#include <LiquidCrystal.h>

LiquidCrystal lcd(3, 13, 9, 10, 11, 12);

int buz = 5; //

int alc = 2 ; //0;

int sw = 4 ; //1;

int mt = 8; //

int mag = 6;

void setup()

{

pinMode(buz,OUTPUT);

pinMode(alc,INPUT);

pinMode(sw,INPUT);

pinMode(mt,OUTPUT);

pinMode(mag,INPUT);

Serial.begin(9600);

lcd.begin(16, 2);

// Print a message to the LCD.

lcd.setCursor(0, 0);

lcd.print("Smart bike");

lcd.setCursor(0, 1);

lcd.print(" helmet");

digitalWrite(buz,HIGH);

digitalWrite(mt,LOW);

delay(1000);

digitalWrite(mt,HIGH);

digitalWrite(buz,LOW);

delay(1000);

lcd.clear();

lcd.setCursor(0, 0);

lcd.print("PLEASE PUT");

lcd.setCursor(0, 1);

lcd.print(" HELMET");

while(digitalRead(sw)==HIGH);

digitalWrite(buz,HIGH);

lcd.clear();

}

//Main Loop To Calculate RPM and Update LCD Display

void loop()

{

if(digitalRead(sw)==LOW)

{

lcd.clear();

digitalWrite(mt,LOW);

lcd.setCursor(0, 0);

lcd.print("IGNITION ON");

while( digitalRead(alc)==HIGH && digitalRead(sw)==LOW)

{

if(digitalRead(mag)==HIGH)

{

lcd.clear();

lcd.setCursor(0, 0);

lcd.print("BIKE GOT IN");

lcd.setCursor(0, 1);

lcd.print("ACCIDENT");

init\_sms();

send\_data(" YOUR BIKE GOT INTO THE ACCIDENT ");

send\_sms();

delay(5500);

}

else

{

}

}

}

if(digitalRead(sw)==HIGH)

{ lcd.clear();

lcd.setCursor(0, 0);

lcd.print(" ");

lcd.setCursor(0, 0);

lcd.print(" NO HELMET ");

digitalWrite(buz,HIGH);

delay(500);

digitalWrite(buz,LOW);

delay(500);

digitalWrite(buz,HIGH);

delay(500);

digitalWrite(buz,LOW);

delay(500);

digitalWrite(buz,HIGH);

delay(500);

digitalWrite(buz,LOW);

delay(500);

digitalWrite(buz,HIGH);

delay(500);

if(digitalRead(sw)==HIGH)

{

digitalWrite(mt,HIGH);

while( digitalRead(alc)==HIGH && digitalRead(sw)==HIGH)

{

if(digitalRead(mag)==HIGH)

{

lcd.clear();

lcd.setCursor(0, 0);

lcd.print("BIKE GOT IN");

lcd.setCursor(0, 1);

lcd.print("ACCIDENT");

init\_sms();

send\_data(" YOUR BIKE GOT INTO THE ACCIDENT ");

send\_sms();

delay(5500);

}

else

{

}

}

}

}

if(digitalRead(alc)==LOW)

{ lcd.clear();

lcd.setCursor(0, 0);

lcd.print(" ");

lcd.setCursor(0, 0);

lcd.print("ALCOHOL DETECTED");

digitalWrite(buz,HIGH);

delay(500);

digitalWrite(buz,LOW);

delay(500);

digitalWrite(buz,HIGH);

delay(500);

digitalWrite(buz,LOW);

delay(500);

digitalWrite(buz,HIGH);

delay(500);

digitalWrite(buz,LOW);

delay(500);

digitalWrite(buz,HIGH);

delay(500);

if(digitalRead(alc)==LOW)

{

digitalWrite(mt,HIGH);

while( digitalRead(alc)==LOW )

{

if(digitalRead(mag)==HIGH)

{

lcd.clear();

lcd.setCursor(0, 0);

lcd.print("BIKE GOT IN");

lcd.setCursor(0, 1);

lcd.print("ACCIDENT");

init\_sms();

send\_data(" YOUR BIKE GOT INTO THE ACCIDENT ");

send\_sms();

delay(5500);

}

else

{

}

}

}

}

}

void init\_sms()

{

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

delay(200);

Serial.println("AT+CMGS=\"+918684884488\"");

delay(200);

}

void send\_data(String message)

{

Serial.println(message);

delay(200);

}

void send\_sms()

{

Serial.write(26);

}