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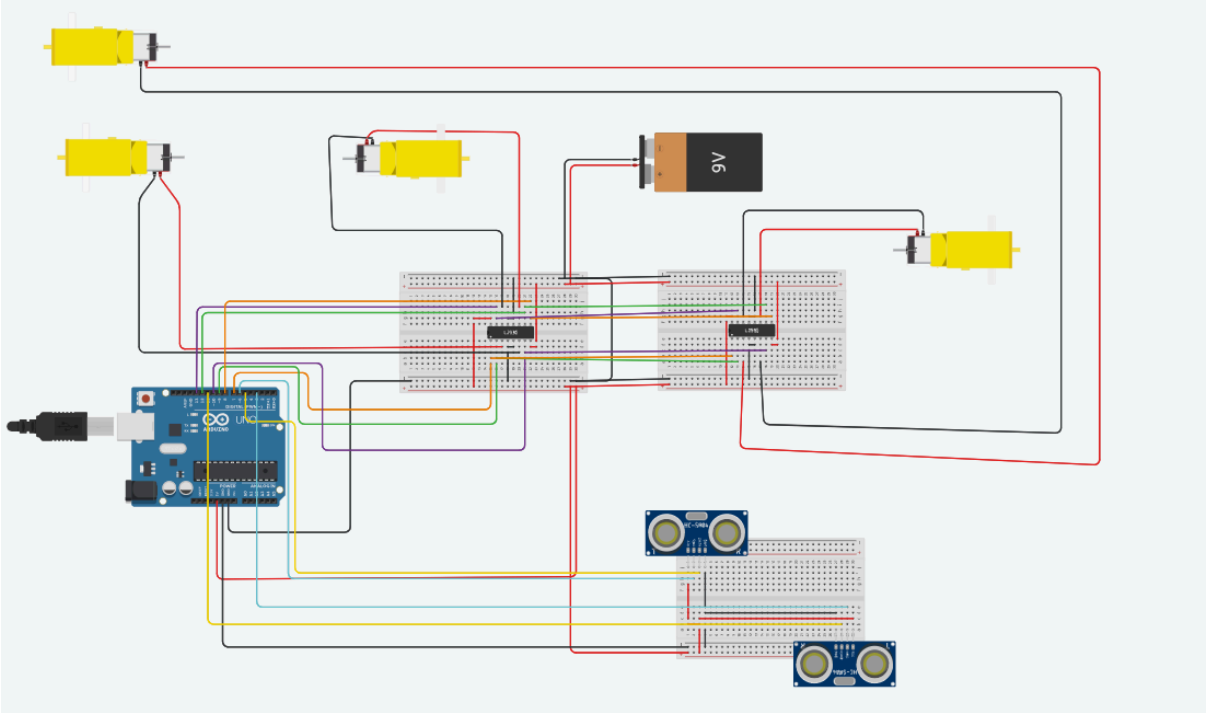
Enlace al circuito:
https://www.tinkercad.com/things/9JWNHkBphtP-copy-of-stunning-kup/editel?sharecode=fHr_qe7CkpOhx9QJQalGNz4I4Ffgmc11YSorFhkLlfg



Codigo:

```
const int Echo1 = 5;
const int Trigger1 = 6;
const int Echo2 = 11;
const int Trigger2 = 3;
int distanciaPrimer;
int distanciaSegundo;
int DIRA1 = 9;
int DIRB1 = 10;
int DIRA2 = 12;
int DIRB2 = 13;

int ENABLE1 = 7;
int ENABLE2 = 8;

void setup() {
        Serial.begin(9600);
        pinMode(Trigger1,OUTPUT);
        pinMode(Echo1,INPUT);
        pinMode(Trigger2,OUTPUT);
        pinMode(Echo2,INPUT);
```

```
        digitalWrite(Trigger1,LOW);
        digitalWrite(Trigger2,LOW);

        pinMode(ENABLE1,OUTPUT);
        pinMode(DIRA1,OUTPUT);
        pinMode(DIRB1,OUTPUT);

        pinMode(ENABLE2,OUTPUT);
        pinMode(DIRA2,OUTPUT);
        pinMode(DIRB2,OUTPUT);

        digitalWrite(ENABLE1,HIGH);
        digitalWrite(ENABLE2,HIGH);
}

// Esta funcion corresponde al 2.1
int detecta_primerSensor() {
        long t;
        long d;
        digitalWrite(Trigger1,LOW);
        delayMicroseconds(5);
        digitalWrite(Trigger1,HIGH);
        delayMicroseconds(15);
        digitalWrite(Trigger1,LOW);
        t=pulseIn(Echo1,HIGH);
        d=t*0.01657;
        return (d);
}

// Esta funcion corresponde al 2.1
int detecta_segundoSensor() {
        long t;
        long d;
        digitalWrite(Trigger2,LOW);
        delayMicroseconds(5);
        digitalWrite(Trigger2,HIGH);
        delayMicroseconds(15);
        digitalWrite(Trigger2,LOW);
        t=pulseIn(Echo2,HIGH);
        d=t*0.01657;
        return (d);
}

void loop() {
// Esta parte corresponde al 2.1
        distanciaPrimer=detecta_primerSensor();
        distanciaSegundo=detecta_segundoSensor();
        Serial.print("Distancia primer ultrasonido: ");
```

```
        Serial.print(distanciaPrimer);
        Serial.println ("cm");
        Serial.print("Distancia segundo ultrasonido: ");
        Serial.print(distanciaSegundo);
        Serial.println ("cm");

// Esta parte corresponde al 2.2
  digitalWrite(DIRA1, HIGH);
  digitalWrite(DIRB2, LOW);
  digitalWrite(DIRB1, LOW);
  digitalWrite(DIRA2, HIGH);
  delay(2000);
  digitalWrite(DIRA1, LOW);
  digitalWrite(DIRB2, LOW);
  digitalWrite(DIRB1, LOW);
  digitalWrite(DIRA2, LOW);
  delay(1000);
  digitalWrite(DIRA1, LOW);
  digitalWrite(DIRB2, HIGH);
  digitalWrite(DIRB1, HIGH);
  digitalWrite(DIRA2, LOW);
  delay(2000);
  digitalWrite(DIRA1, LOW);
  digitalWrite(DIRB2, LOW);
  digitalWrite(DIRB1, LOW);
  digitalWrite(DIRA2, LOW);
  delay(1000);
  digitalWrite(DIRA1, HIGH);
  digitalWrite(DIRB2, LOW);
  digitalWrite(DIRB1, LOW);
  digitalWrite(DIRA2, LOW);
  delay(2000);
  digitalWrite(DIRA1, LOW);
  digitalWrite(DIRB2, LOW);
  digitalWrite(DIRB1, LOW);
  digitalWrite(DIRA2, LOW);
  delay(1000);
  digitalWrite(DIRA1, LOW);
  digitalWrite(DIRB2, LOW);
  digitalWrite(DIRB1, LOW);
  digitalWrite(DIRA2, HIGH);
  delay(2000);
  digitalWrite(DIRA1, LOW);
  digitalWrite(DIRB2, LOW);
  digitalWrite(DIRB1, LOW);
  digitalWrite(DIRA2, LOW);
  delay(1000);
```

```
//Esta parte corresponde al 2.3
  if(distanciaPrimer<50){
    digitalWrite(DIRA1, LOW);
          digitalWrite(DIRB2, LOW);
          digitalWrite(DIRB1, LOW);
          digitalWrite(DIRA2, LOW);
          delay(1000);
    digitalWrite(DIRA1, LOW);
          digitalWrite(DIRB2, HIGH);
          digitalWrite(DIRB1, HIGH);
          digitalWrite(DIRA2, LOW);
          delay(1000);
    digitalWrite(DIRA1, HIGH);
          digitalWrite(DIRB2, LOW);
          digitalWrite(DIRB1, LOW);
          digitalWrite(DIRA2, LOW);
          delay(2000);

  }

          digitalWrite(DIRA1, HIGH);
          digitalWrite(DIRB2, LOW);
          digitalWrite(DIRB1, LOW);
          digitalWrite(DIRA2, HIGH);
          delay(1000);

  if(distanciaSegundo<50){
    digitalWrite(DIRA1, LOW);
          digitalWrite(DIRB2, LOW);
          digitalWrite(DIRB1, LOW);
          digitalWrite(DIRA2, LOW);
          delay(1000);
    digitalWrite(DIRA1, LOW);
          digitalWrite(DIRB2, HIGH);
          digitalWrite(DIRB1, HIGH);
          digitalWrite(DIRA2, LOW);
          delay(1000);
    digitalWrite(DIRA1, HIGH);
          digitalWrite(DIRB2, LOW);
          digitalWrite(DIRB1, LOW);
          digitalWrite(DIRA2, LOW);
          delay(2000);

  }

          digitalWrite(DIRA1, HIGH);
```

```
        digitalWrite(DIRB2, LOW);
        digitalWrite(DIRB1, LOW);
        digitalWrite(DIRA2, HIGH);
        delay(1000);

  delay(1000);
}
```