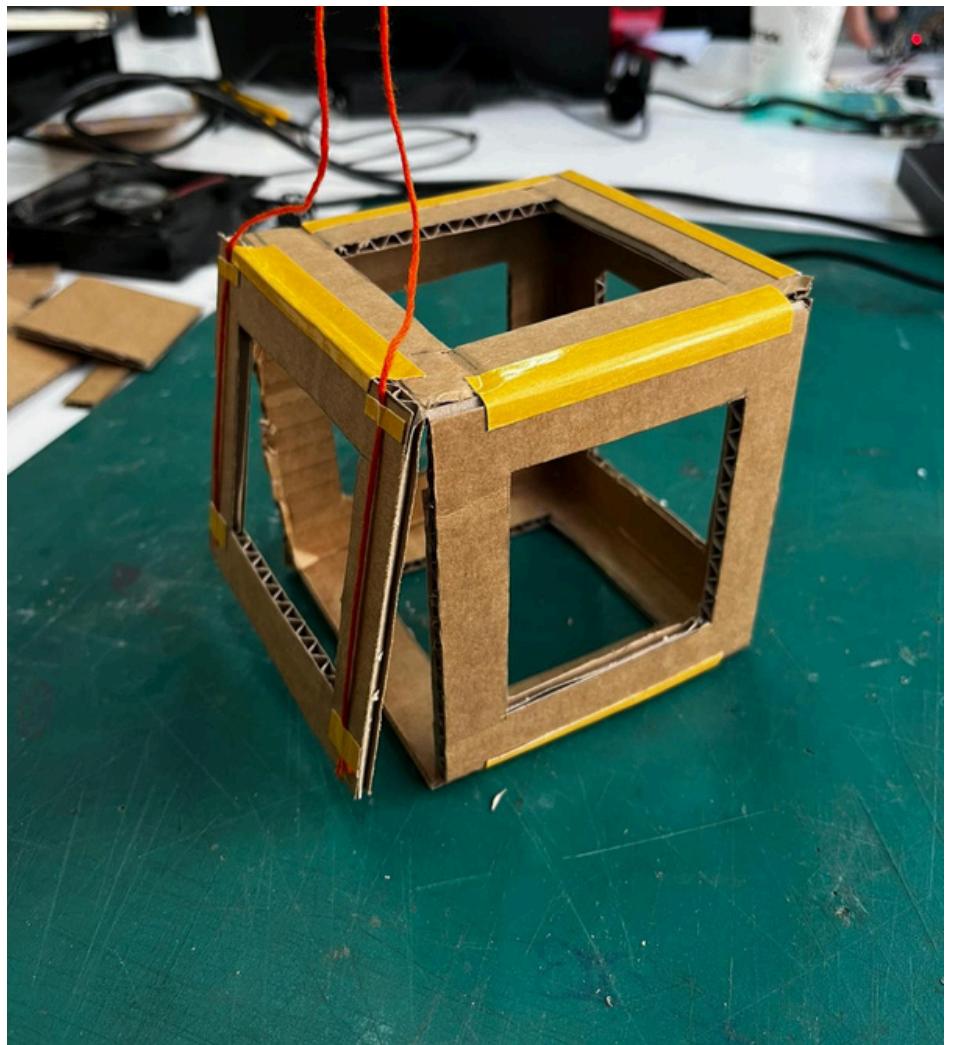
PROTOTYPES

Protoyping process... nano banana and mockup models

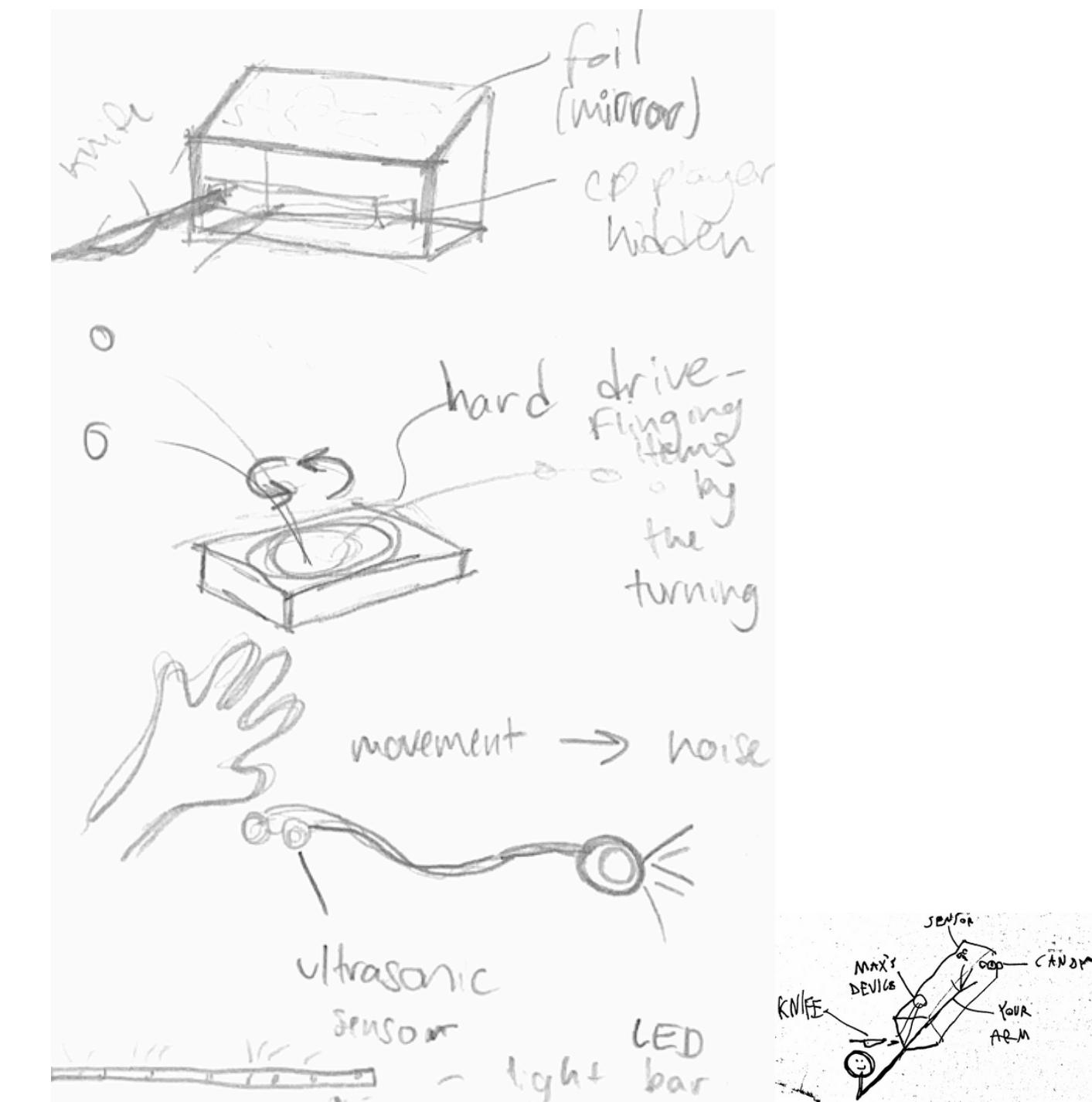
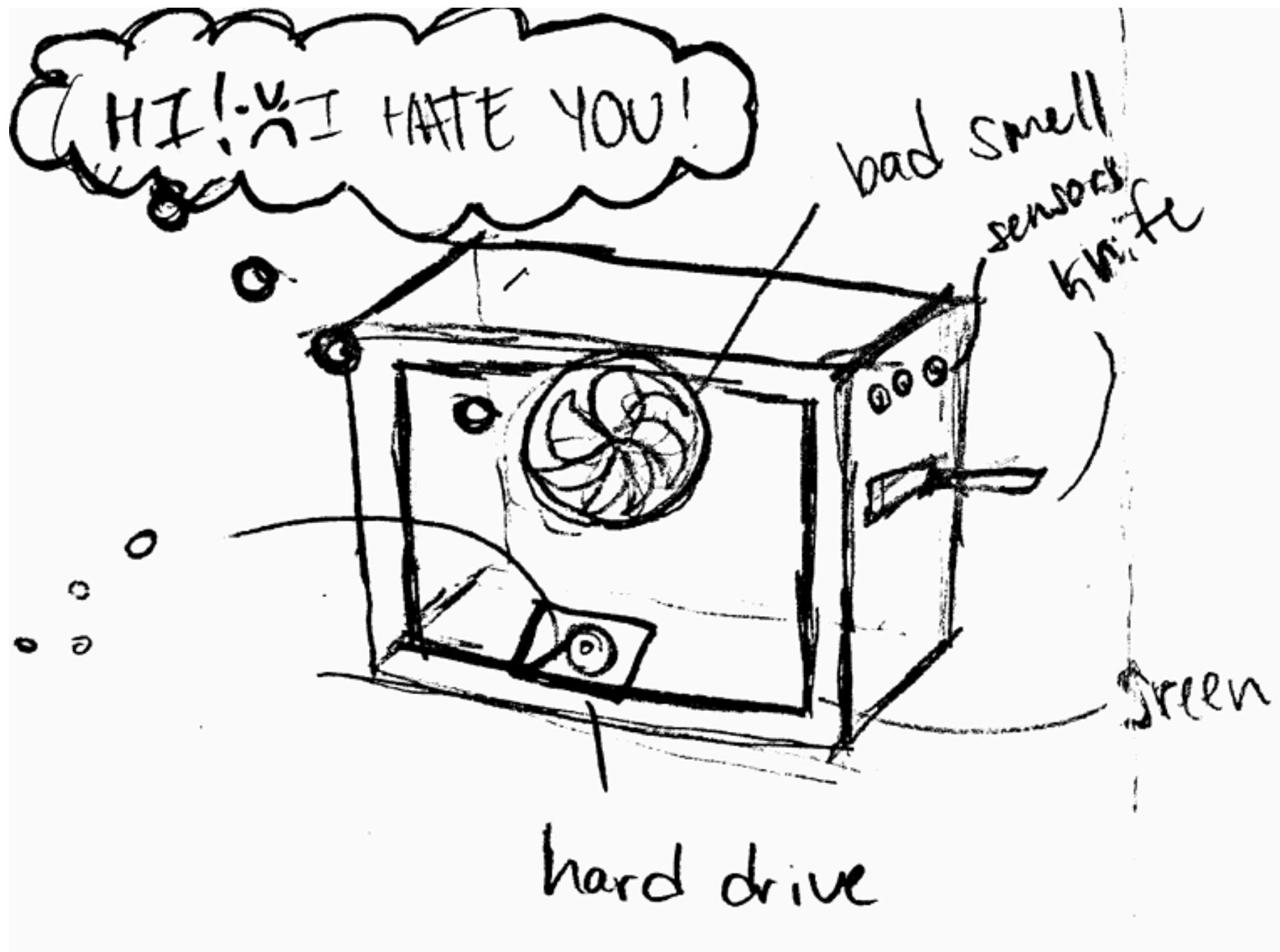


PROTOTYPES

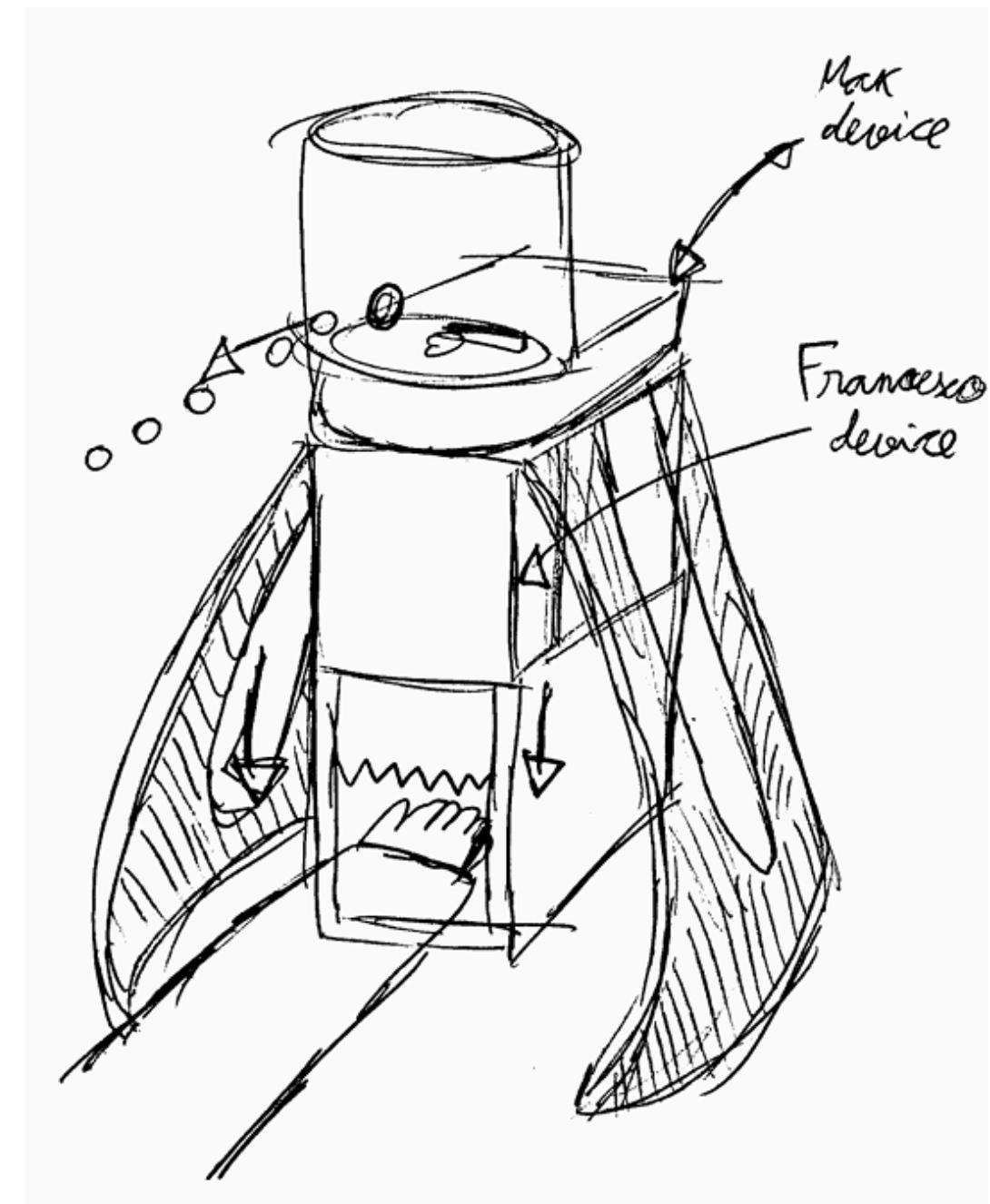
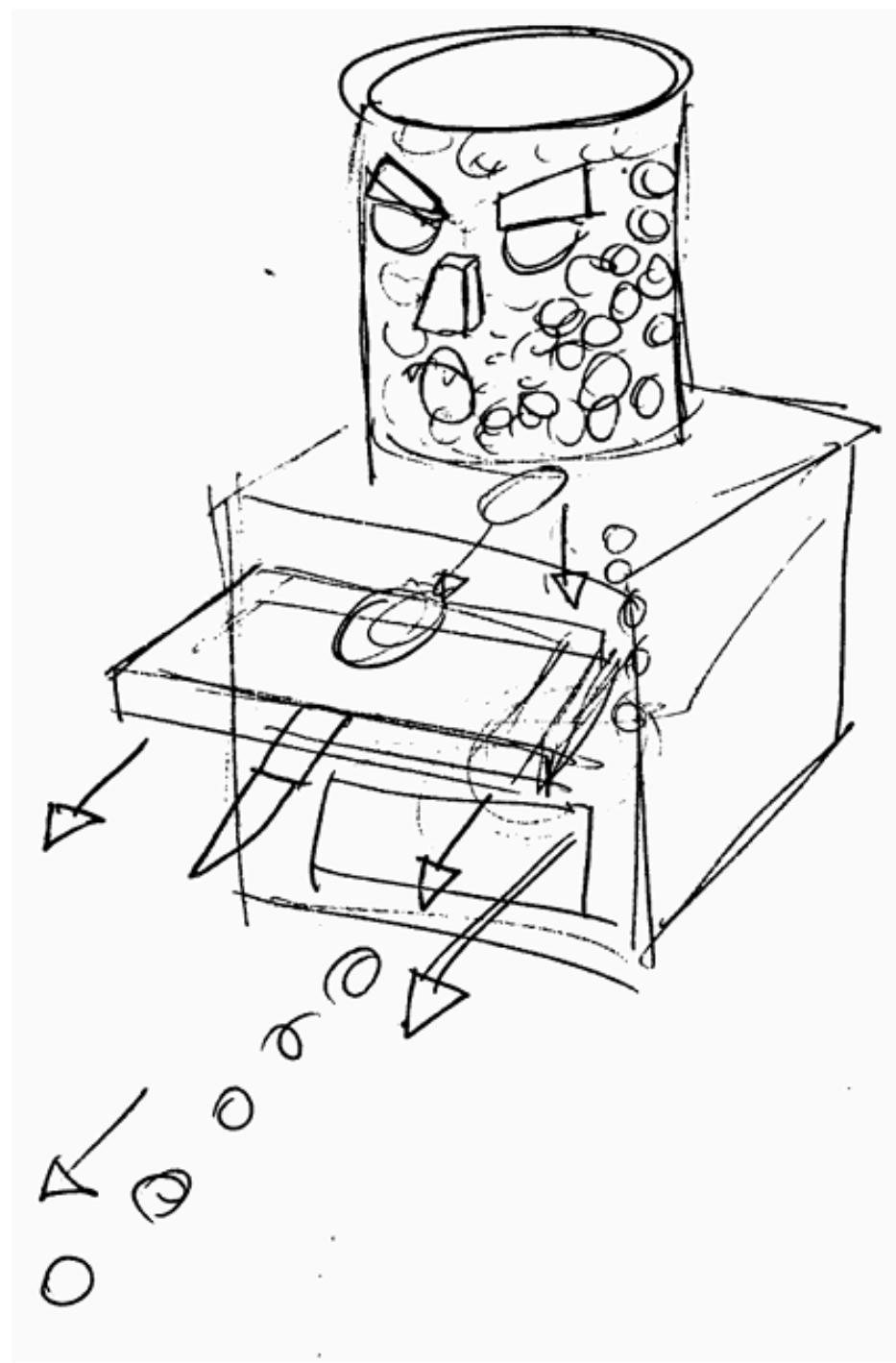
Protoyping prossess... nano banana and mockup models



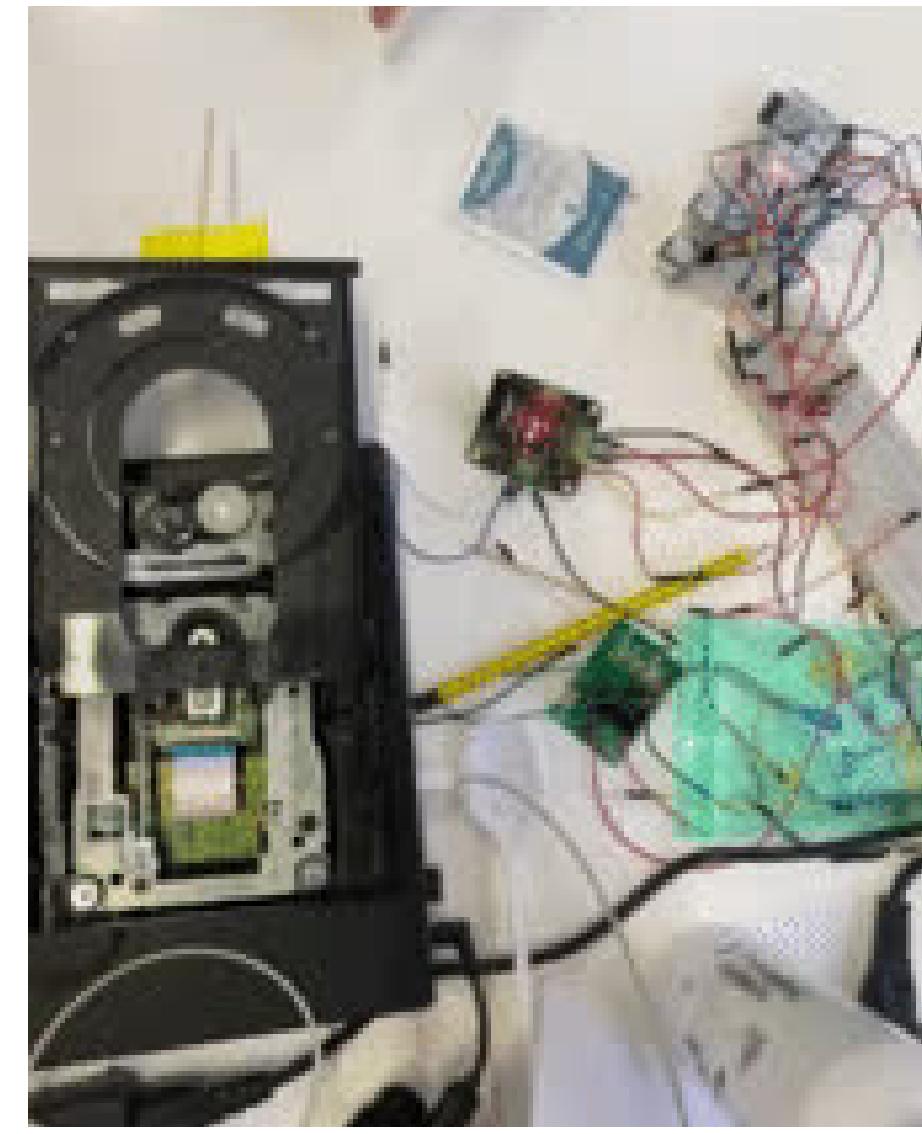
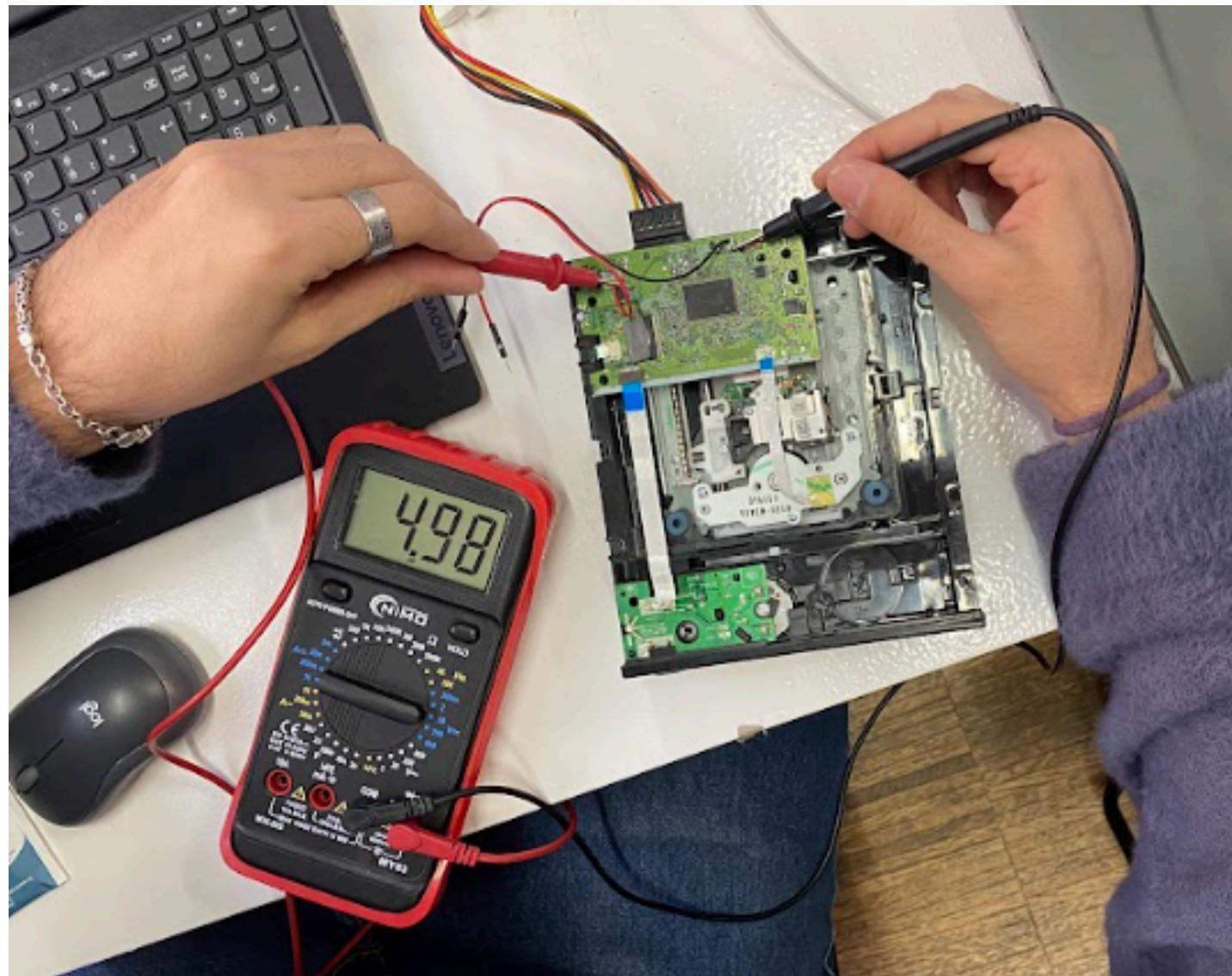
ITERATING NARRATIVE



ITERATING NARRATIVE

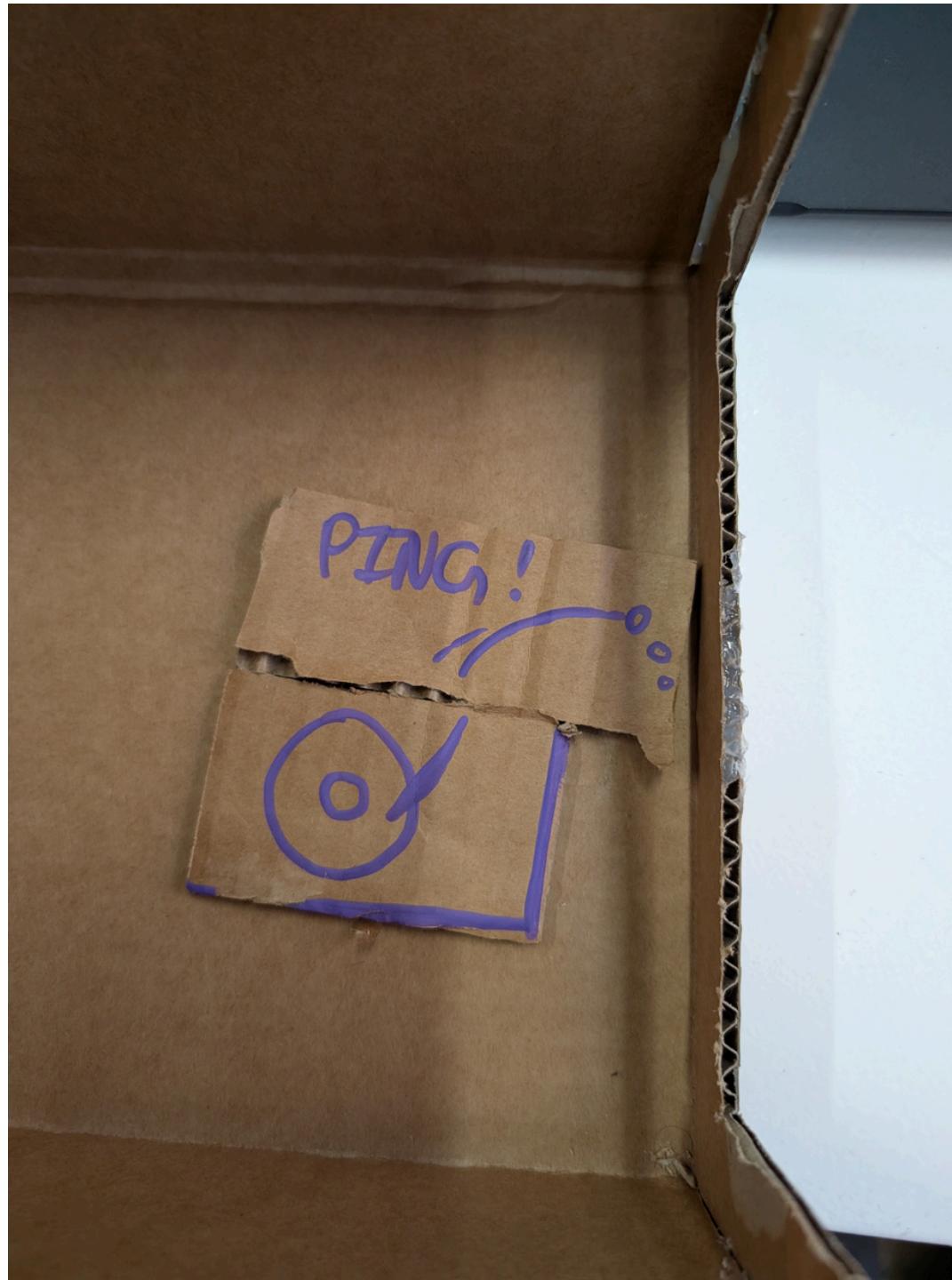


ULTRASONIC SENSOR, CD MOVEMENT, AND BUZZER



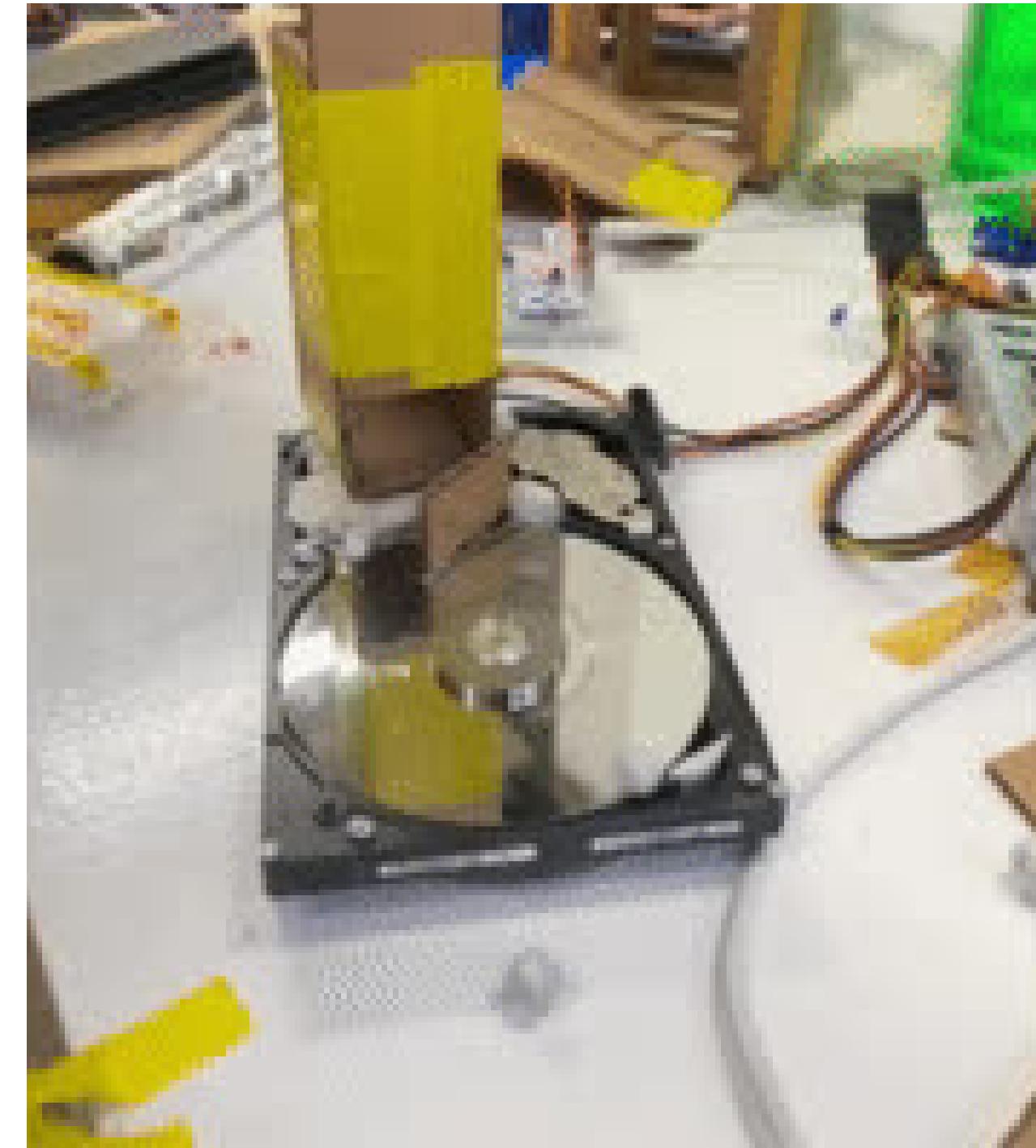
- We first learned **how to use the buzzer and generate sound**.
- Then we learned **how to use the ultrasonic sensor to detect distance**.
- We **combined both components** so the **buzzer activates when my hand approaches the sensor**.
- After that, we disabled the **CD player's physical button** and checked its power requirements (**5V**).
- We **identified the CD player motor's positive and negative terminals**.
- We learned **how to control the CD tray to open and close using the H-bridge**.
- Finally, **We integrated all systems**: when my hand gets close, the CD tray opens and the buzzer plays; when I move my hand away, both the CD tray and the buzzer turn off.

HARD DRIVE DESIGN



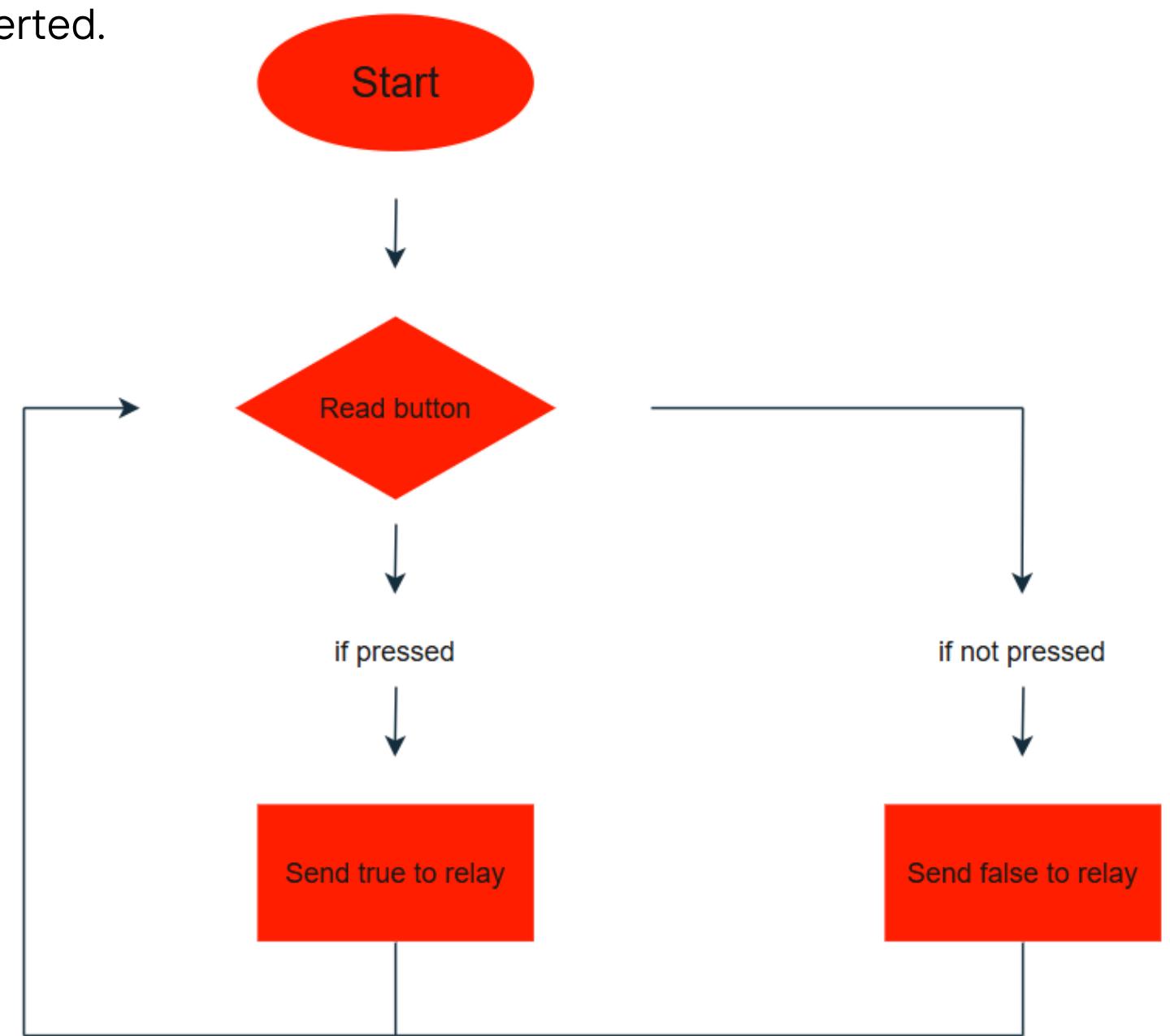
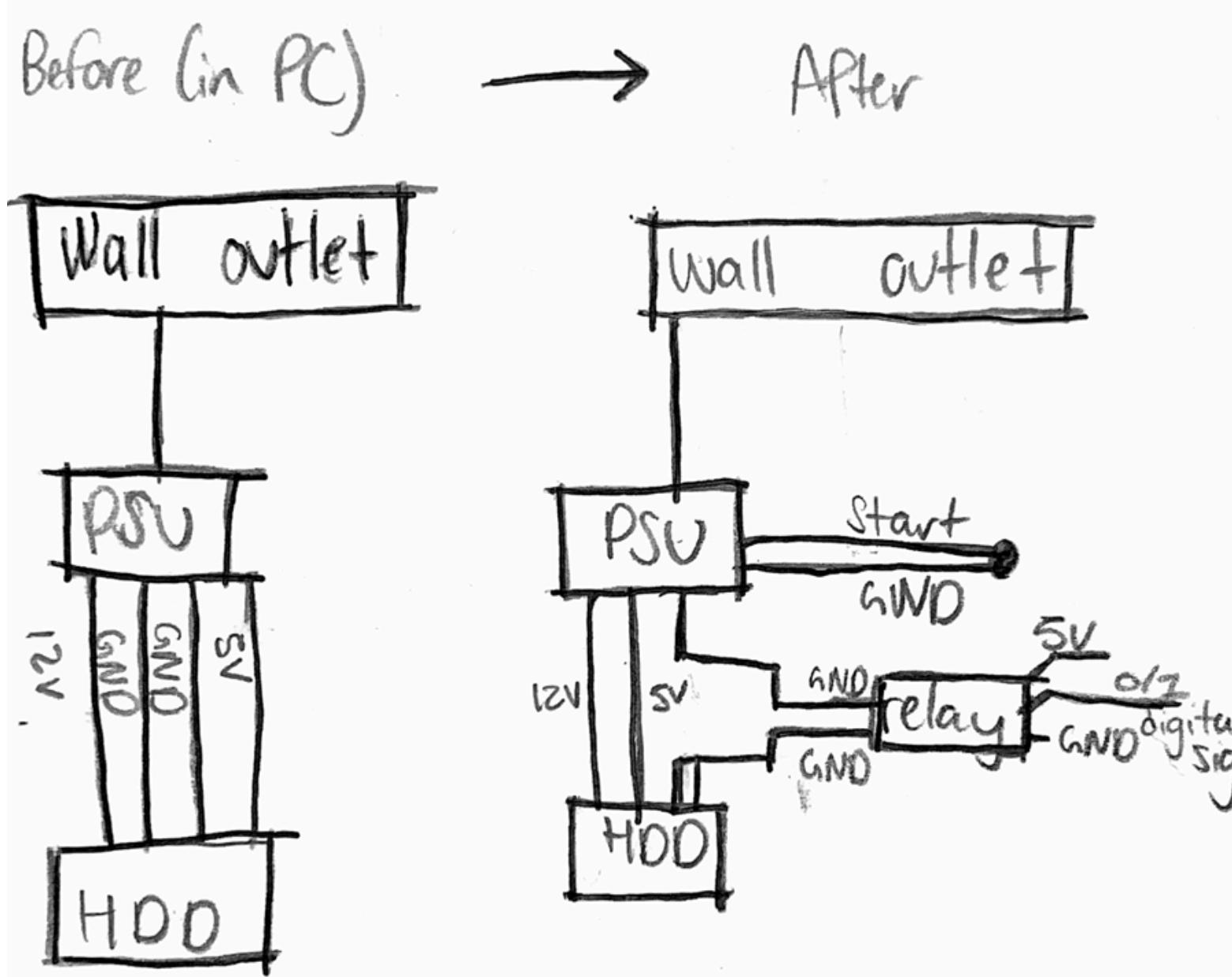
An attempt to use hard drive spin as a way to taunt and aggravate the user. The original idea was that the motor spins fast enough to fling small objects. This property could be used with additional guides to launch soft pellets at the user of the machine.

The hard drive was composed of a high speed stepper motor that spins data storage plates as well as a magnetically controlled needle that reads data.



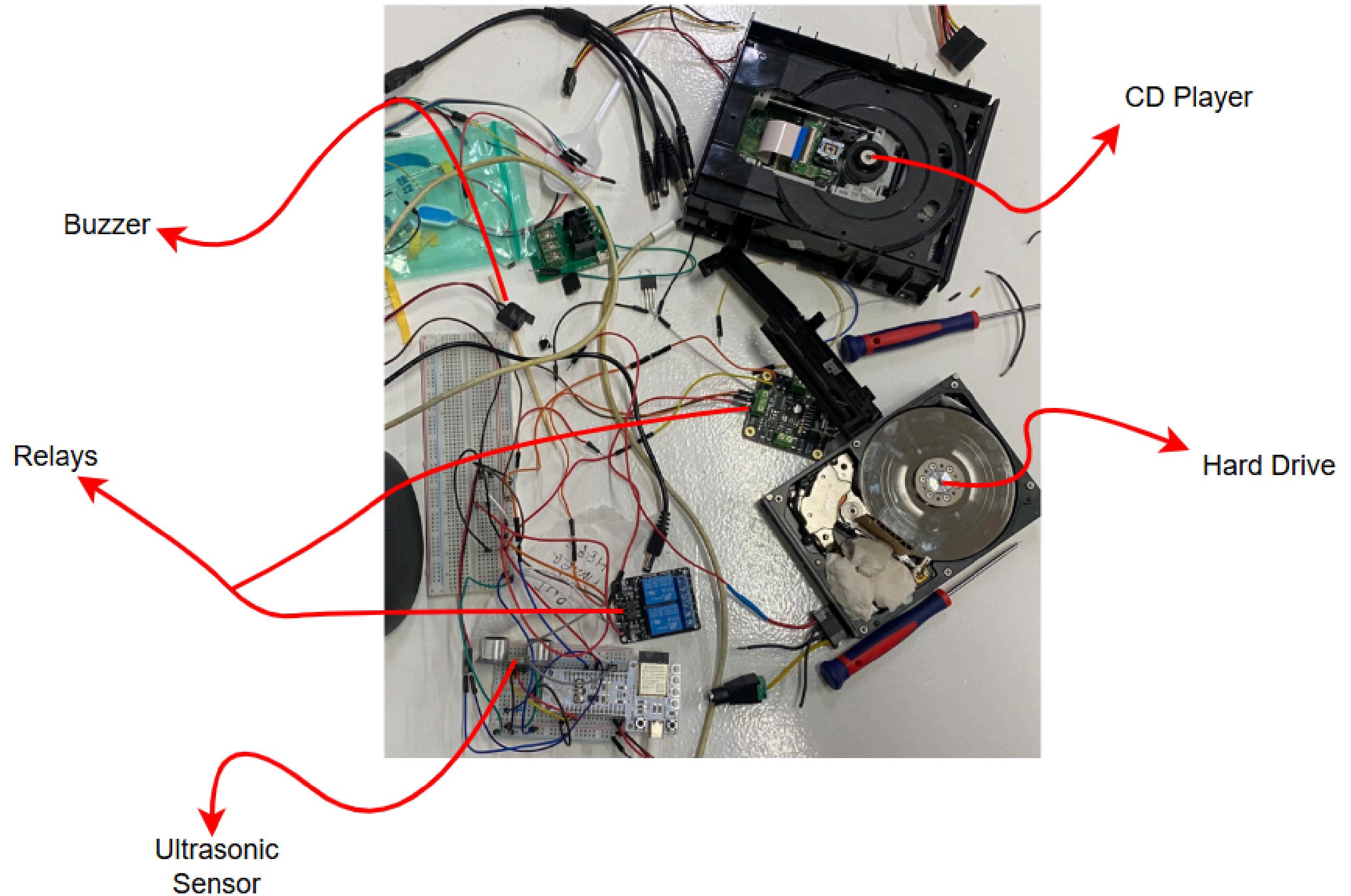
HARD DRIVE ELECTRONIC DIAGRAM

The hard drive (HDD) was a interesting device to hack. Normally it receives logic from the motherboard that controls both it and the power supply (PSU). This diagram shows how the connection with the power supply was interrupted and a digitally controlled relay was inserted.



MOMENTS BEFORE DISASTER....

All the components were wired together. The dream was you get close and a series of events would occur. Once the Ultrasonic sensor was activated, the CD player would move, then the Buzzer would make a jingle, and finally the Hard drive would turn on. All of our components were in harmony!



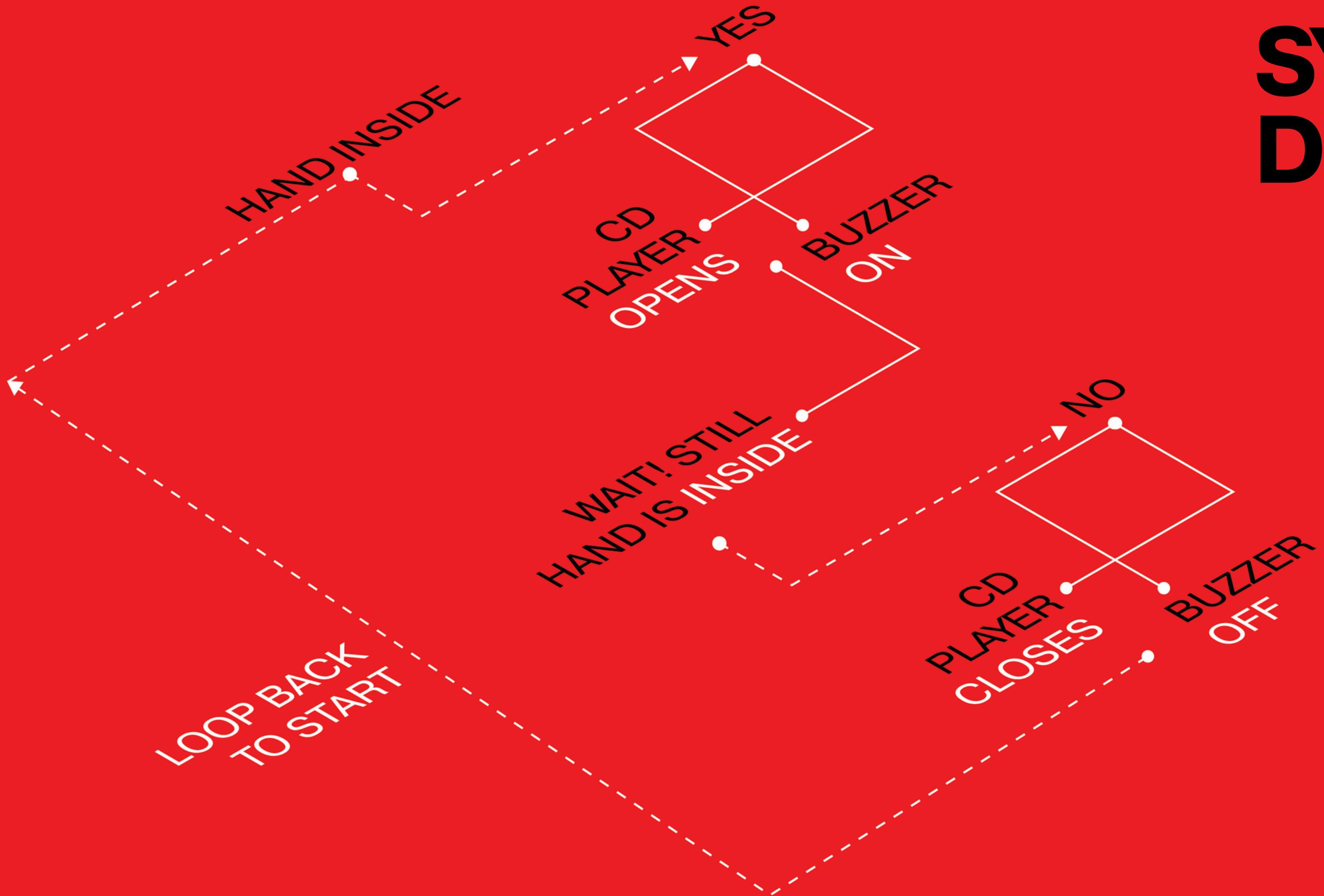
ITERATION PROCESS -

RIP HARDRIVE :(

After attempting to move the hard drive from one power supply to another, the 5-volt and 12-volt wires were shorted and the circuit board controlling the hard drive was murdered. With additional time and effort, the stepper motor could be harvested and brought back to life.



SYSTEM DIAGRAM



CODING LOGIC



INITIALIZE pins for buzzer, sensor, and motor

- *LOOP forever:*
distance = readSensor()
- *IF* *distance < threshold THEN*
openCD()
playMelodyWhileHandNear()
- *ELSE*
closeCD()
stopBuzzer()
- *ENDIF*
- *ENDLOOP*
- END*





MATERIALS AND PARTS

MDF

1X STABBER

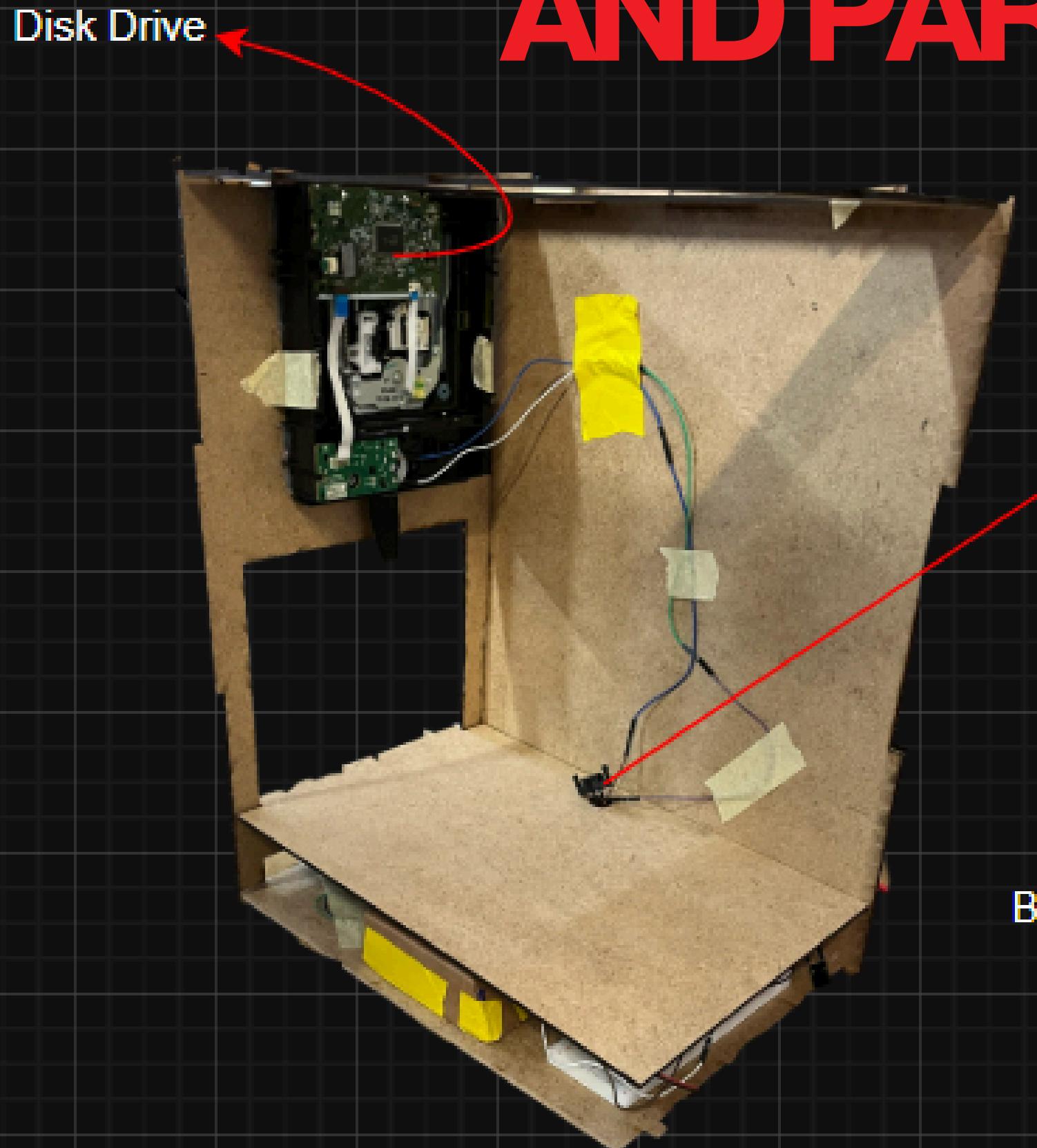
1X BUZZER

1X SENSOR

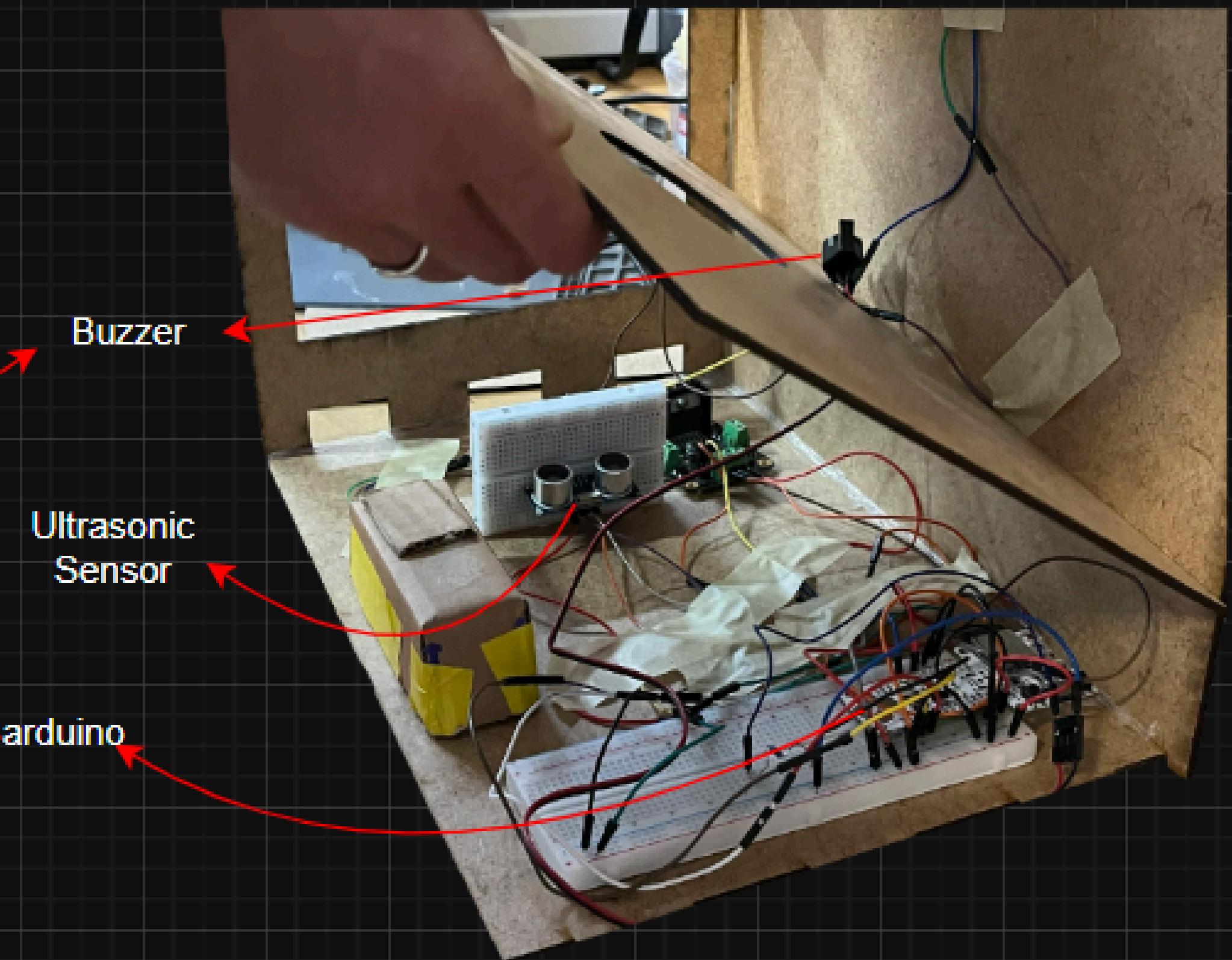
1X VICTIM



MATERIALS AND PARTS



Disk Drive

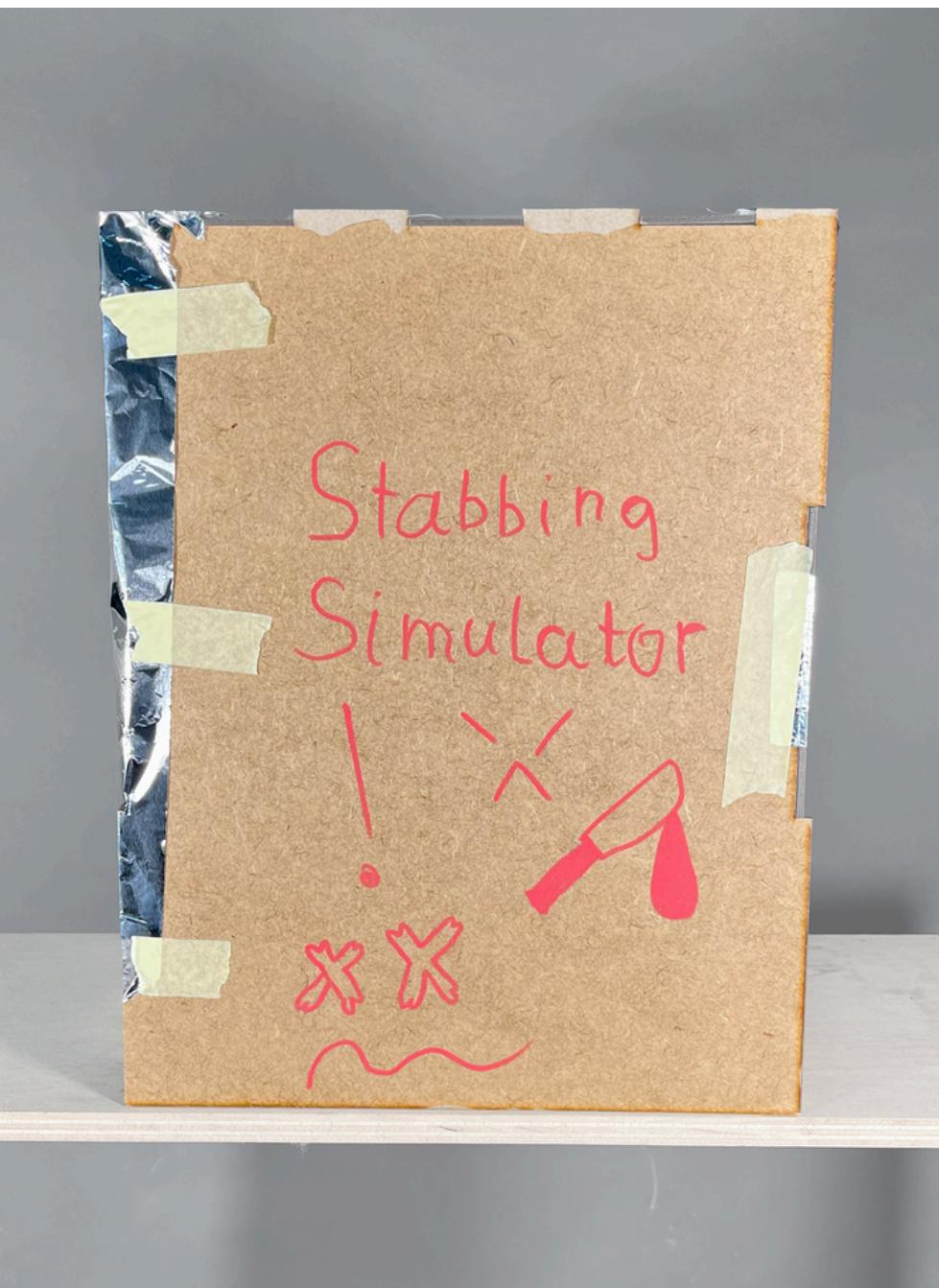
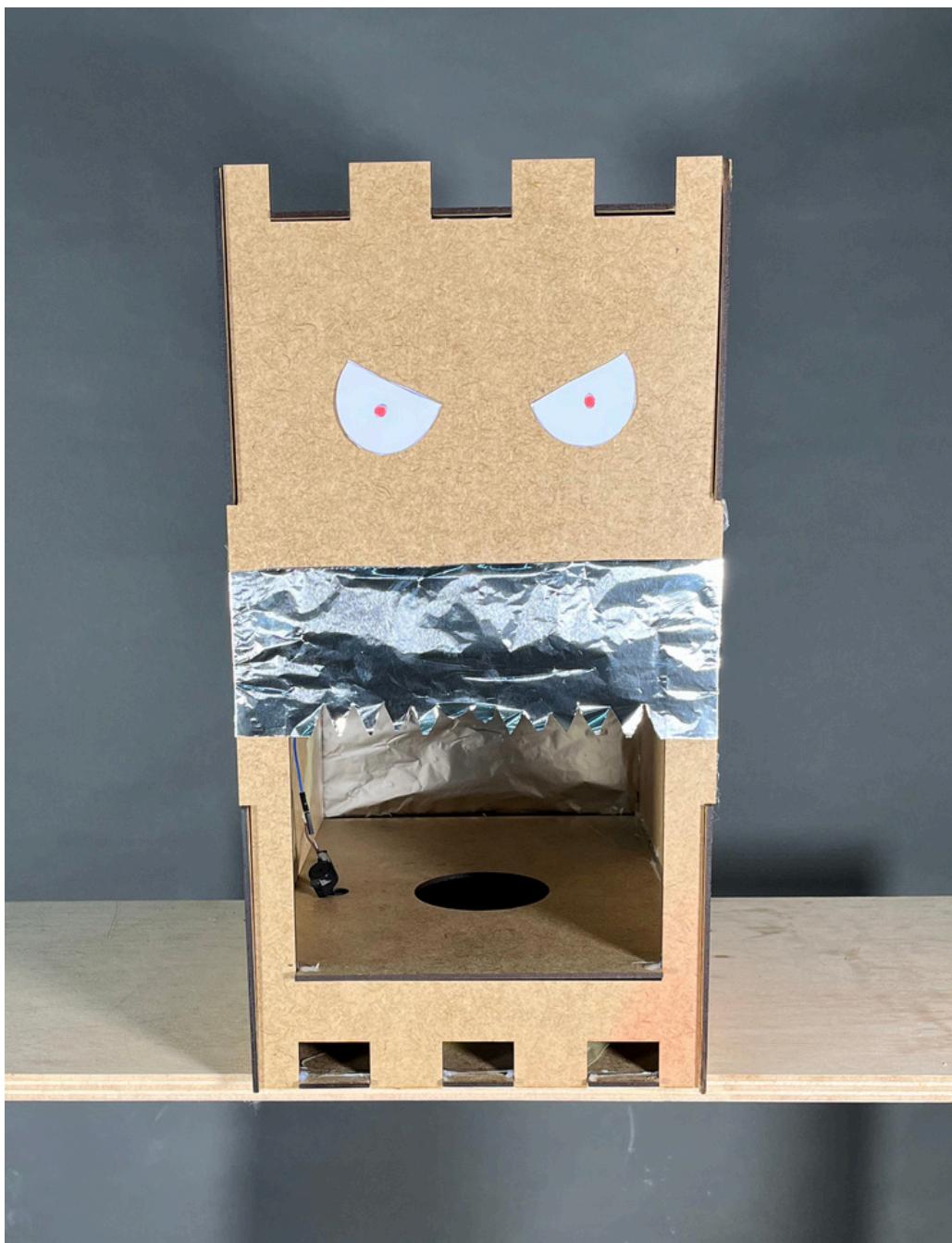


Buzzer

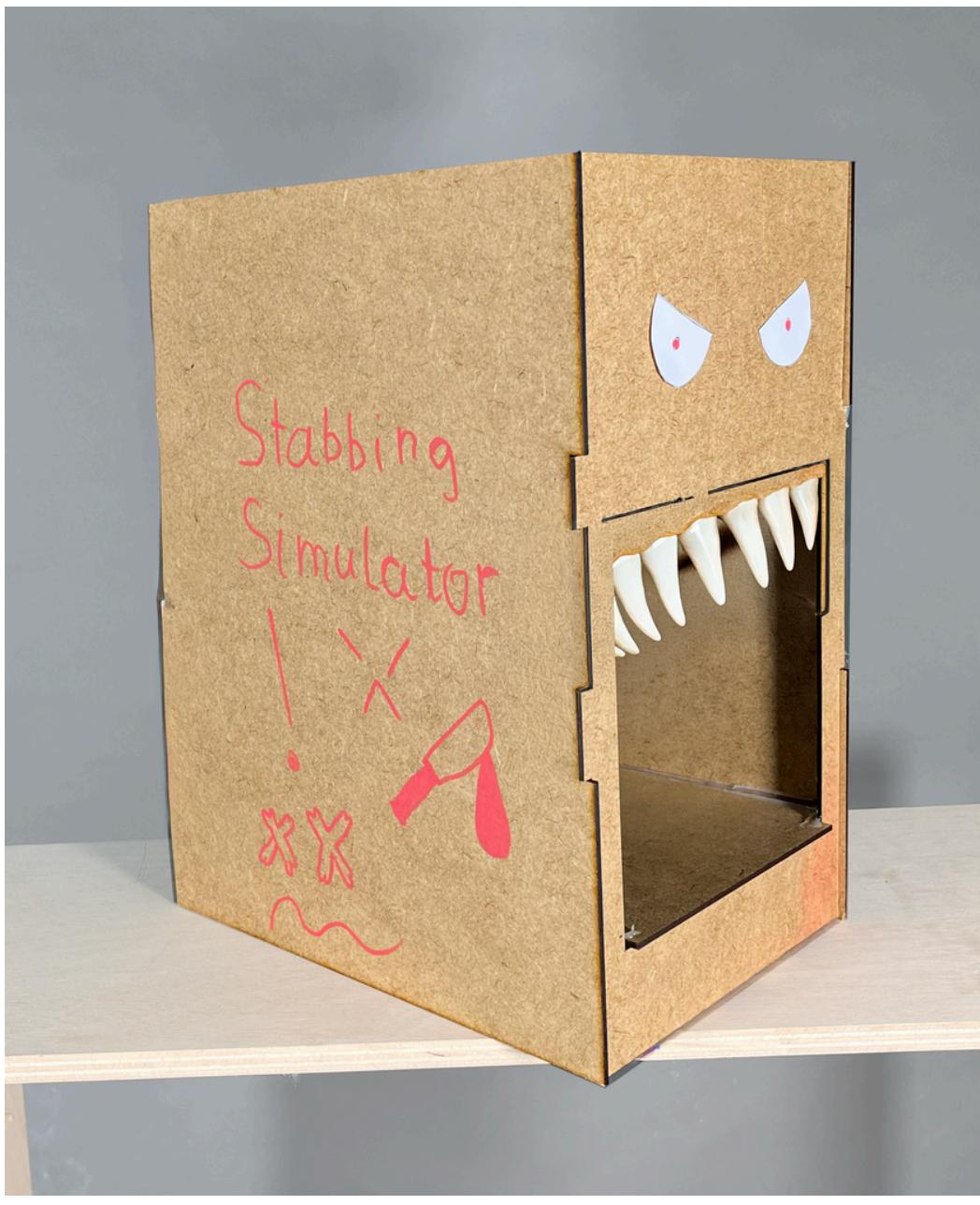
Ultrasonic
Sensor

Barduino

FINAL ITERATION



..AND BEYOND



THANK YOU!!!

