|  |  |
| --- | --- |
|  | const int rightSensorPin = A0; |
|  | const int leftSensorPin = A1; |
|  | int rightSensorRead = 0; |
|  | int leftSensorRead = 0; |
|  | int rightLightPct = 0; |
|  | int leftLightPct = 0; |
|  | int degreeChange = 1; |
|  |  |
|  |
|  |
|  | #include <CustomStepper.h> |
|  | CustomStepper stepper(9, 10, 11, 12); |
|  |  |
|  | void setup() { |
|  | Serial.begin(9600); |
|  | stepper.setRPM(5); |
|  | stepper.setSPR(4075.7728395); |
|  | } |
|  |  |
|  | void loop() { |
|  | rightSensorRead = analogRead(rightSensorPin); |
|  | leftSensorRead = analogRead(leftSensorPin); |
|  | rightLightPct = map(rightSensorRead, 0, 1023, 0, 100); |
|  | leftLightPct = map(leftSensorRead, 0, 1023, 0, 100); |
|  | degreeChange = map(abs(rightLightPct-leftLightPct),0,100,2,10); |
|  | Serial.print("right = "); |
|  | Serial.print(rightSensorRead); |
|  | Serial.print(" left = "); |
|  | Serial.print(leftSensorRead); |
|  | Serial.print(" Pct r/l = "); |
|  | Serial.print(rightLightPct); |
|  | Serial.print("/"); |
|  | Serial.println(leftLightPct); |
|  | if(rightLightPct < 30 && leftLightPct < 30){ |
|  | Serial.println("Nu exista soare!"); |
|  | }else if(rightLightPct > leftLightPct){ |
|  | Serial.println("Intoarce CCW!"); |
|  | rotateLeft(); |
|  | stepper.run(); |
|  | }else{ |
|  | Serial.println("Intoarce CW!"); |
|  | rotateRight(); |
|  | stepper.run(); |
|  | } |
|  | } |
|  |  |
|  | void rotateLeft(){ |
|  | stepper.setDirection(CCW); |
|  | stepper.rotateDegrees(degreeChange); |
|  | while(stepper.isDone() == false){ |
|  | stepper.run(); |
|  | } |
|  | } |
|  | void rotateRight(){ |
|  | stepper.setDirection(CW); |
|  | stepper.rotateDegrees(degreeChange); |
|  | while(stepper.isDone() == false){ |
|  | stepper.run(); |
|  | } |
|  | } |