Project Development Phase

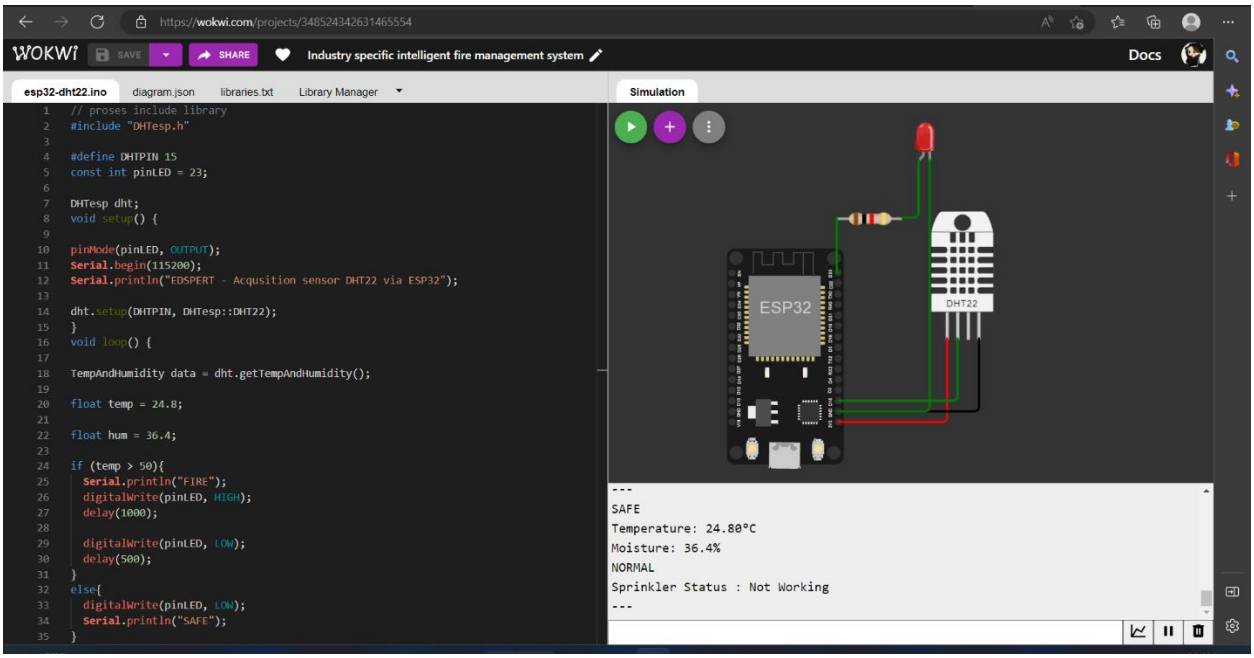
Sprint – 1

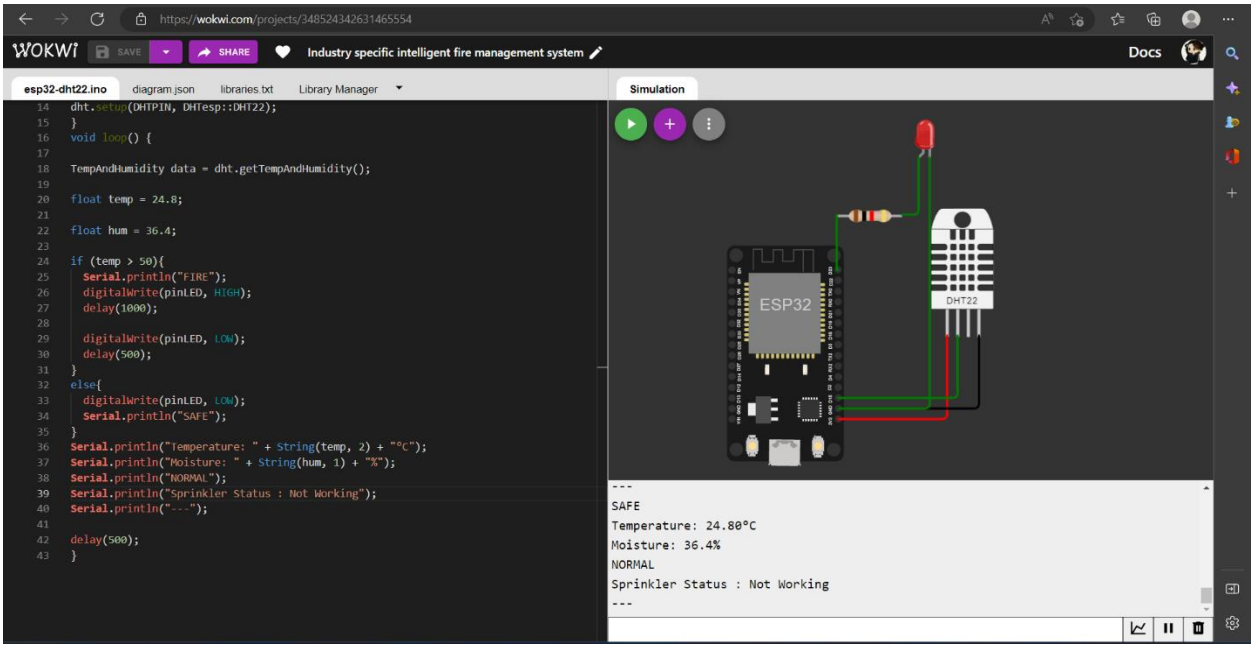
Date	31 October 2022
Team ID	PNT2022TMID11775
Project Name	Industry-specific intelligent fire management system

WOKWI WEB URL:

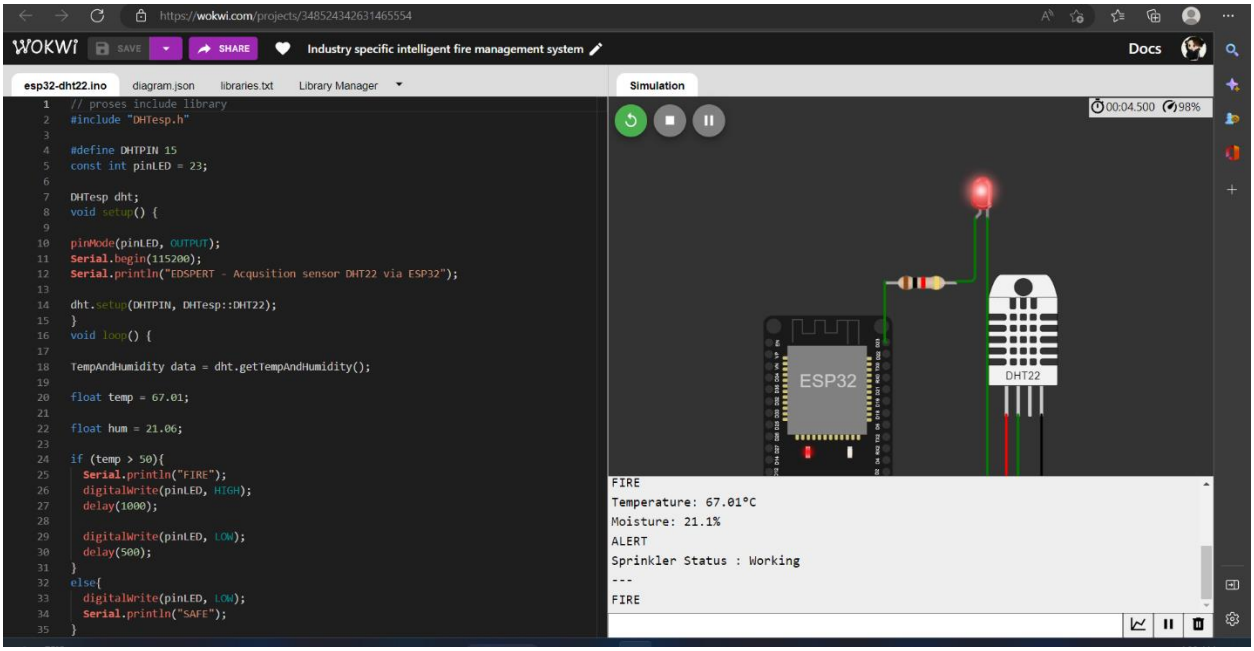
https://wokwi.com/projects/348524342631465554

SNAPSHOTS OF SIMULATION:

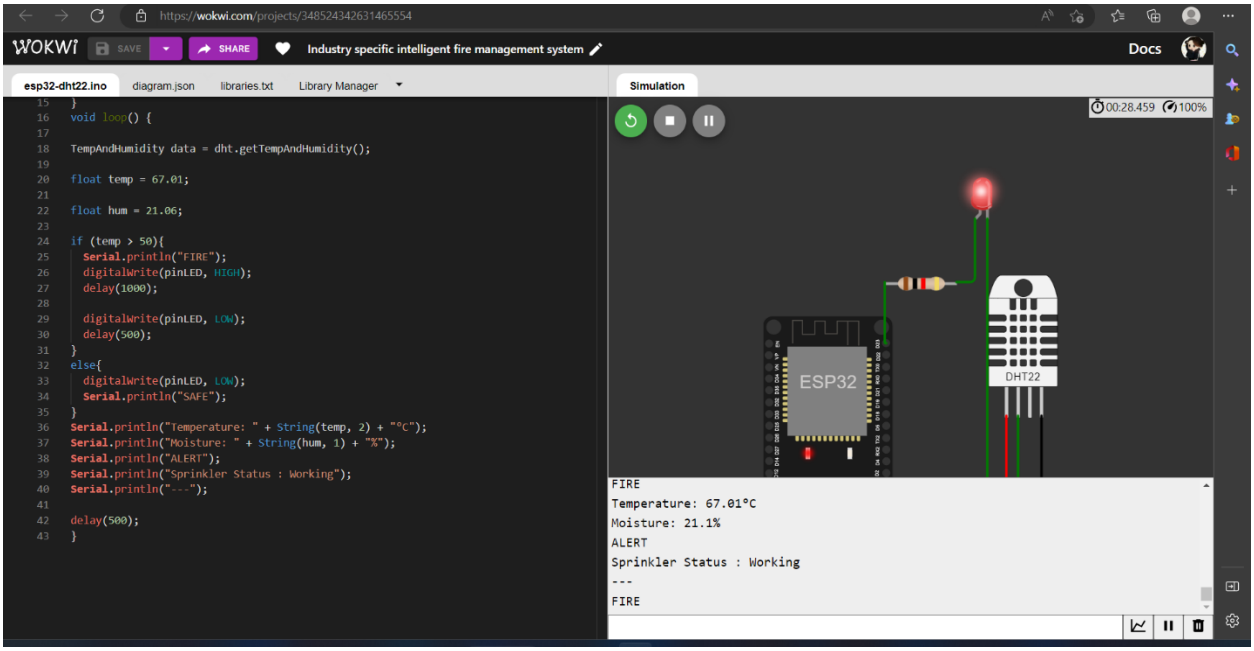



https://wokwi.com/projects/348524342631465554
WOKWI
SAVE
SHARE
Industry specific intelligent fire management system
Docs
esp32-dht22.ino
diagram.json
libraries.txt
Library Manager
Simulation
dht.setup(DHTPIN, DHTesp::DHT22);
}
void loop() {
TempAndHumidity data = dht.getTempAndHumidity();
float temp = 24.8;
float hum = 36.4;
if (temp > 50){
Serial.println("FIRE");
digitalWrite(pinLED, HIGH);
delay(1000);
digitalWrite(pinLED, LOW);
delay(500);
}
else{
digitalWrite(pinLED, LOW);
Serial.println("SAFE");
}
Serial.println("Temperature: " + String(temp, 2) + "°C");
Serial.println("Moisture: " + String(hum, 1) + "%");
Serial.println("NORMAL");
Serial.println("Sprinkler Status : Not Working");
Serial.println("---");
delay(500);
}
ESP32
DHT22

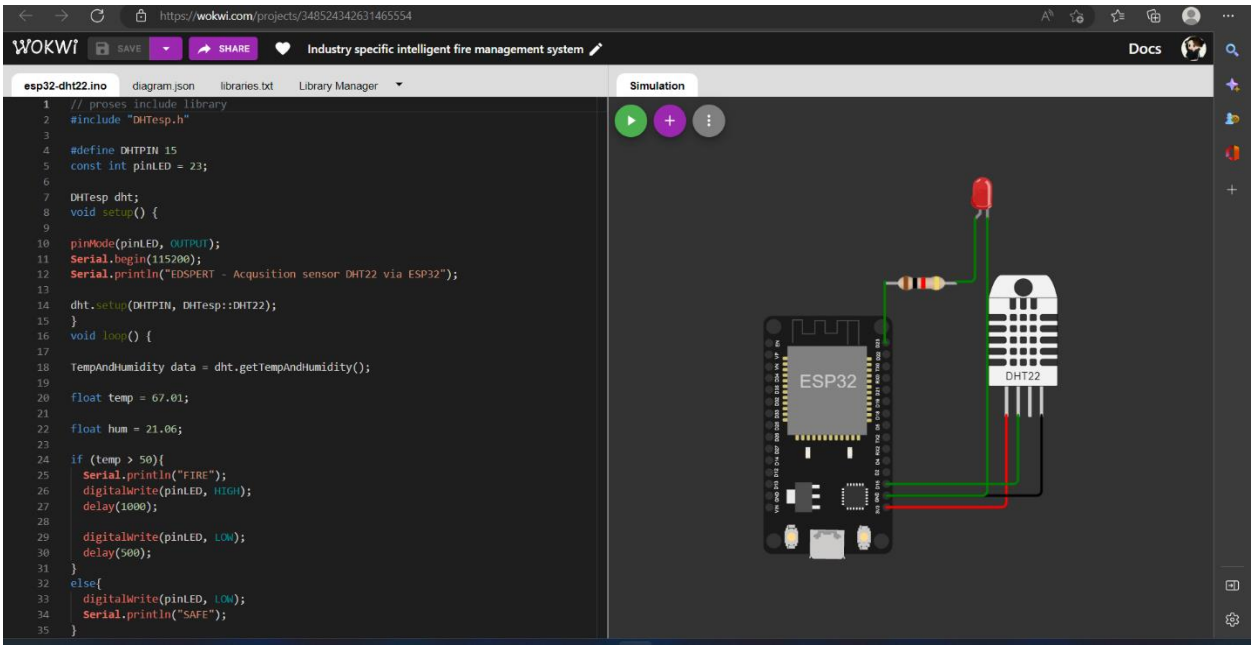
SAFE
Temperature: 24.80°C
Moisture: 36.4%
NORMAL
Sprinkler Status : Not Working


https://wokwi.com/projects/348524342631465554
WOKWI
SAVE
SHARE
Industry specific intelligent fire management system
Docs
esp32-dht22.ino
diagram.json
libraries.txt
Library Manager
Simulation
00:04.500
98%
// proses include library
#include "DHTesp.h"
#define DHTPIN 15
const int pinLED = 23;
DHTesp dht;
void setup() {
pinMode(pinLED, OUTPUT);
Serial.begin(115200);
Serial.println("EDSPERT - Acqusition sensor DHT22 via ESP32");
dht.setup(DHTPIN, DHTesp::DHT22);
}
void loop() {
TempAndHumidity data = dht.getTempAndHumidity();
float temp = 67.01;
float hum = 21.06;
if (temp > 50){
Serial.println("FIRE");
digitalWrite(pinLED, HIGH);
delay(1000);
digitalWrite(pinLED, LOW);
delay(500);
}
else{
digitalWrite(pinLED, LOW);
Serial.println("SAFE");
}
ESP32
DHT22
FIRE
Temperature: 67.01°C
Moisture: 21.1%
ALERT
Sprinkler Status : Working

FIRE




```ino
}
void loop() {

TempAndHumidity data = dht.getTempAndHumidity();

float temp = 67.01;

float hum = 21.06;

if (temp > 50){
  Serial.println("FIRE");
  digitalWrite(pinLED, HIGH);
  delay(1000);

  digitalWrite(pinLED, LOW);
  delay(500);
}
else{
  digitalWrite(pinLED, LOW);
  Serial.println("SAFE");
}
Serial.println("Temperature: " + String(temp, 2) + "°C");
Serial.println("Moisture: " + String(hum, 1) + "%");
Serial.println("ALERT");
Serial.println("Sprinkler Status : Working");
Serial.println("---");

delay(500);
}
```




```ino
// proses include library
#include "DHTesp.h"

#define DHTPIN 15
const int pinLED = 23;

DHTesp dht;
void setup() {

pinMode(pinLED, OUTPUT);
Serial.begin(115200);
Serial.println("EDSPERT - Acqusition sensor DHT22 via ESP32");

dht.setup(DHTPIN, DHTesp::DHT22);
}
void loop() {

TempAndHumidity data = dht.getTempAndHumidity();

float temp = 67.01;

float hum = 21.06;

if (temp > 50){
  Serial.println("FIRE");
  digitalWrite(pinLED, HIGH);
  delay(1000);

  digitalWrite(pinLED, LOW);
  delay(500);
}
else{
  digitalWrite(pinLED, LOW);
  Serial.println("SAFE");
}
```