 9/14/2023

// SERVER HUMMER by Jay Bell 9/14/2023

#include <nRF24L01.h>

#include <RF24.h>

#include<SPI.h>

RF24 radio(9,10);

const byte address[6] = "00001";

const int threshold = 20;

#define pot1 A0

int potValue1 = 0;

int pwmValue1 = 0;

int check1 = 0;

// Packet Length: up to 32 bytes(8 byte payload much higher success rate)

const char var1[8] = "motor";//began at "32"(names in transmit and receive

// must be the same!!!!!))))

#define horn A1

int hornValue2 = 0;

int pwmValue2 = 0;

int check2 = 0;

const char var2[8] = "horn";

#define pot2 A2

int potValue2 = 0;

int angleValue = 0;

int check3 = 0;

const char var3[8] = "wave";

#define button 2

boolean buttonValue2 = 0;

int onValue2 = 0;

int check4 = 0;

const char var4[8] = "light";//began at "32"

void setup() {

Serial.begin(9600);

pinMode(button, INPUT);

radio.begin();

radio.openWritingPipe(address);

radio.setChannel(100); //Channels (0 -125) 1Mhz wide start at 2400Mhz-2525Mhz

radio.setDataRate(RF24\_250KBPS); //nRF24 supports 250kbps, 1Mbs,2Mbps (250kbps most error free)

radio.enableAckPayload();

radio.enableDynamicPayloads();//Jay added

radio.setPALevel(RF24\_PA\_HIGH);

radio.stopListening();

}

void loop() {

potValue1 = analogRead(pot1);

if(potValue1 > check1 + threshold || potValue1 < check1 - threshold)

{

radio.write(&var1, sizeof(var1));

pwmValue1 = map(potValue1, 0, 1023, 0, 255);

radio.write(&pwmValue1, sizeof(pwmValue1));

check1 = potValue1;

Serial.print("PWM Value1:");

Serial.println(pwmValue1);

}

hornValue2 = analogRead(horn);

if(hornValue2 > check2 + threshold || hornValue2 < check2 - threshold)

{

radio.write(&var2, sizeof(var2));

pwmValue2 = map(hornValue2, 0, 1023, 0, 255);

radio.write(&pwmValue2, sizeof(pwmValue2));

check2 = hornValue2;

Serial.print("PWMValue2:");

Serial.println(pwmValue2);

}

potValue2 = analogRead(pot2);

if(potValue2 > check3 + threshold || potValue2 < check3 - threshold)

{

radio.write(&var3, sizeof(var3));

angleValue =map(potValue2, 0, 1023, 0, 180);

radio.write(&angleValue, sizeof(angleValue));

check3 = potValue2;

Serial.print("Angle Value:");

Serial.println(angleValue);

}

buttonValue2 = digitalRead(button);

{

radio.write(&var4, sizeof(var4));

onValue2 =buttonValue2;

radio.write(&onValue2, sizeof(onValue2));

check4 = buttonValue2;

Serial.print("onValue2:");

Serial.println(onValue2);

}

}