#include <LiquidCrystal.h>

LiquidCrystal lcd(12,11,5,4,3,2);

void setup()

{

lcd.begin(16,2);

lcd.setCursor(4,0);

lcd.print("Monitoring");

lcd.setCursor(7,1);

lcd.print("System");

delay(2000);

Serial.begin(9600);

}

void loop()

{

lcd.clear();

float Voltage=analogRead(A0)\*0.004882814;

float degrees = ( Voltage - 0.5 ) \* 100;

lcd.setCursor(3,0);

lcd.print("Temp:");

lcd.setCursor(8,0);

lcd.print(degrees);

if (degrees<10)

{

lcd.setCursor(4,1);

lcd.print("-TOO COLD");

}

else if(degrees<18 &&degrees>10 )

{

lcd.setCursor(4,1);

lcd.print("-COLD");

}

else if(degrees<30 &&degrees>18 )

{

lcd.setCursor(4,1);

lcd.print("-Normal Temp");

}

else if(degrees<45 &&degrees>30 )

{

lcd.setCursor(4,1);

lcd.print("-Hot");

}

else if(degrees>45 )

{

lcd.setCursor(4,1);

lcd.print("-TOO HOT");

}

delay(2000);

lcd.clear();

float ldr=analogRead(A1);

lcd.setCursor(1,0);

lcd.print("Intensity:");

lcd.setCursor(12,0);

lcd.print(ldr);

if (ldr<230)

{

lcd.setCursor(4,1);

lcd.print("-TOO BRIGHT");

}

else if (ldr<460 && ldr>230 )

{

lcd.setCursor(2,1);

lcd.print("-Medium Light");

}

else if (ldr>460)

{

lcd.setCursor(4,1);

lcd.print("-TOO DARK");

}

delay(2000);

lcd.clear();

}

Arduino 2

#include<LiquidCrystal.h>

LiquidCrystal lcd(12,11,5,4,3,2);

void setup()

{

lcd.begin(16,2);

pinMode(10, OUTPUT);

pinMode(A0,INPUT);

pinMode(A2,INPUT);

lcd.begin(16,2);

lcd.setCursor(4,0);

lcd.print("Detecting..");

delay(1000);

pinMode(7,INPUT);

Serial.begin(9600);

Serial.print("[2J"); // clear screen command

}

void loop()

{

int a,fire,b;

a = digitalRead(7);

fire = analogRead(A2);

b = 1;

if(a==HIGH){

tone(10, 220, 100);

lcd.setCursor(1,1);

lcd.println("Animal Detected");

delay(1000);

Serial.print(a);

}

else if(a==LOW){

lcd.setCursor(1,1);

lcd.print("Path clear");

delay(1000);

Serial.println(a);

}

lcd.clear();

}

Arduino 3

#include<LiquidCrystal.h>

LiquidCrystal lcd(12,11,5,4,3,2);

void setup()

{

lcd.begin(16,2);

pinMode(A2,INPUT);

lcd.begin(16,2);

lcd.setCursor(1,0);

delay(1000);

Serial.begin(9600);

}

void loop()

{

int x = 0,fires;

while(x <= 4000){

int fire;

fire = analogRead(A2);

fires = map(fire,0,1023,0,255);

if(fires >= 61){

tone(10, 220, 100);

lcd.setCursor(1,0);

lcd.print("Forest Fire Detected");

delay(2000);

lcd.setCursor(1,1);

lcd.print("Sending location to train driver");

Serial.println(fires);

delay(1000);

x += 1;

}

else if(fires < 60){

lcd.setCursor(1,0);

lcd.print("Forest Clear");

delay(2000);

lcd.setCursor(1,1);

Serial.println(fires);

x += 1;

}

lcd.clear();

}

}