#include <LiquidCrystal.h>

#define trigger 10

#define echo 11

#define motor 8

#define buzzer 12

LiquidCrystal lcd(7, 6, 5, 4, 3, 2);

float time = 0, distance = 0;

int temp = 0;

void setup() {

lcd.begin(16, 2);

pinMode(trigger, OUTPUT);

pinMode(echo, INPUT);

pinMode(motor, OUTPUT);

pinMode(buzzer, OUTPUT);

lcd.print("Water Level");

lcd.setCursor(0, 1);

lcd.print("Indicator");

delay(2000);

}

void loop() {

digitalWrite(trigger, LOW);

delayMicroseconds(2);

digitalWrite(trigger, HIGH);

delayMicroseconds(10);

digitalWrite(trigger, LOW);

delayMicroseconds(2);

time = pulseIn(echo, HIGH);

distance = time \* 340 / 20000;

lcd.clear();

lcd.print("Water Space In");

lcd.setCursor(0, 1);

lcd.print("Tank is: ");

lcd.print(distance);

lcd.print("Cm");

delay(2000);

if (distance < 12 && temp == 0) {

digitalWrite(motor, LOW);

digitalWrite(buzzer, HIGH);

lcd.clear();

lcd.print("Water Tank Full");

lcd.setCursor(0, 1);

lcd.print("Motor Turned OFF");

delay(2000);

digitalWrite(buzzer, LOW);

delay(3000);

temp = 1;

} else if (distance < 12 && temp == 1) {

digitalWrite(motor, LOW);

lcd.clear();

lcd.print("Water Tank Full");

lcd.setCursor(0, 1);

lcd.print("Motor Turned OFF");

delay(5000);

} else if (distance > 30) {

digitalWrite(motor, HIGH);

lcd.clear();

lcd.print("LOW Water Level");

lcd.setCursor(0, 1);

lcd.print("Motor Turned ON");

delay(5000);

}

}