Soft-ul principal(Varianta lunga)

#include <Arduino.h>

#include <Keyboard.h>

#include <Mouse.h>

#define B1 2

#define B2 3

#define B3 4

#define B4 5

#define B5 6

#define B6 7

#define L1A 8

#define L1B 9

#define L2A 10

#define L2B 11

#define resetPin 12

int addon = 0;

bool firstRun = true;

//Keyboard loop failsafe:

void setup(){

digitalWrite(resetPin,1);

ButtonDeclare();

LEDDeclare();

pinMode(resetPin,OUTPUT);

Serial.begin(9600);

Serial1.begin(9600);

getAddon();

listAddon();

}

void loop(){

if(addon == 2)

debug();

if(firstRun == true)

{

Serial.end();

Keyboard.begin();

firstRun = false;

}

if(addon == 3)

mouseMode();

else if(Serial1.available() > 0)

externalInput();

else

buttonInput();

delay(100);

}

void ButtonDeclare(){

pinMode(B1,INPUT);

digitalWrite(B1,1);

pinMode(B2,INPUT);

digitalWrite(B2,1);

pinMode(B3,INPUT);

digitalWrite(B3,1);

pinMode(B4,INPUT);

digitalWrite(B4,1);

pinMode(B5,INPUT);

digitalWrite(B5,1);

pinMode(B6,INPUT);

digitalWrite(B6,1);

}

void LEDDeclare(){

pinMode(L1A,OUTPUT);

pinMode(L1B,OUTPUT);

pinMode(L2A,OUTPUT);

pinMode(L2B,OUTPUT);

}

void getAddon(){

for(int i=0;i<100;i++)

{

Serial1.print("0");

if(Serial1.available() > 0)

{

if(Serial1.read() == 49)

{

delay(100);

if(Serial1.available() > 0)

{

addon = Serial1.read() - '0';

digitalWrite(L1A,1);

}

else

{

addon = 1;

digitalWrite(L1B,1);

}

break;

}

}

delay(25);

}

}

void listAddon(){

if(addon == 0)

Serial.println("\nAdd-on not found");

if(addon == 1)

Serial.println("\nAdd-on not recognised");

if(addon == 2)

Serial.println("\nBoard running in Debug mode");

if(addon == 3)

Serial.println("\n6-key Extention Addon found,running in Mouse mode");

if(addon == 4)

Serial.println("\nArm Addon found");

if(addon == 5)

Serial.println("\n6-key Extention Addon found,running in Extention mode");

if(addon == 6)

Serial.println("\nRFID Reader Addon found");

if(addon == 7)

Serial.println("\nGeneric Addon Found");

}

bool credentials(){

bool allow=true;

if(addon == 6) //RFID Login

{

while(true)

{

if(Serial1.available() > 0)

{

if(Serial1.read() == 50)

{

allow=true;

break;

}

}

delay(10);

}

}

else

allow = pinEntry();

if(allow == false)

return false;

else

return true;

}

bool pinEntry(){

byte pin[4] = {1, 2, 3, 4};

byte input[4],pos=0;

while(pos<4)

{

if(digitalRead(B1)==0)

{

input[pos]=1;

pos++;

}

if(digitalRead(B2)==0)

{

input[pos]=2;

pos++;

}

if(digitalRead(B3)==0)

{

input[pos]=3;

pos++;

}

if(digitalRead(B4)==0)

{

input[pos]=4;

pos++;

}

delay(150);

}

for(byte i=0;i<4;i++)

{

if(input[i]!=pin[i])

return false;

}

return true;

}

void debug(){

char rx;

Serial.println("For a list of available commands send 'H' in terminal");

while(true)

{

if(Serial.available() > 0)

{

rx=Serial.read();

if(rx == 'R' || rx == 'r')

{

Serial.println("Resetting...");

digitalWrite(resetPin,0);

delay(500);

Serial.println("Error resetting");

}

else if(rx == 'A' || rx == 'a')

{

rx=Serial.read();

addon = rx - '0';

Serial.print("Changed add-on identifier to ");

Serial.println(rx);

Serial.println("Exiting Debug mode");

listAddon();

break;

}

else if(rx == 'B' || rx == 'b')

{

rx=Serial.read();

Serial.print("Button ");

Serial.print(rx);

Serial.print(" state is ");

if(rx == '1')

Serial.println(digitalRead(B1));

if(rx == '2')

Serial.println(digitalRead(B2));

if(rx == '3')

Serial.println(digitalRead(B3));

if(rx == '4')

Serial.println(digitalRead(B4));

if(rx == '5')

Serial.println(digitalRead(B5));

if(rx == '6')

Serial.println(digitalRead(B6));

}

else if(rx == 'H' || rx == 'h')

{

Serial.println("\nList of available commands: \n");

Serial.println("A0-A7 : Change add-on identifier\nB1-B6 : List Specified button state\nH : List Commands\nR : Reset Arduino\n");

Serial.println("L1A1/0 : Turn LED 1 Green on/off");

Serial.println("L1B1/0 : Turn LED 1 Red on/off");

Serial.println("L2A1/0 : Turn LED 2 Green on/off");

Serial.println("L2B1/0 : Turn LED 2 Red on/off \n");

}

else if(rx == 'L' || rx == 'l')

{

rx=Serial.read();

if(rx == '1')

{

rx=Serial.read();

if(rx == 'A' || rx == 'a')

{

rx=Serial.read();

if(rx == '1')

{

digitalWrite(L1A,1);

Serial.println("Turned LED 1 Green on");

}

else

{

digitalWrite(L1A,0);

Serial.println("Turned LED 1 Green off");

}

}

else

{

rx=Serial.read();

if(rx == '1')

{

digitalWrite(L1B,1);

Serial.println("Turned LED 1 Red on");

}

else

{

digitalWrite(L1B,0);

Serial.println("Turned LED 1 Red off");

}

}

}

else

{

rx=Serial.read();

if(rx == 'A' || rx == 'a')

{

rx=Serial.read();

if(rx == '1')

{

digitalWrite(L1A,1);

Serial.println("Turned LED 2 Green on");

}

else

{

digitalWrite(L1A,0);

Serial.println("Turned LED 2 Green off");

}

}

else

{

rx=Serial.read();

if(rx == '1')

{

digitalWrite(L1B,1);

Serial.println("Turned LED 2 Red on");

}

else

{

digitalWrite(L1B,0);

Serial.println("Turned LED 2 Red off");

}

}

}

}

}

}

}

void buttonInput()

{

if(digitalRead(B1) == 0)

{

if(credentials() == true)

{

Keyboard.println("Super important password");

Keyboard.write(KEY\_RETURN);

}

}

else if(digitalRead(B2) == 0)

{

Keyboard.press(KEY\_LEFT\_GUI);

Keyboard.write(114); // r in ASCII

Keyboard.releaseAll();

Keyboard.print("iexplore");

Keyboard.write(KEY\_RETURN);

}

else if(digitalRead(B3) == 0)

{

}

else if(digitalRead(B4) == 0)

{

}

else if(digitalRead(B5) == 0)

{

}

else if(digitalRead(B6) == 0)

{

}

delay(150);

}

void mouseMode()

{

Keyboard.end();

Mouse.begin();

while(true)

{

}

}

void externalInput()

{char rx;

rx=Serial1.read();

if(rx == 'A')

{

}

else if(rx == 'B')

{

}

else if(rx == 'C')

{

}

else if(rx == 'D')

{

}

else if(rx == 'E')

{

}

else if(rx == 'F')

{

}

else if(rx == 'G')

{

}

else if(rx == 'H')

{

}

else if(rx == 'I')

{

}

else if(rx == 'J')

{

}

else if(rx == 'K')

{

}

else if(rx == 'L')

{

}

else if(rx == 'M')

{

}

else if(rx == 'N')

{

}

else if(rx == 'O')

{

}

else if(rx == 'P')

{

}

else if(rx == 'Q')

{

}

else if(rx == 'R')

{

}

else if(rx == 'S')

{

}

else if(rx == 'T')

{

}

else if(rx == 'U')

{

}

else if(rx == 'V')

{

}

else if(rx == 'W')

{

}

else if(rx == 'X')

{

}

else if(rx == 'Y')

{

}

else if(rx == 'Z')

{

}

}