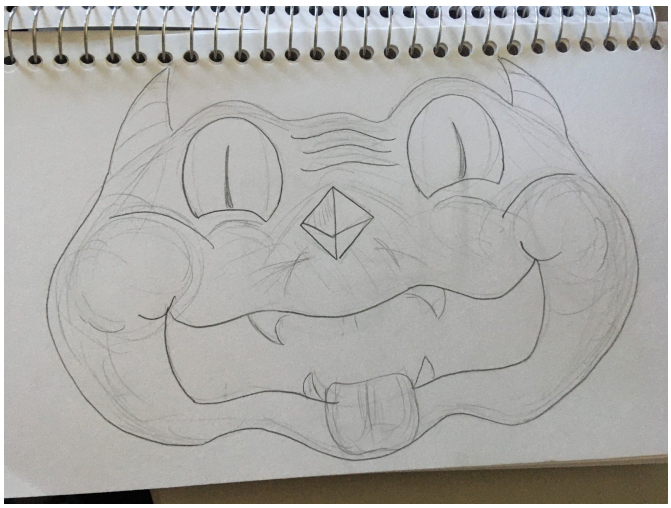
Who: Team

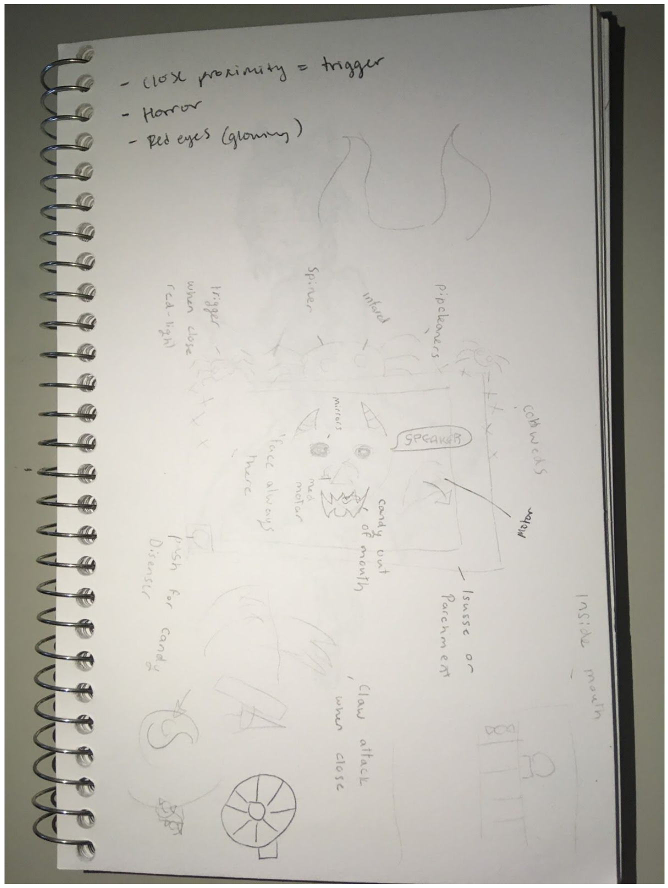
Team Name	Team Spook
Platform Number:	UA33-07
Team members	Maddy, Jasmine
Repository link	https://github.com/psb-2019-2020-s1-autonomous-robotics/scariestthingever

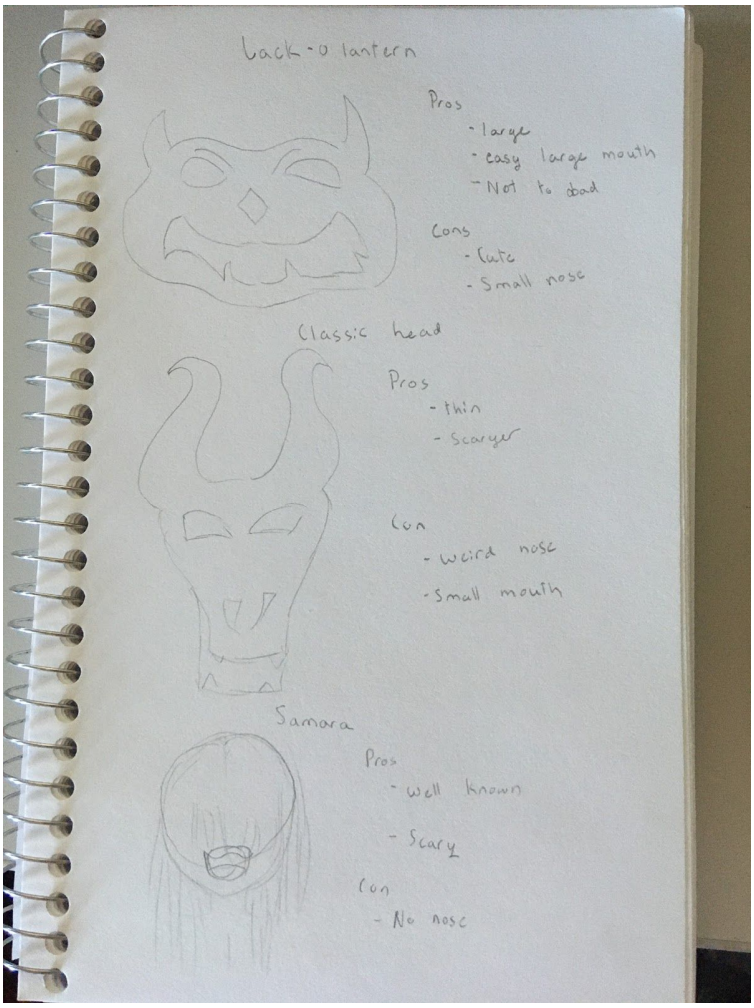
What: Description

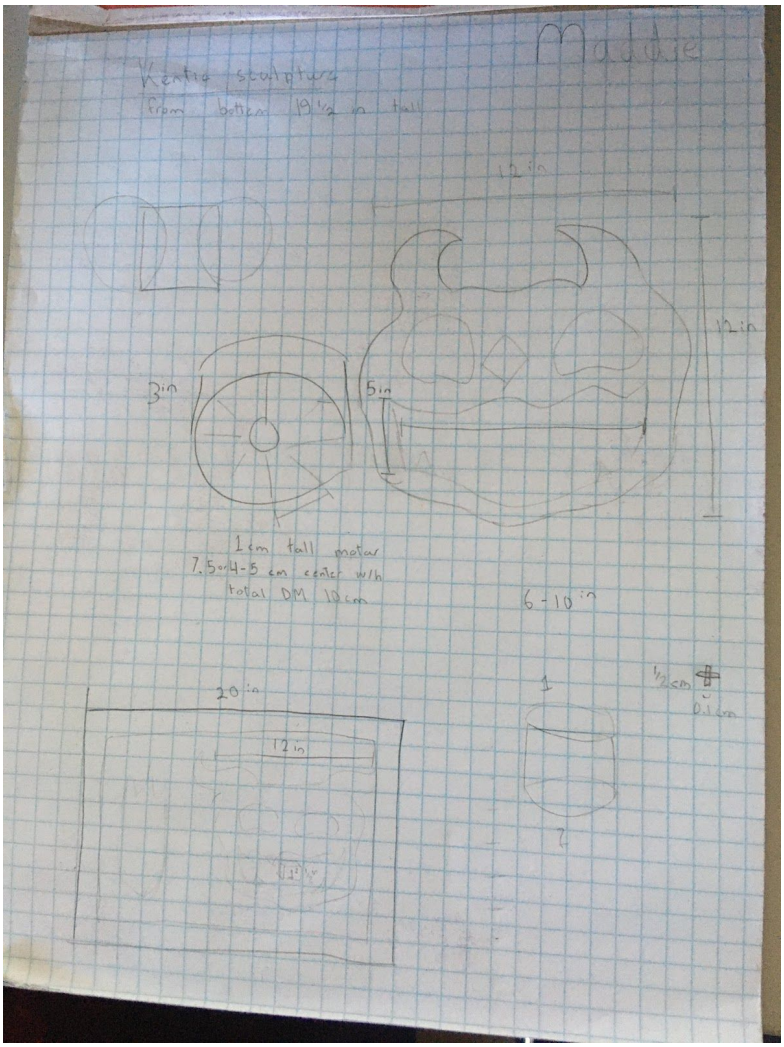
Goal (what is this to accomplish?)	This project aims to distribute candy in a fun way.
Use case(s) (how do you use it?)	Walk by to get scared by the monster; push button for candy.

How / Why: Other documentation

Design	


- close proximity = trigger
- Horror
- Red eyes (glowing)
pipecleaners
trigger when close red-light
cobwebs
SPEAKER
Motor
candy out of mouth
face always here
push for candy Dispenser
claw attack when close
Inside mouth

	 Jack-o lantern Pros - large - easy large mouth - Not to dead Cons - Cute - Small nose Classic head Pros - thin - scaryer Con - weird nose - Small mouth Samara Pros - well known - Scary Con - No nose

	 Maddie Kente sculpture from bottom 19 1/2 in tall 12 in 12 in 3 in 5 in 1 cm tall motor 7.5 or 4-5 cm center w/h total DM 10 cm 6-10 in 20 in 12 in 1 2

Code	
Tradeoffs (why?)	Structural integrity + aesthetics: used cardboard and tape (convenient) Space: added more functionality -> slightly crowded

```
#!/usr/bin/env pybricks-micropython

from pybricks import ev3brick as brick
from pybricks.ev3devices import (Motor, TouchSensor, ColorSensor,
                                 InfraredSensor, UltrasonicSensor, GyroSensor)
from pybricks.parameters import (Port, Stop, Direction, Button, Color,
                                 SoundFile, ImageFile, Align)
from pybricks.tools import print, wait, StopWatch
from pybricks.robotics import DriveBase

# Write your program here
handMotor = Motor(Port.A)
candyMotor = Motor(Port.B)
noseMotor = Motor(Port.C)
#button = TouchSensor(Port.S1)
spiderEye = UltrasonicSensor(Port.S2)

while True:
    distance = spiderEye.distance(False)
    print(distance)
    if distance <= 2000:
        #Arm code
        print("Turn 1")
        handMotor.run_target(500,90)
        #wait(1000)
        print("Turn 2")
        handMotor.run_target(500,-90)
        #Nose code
        noseMotor.run_target(500,360)
        #wait(500)
        brick.sound.file(SoundFile.LAUGHING_1)
        noseMotor.run_target(500,0)
    if button.pressed():
        candyMotor.run_target(500, 45)
```