#include <LiquidCrystal.h>

#pragma GCC diagnostic ignored "-Wwrite-strings"

LiquidCrystal lcd(9,8,10,11,12,13);

int led=13;

int temp=0,i=0,x=0,k=0;

char str[100],msg[32];

void setup()

{

lcd.begin(16,2);

Serial.begin(9600);

pinMode(led, OUTPUT);

digitalWrite(led, HIGH);

lcd.print("GSM Initilizing...");

gsm\_init();

lcd.setCursor(0,0);

lcd.print("E-Notice");

lcd.setCursor(0,1);

lcd.print(" Board ");

delay(2000);

lcd.clear();

lcd.print("WELCOME");

delay(1000);

lcd.setCursor(0,1);

lcd.print("System Ready");

Serial.println("AT+CNMI=2,2,0,0,0");

delay(500);

Serial.println("AT+CMGF=1");

delay(1000);

digitalWrite(led, LOW);

}

void loop()

{

for(unsigned int t=0;t<60000;t++)

{

serialEvent();

if(temp==1)

{

x=0,k=0,temp=0;

while(x<i)

{

while(str[x]=='#')

{

x++;

while(str[x]!='\*')

{

msg[k++]=str[x++];

}

}

x++;

}

msg[k]='\0';

lcd.clear();

lcd.print(msg);

delay(1000);

temp=0;

i=0;

x=0;

k=0;

}

}

lcd.scrollDisplayLeft();

}

void serialEvent()

{

while(Serial.available())

{

char ch=(char)Serial.read();

str[i++]=ch;

if(ch == '\*')

{

temp=1;

lcd.clear();

lcd.print("Message Received");

delay(1000);

}

}

}

void gsm\_init()

{

lcd.clear();

lcd.print("Finding Module..");

boolean at\_flag=1;

while(at\_flag)

{

Serial.println("AT");

while(Serial.available()>0)

{

if(Serial.find("OK"))

at\_flag=0;

}

delay(1000);

}

lcd.clear();

lcd.print("Module Connected..");

delay(1000);

lcd.clear();

lcd.print("Disabling ECHO");

boolean echo\_flag=1;

while(echo\_flag)

{

Serial.println("ATE0");

while(Serial.available()>0)

{

if(Serial.find("OK"))

echo\_flag=0;

}

delay(1000);

}

lcd.clear();

lcd.print("Echo OFF");

delay(1000);

lcd.clear();

lcd.print("Finding Network..");

boolean net\_flag=1;

while(net\_flag)

{

Serial.println("AT+CPIN?");

while(Serial.available()>0)

{

if(Serial.find("+CPIN: READY"))

net\_flag=0;

}

delay(1000);

}

lcd.clear();

lcd.print("Network Found..");

delay(1000);

lcd.clear();}