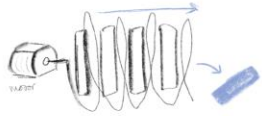


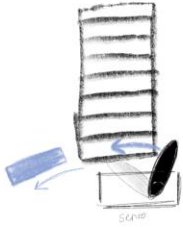
PHYSICAL COMPUTING PROJECT 1

Ellen Harradine - Dan Gavin - Roco Kolenda - Harrison Gleave

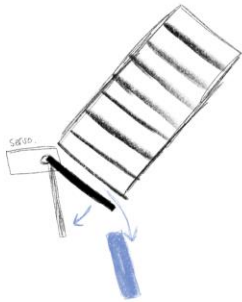




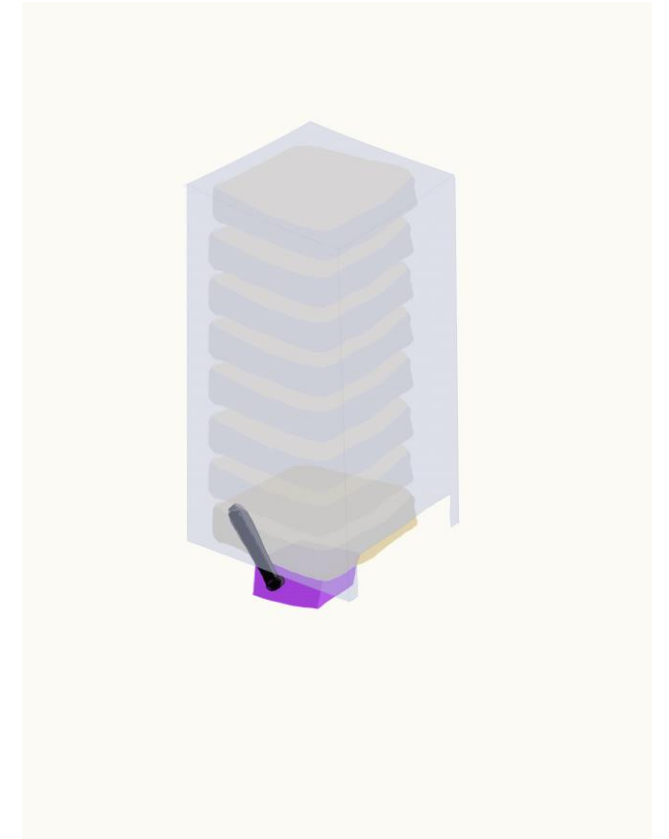
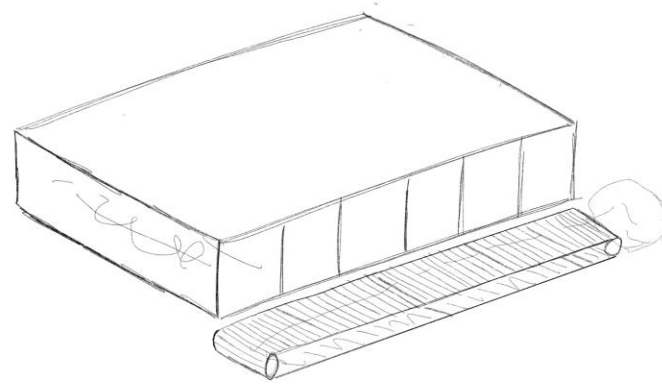
Archimedes screw using a motor and a metal wire spiral to advance the biscuit forward. Rotating just enough for one biscuit to be dispensed.



Using a pushing action from a servo to move one biscuit from the stack.

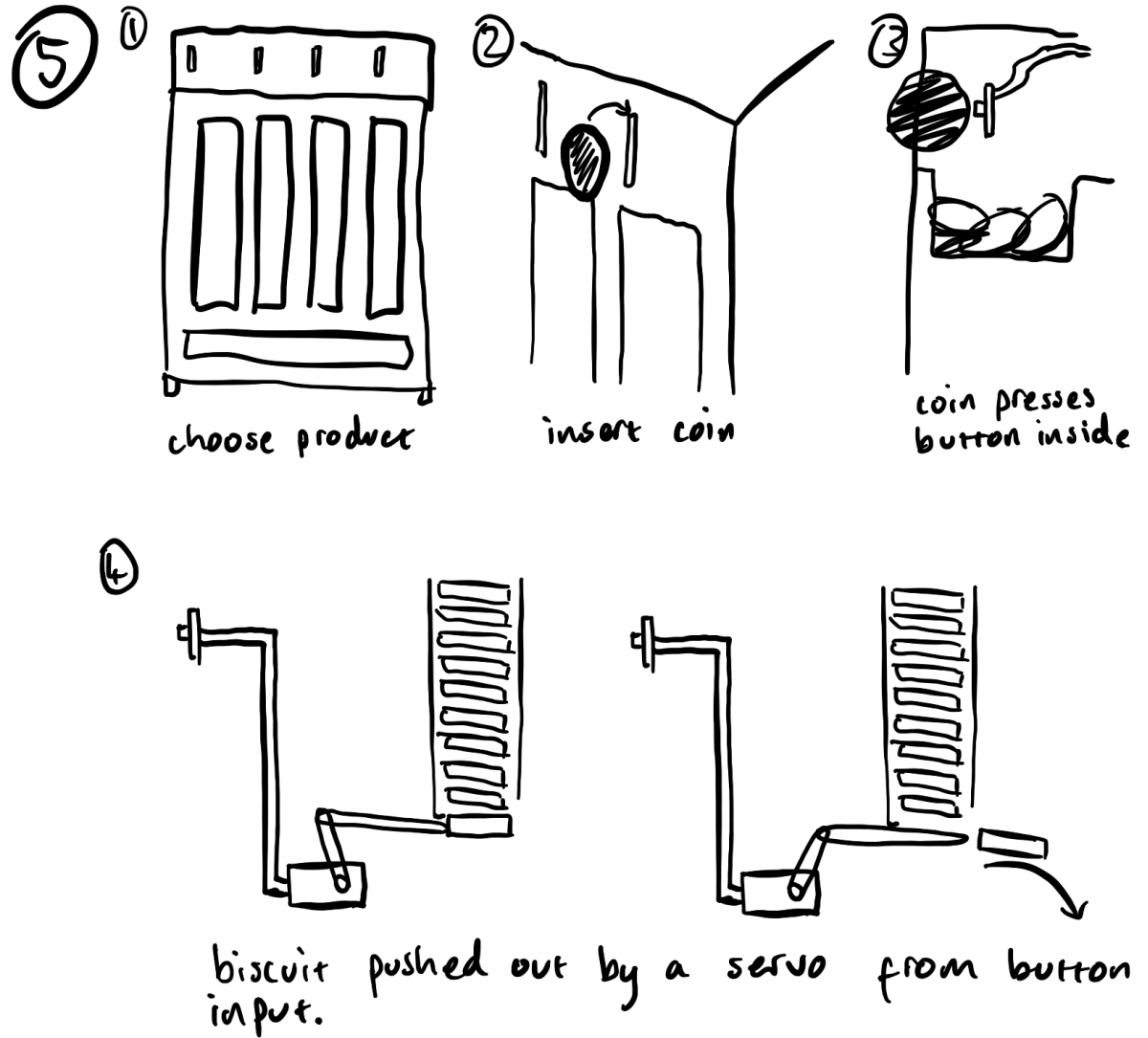


Trapdoor connected to a servo, this mechanism would be difficult to calibrate as the biscuits would move at an angle. Possibly getting stuck and jamming the trap door

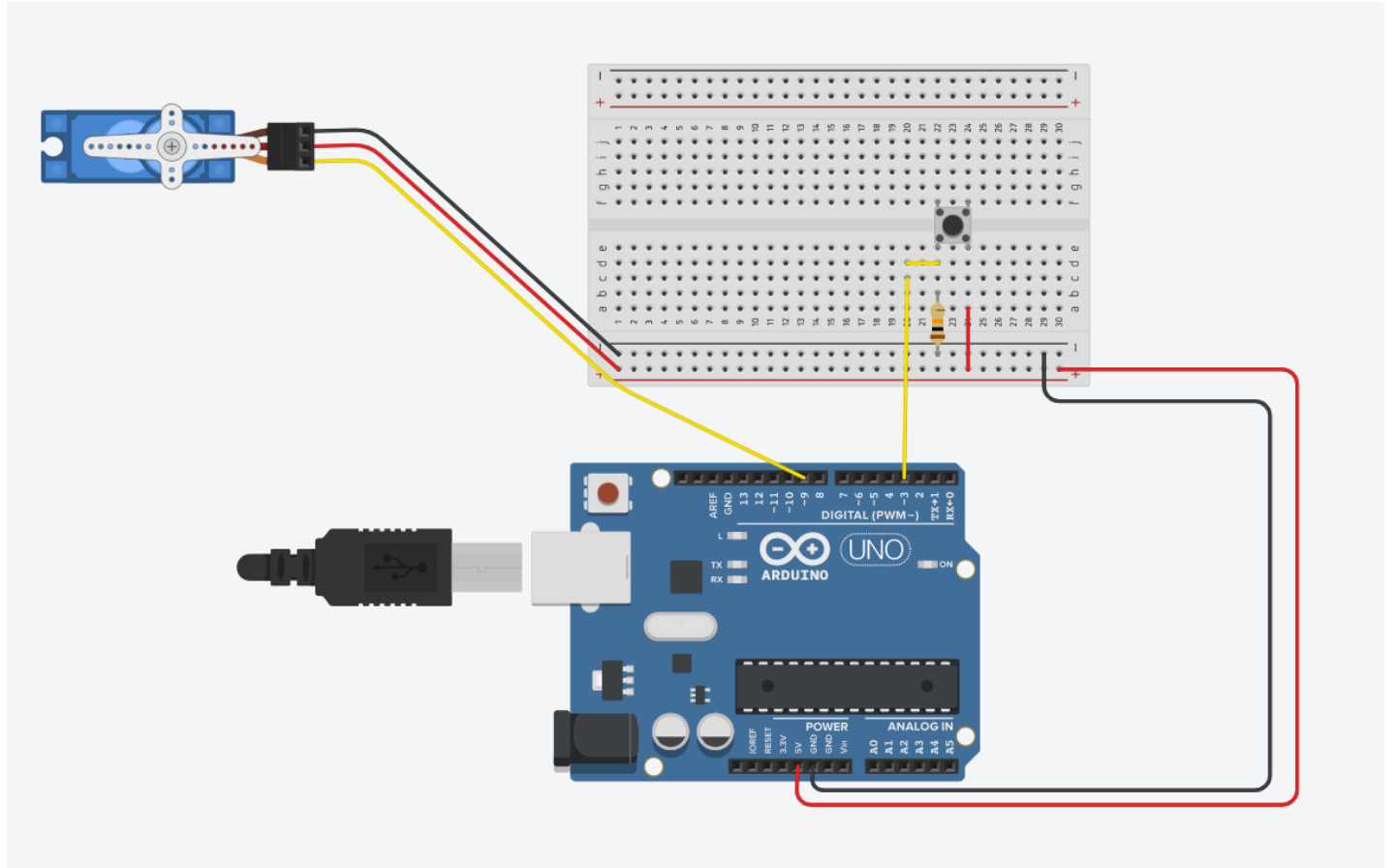


INITIAL SKETCHES

USER JOURNEY



CIRCUIT DIAGRAM



CODE USED

```
#include <Servo.h>

Servo myservo; // create servo object to control a servo

int pos = 0;

int buttonPin = 3;

int buttonState = 0;

void setup()
{
  myservo.attach(9); // attaches the servo on pin 9 to the servo object

  //assigning input output
  pinMode(buttonPin, INPUT);

  Serial.begin(9600);
}

void loop()
{
  buttonState = digitalRead(buttonPin);

  if (buttonState == HIGH) {
    for (pos = 0; pos <= 180; pos += 1) {
      myservo.write(pos); // tell servo to go to position in variable 'pos'
      delay(15); // waits 15ms for the servo to reach the position
    }
    Serial.println("ON");
  }
}
```

Code referenced - <https://docs.arduino.cc/learn/electronics/servo-motors>

PSUEDO CODE FLOWCHART

