Robotikäsi

<https://create.arduino.cc/projecthub/ChanR19/simple-programmable-robotic-arm-bd28a0?ref=platform&ref_id=424_trending_part__&offset=42>

#include <Servo.h>

Servo servo1; //Servot

Servo servo2;

Servo servo3;

const int LED1 = 2; //LEDit

const int LED2 = 3;

const int LED3 = 4;

const int LED4 = 7;

const int LED5 = 8;

const int button1 = 12; //Nappit

const int button2 = 13;

int button1Presses = 0; //Mitä nappit tekee

boolean button2Pressed = false;

const int pot1 = A0; //Potentiometeri

const int pot2 = A1;

const int pot3 = A2;

int pot1Val; //potentiometerin arvot

int pot2Val;

int pot3Val;

int pot1Angle;

int pot2Angle;

int pot3Angle;

int servo1PosSaves[] = {1,1,1,1,1}; //Tallenta mitä servot teke

int servo2PosSaves[] = {1,1,1,1,1};

int servo3PosSaves[] = {1,1,1,1,1};

void setup() {

servo1.attach(5);

servo2.attach(6);

servo3.attach(9);

pinMode(LED1, OUTPUT);

pinMode(LED2, OUTPUT);

pinMode(LED3, OUTPUT);

pinMode(LED4, OUTPUT);

pinMode(LED5, OUTPUT);

pinMode(button1, INPUT);

pinMode(button2, INPUT);

Serial.begin(9600);

}

void loop() {

pot1Val = analogRead(pot1);

pot1Angle = map(pot1Val, 0, 1023, 0, 179);

pot2Val = analogRead(pot2);

pot2Angle = map(pot2Val, 0, 1023, 0, 179);

pot3Val = analogRead(pot3);

pot3Angle = map(pot3Val, 0, 1023, 0, 179);

servo1.write(pot1Angle); // muisti missä asenossa servot olit

servo2.write(pot2Angle);

servo3.write(pot3Angle);

if(digitalRead(button1) == HIGH){ // This will check how many times button1 is pressed and save the positions to an array depending on how many times it is pressed; switch/case works like a if statement

button1Presses++;

switch(button1Presses){

case 1:

servo1PosSaves[0] = pot1Angle;

servo2PosSaves[0] = pot2Angle;

servo3PosSaves[0] = pot3Angle;

digitalWrite(LED1, HIGH);

Serial.println("Pos 1 Saved");

break;

case 2:

servo1PosSaves[1] = pot1Angle;

servo2PosSaves[1] = pot2Angle;

servo3PosSaves[1] = pot3Angle;

digitalWrite(LED2, HIGH);

Serial.println("Pos 2 Saved");

break;

case 3:

servo1PosSaves[2] = pot1Angle;

servo2PosSaves[2] = pot2Angle;

servo3PosSaves[2] = pot3Angle;

digitalWrite(LED3, HIGH);

Serial.println("Pos 3 Saved");

break;

case 4:

servo1PosSaves[3] = pot1Angle;

servo2PosSaves[3] = pot2Angle;

servo3PosSaves[3] = pot3Angle;

digitalWrite(LED4, HIGH);

Serial.println("Pos 4 Saved");

break;

case 5:

servo1PosSaves[4] = pot1Angle;

servo2PosSaves[4] = pot2Angle;

servo3PosSaves[4] = pot3Angle;

digitalWrite(LED5, HIGH);

Serial.println("Pos 5 Saved");

break;

}

}

if(digitalRead(button2) == HIGH){ // Pretty self-explnatory here

button2Pressed = true;

}

if(button2Pressed){ // if the boolean button2Press is true, then the servos will run though all their saved positions

for(int i = 0; i < 5; i++){

servo1.write(servo1PosSaves[i]);

servo2.write(servo2PosSaves[i]);

servo3.write(servo3PosSaves[i]);

Serial.println(" potentimeter Angles: ");

Serial.println(servo1PosSaves[i]);

Serial.println(servo2PosSaves[i]);

Serial.println(servo3PosSaves[i]);

delay(1050);

}

}

delay(300);

}