Pet feeder

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#include <Servo.h>

Servo myservo;  // create servo object to control a servo
// twelve servo objects can be created on most boards

int pos = 0;

#define echoPin1 7
#define trigPin1 6

#define buzz 5

long duration;
int distance;


void setup() {
Serial.begin(9600);
pinMode(trigPin1, OUTPUT);
pinMode(echoPin1, INPUT);
 myservo.attach(9);
pinMode(buzz, OUTPUT);
}

int obstacle(int trigPinx, int echoPinx) {
  digitalWrite(trigPinx, LOW);
  delayMicroseconds(2);

  digitalWrite(trigPinx, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPinx, LOW);

  duration = pulseIn(echoPinx, HIGH);

  distance = duration * 0.034 / 2;
  return distance;
}


void loop(){
  int dist1 = obstacle(trigPin1,echoPin1);
   Serial.println(dist1);
  Serial.print("\t");

  if (dist1 < 20){

   for (pos = 0; pos <= 70; pos += 1) { // goes from 0 degrees to 180 degrees
    // in steps of 1 degree
    myservo.write(pos);              // tell servo to go to position in variable 'pos'
    delay(15);                       // waits 15ms for the servo to reach the position
  }
  for (pos = 70; pos >= 0; pos -= 1) { // goes from 180 degrees to 0 degrees
    myservo.write(pos);              // tell servo to go to position in variable 'pos'
    delay(15);                       // waits 15ms for the servo to reach the position

  }
 }
```

```
  else{
 //  digitalWrite(buzz,LOW);
  }
  delay(200);
}
```