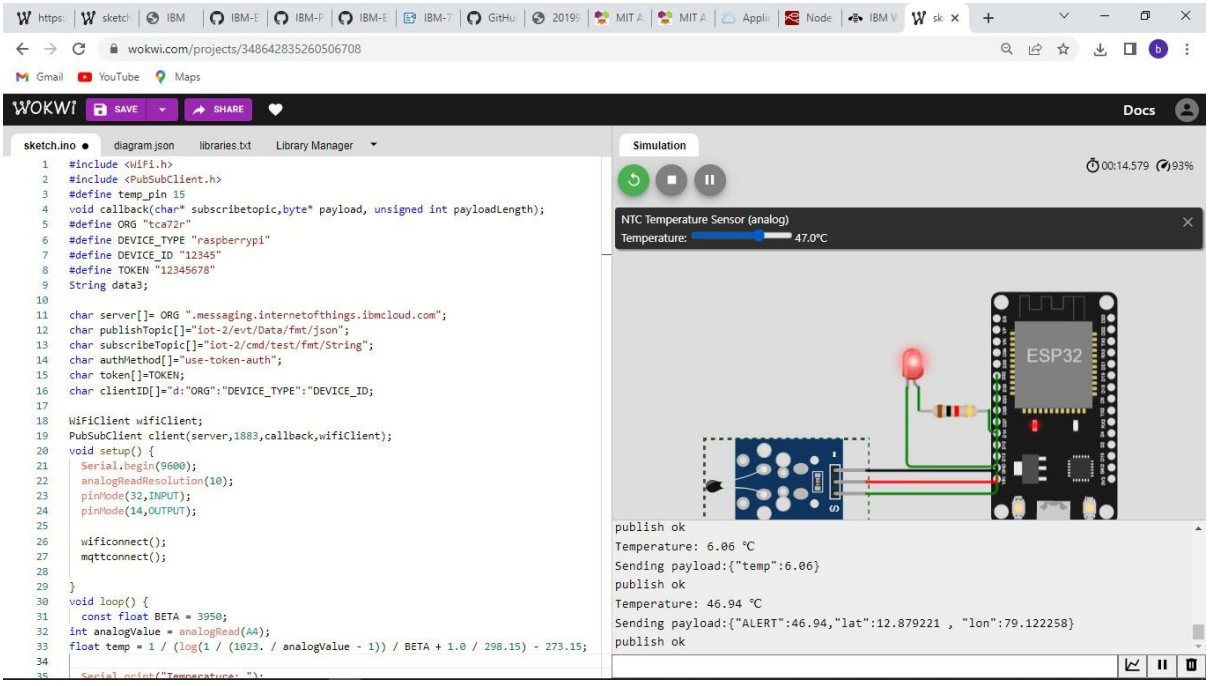
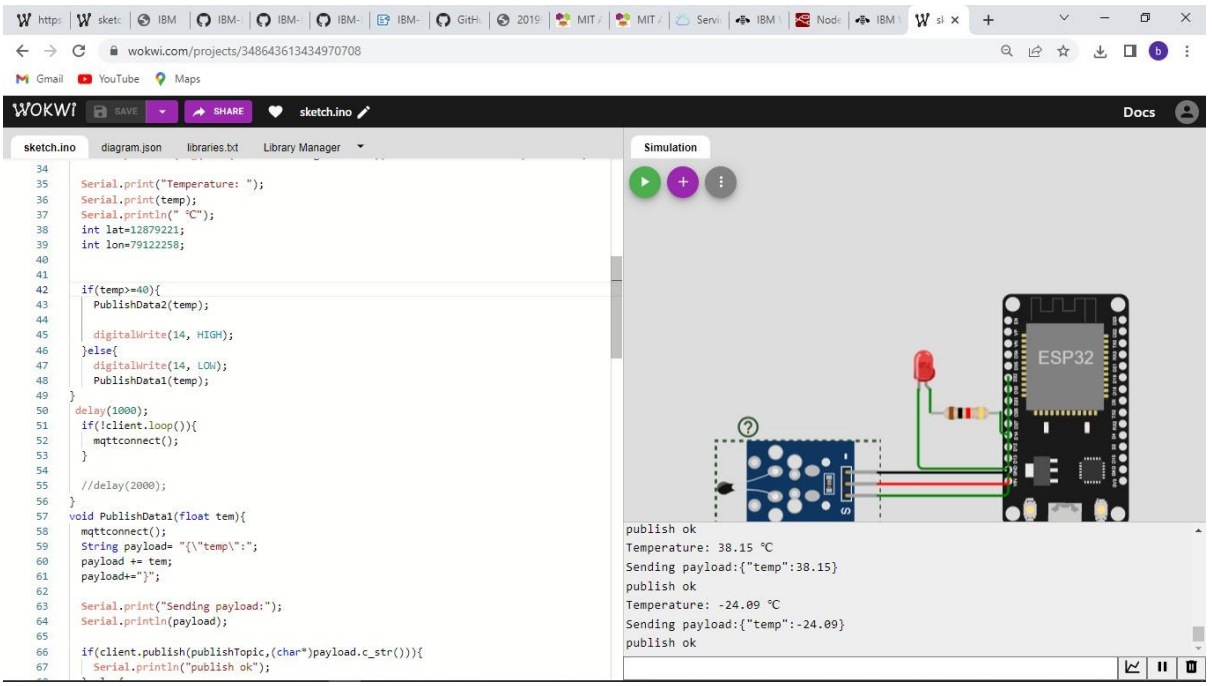
PROJECT DEVELOPMENT PHASE -SPRINT 1

Date	18 November 2022
Team ID	PNT2022TMID40881
Project Name	Industry specific intelligent fire management system

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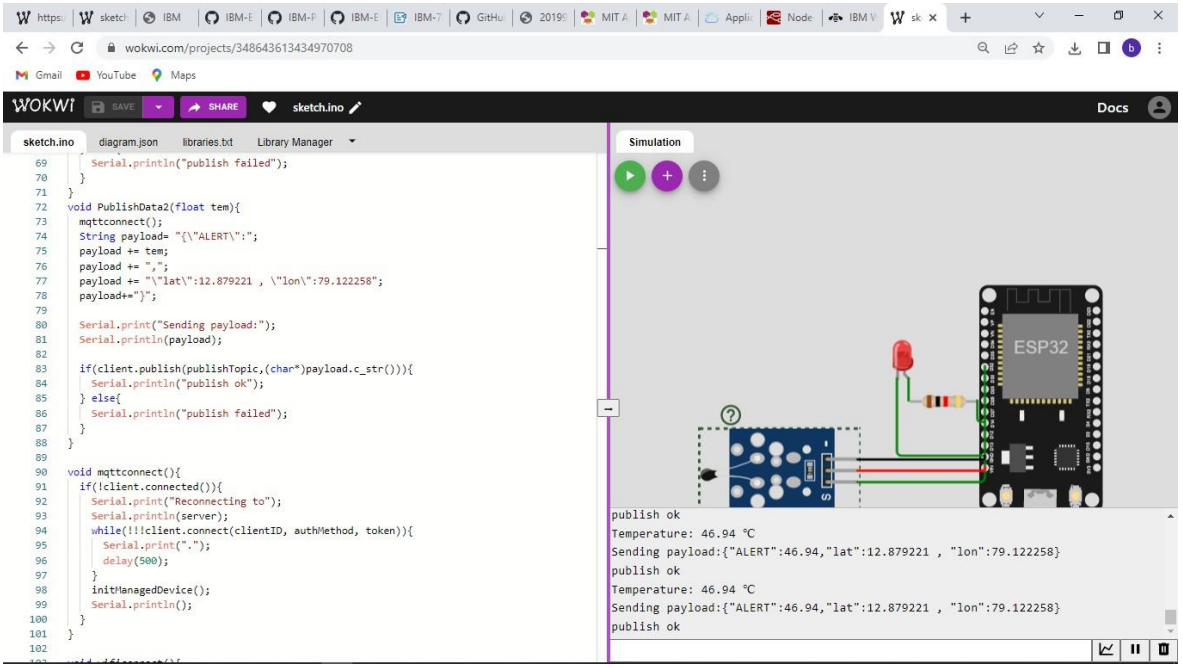
Serial.print("Temperature: ");
Serial.print(temp);
Serial.println(" ℃");
int lat=12879221;
int lon=79122258;
if(temp>=40){
PublishData2(temp);
digitalWrite(14, HIGH);
}else{
digitalWrite(14, LOW);
PublishData1(temp);
}
delay(1000);
if(!client.loop()){
mqttconnect();
}
//delay(2000);
}
void PublishData1(float tem){
mqttconnect();
String payload= "{\"temp\":";
payload += tem;
payload+="}";
Serial.print("Sending payload:");
Serial.println(payload);
if(client.publish(publishTopic,(char*)payload.c_str())){
Serial.println("publish ok");
publish ok
Temperature: 38.15 ℃
Sending payload:{"temp":38.15}
publish ok
Temperature: -24.09 ℃
Sending payload:{"temp":-24.09}
publish ok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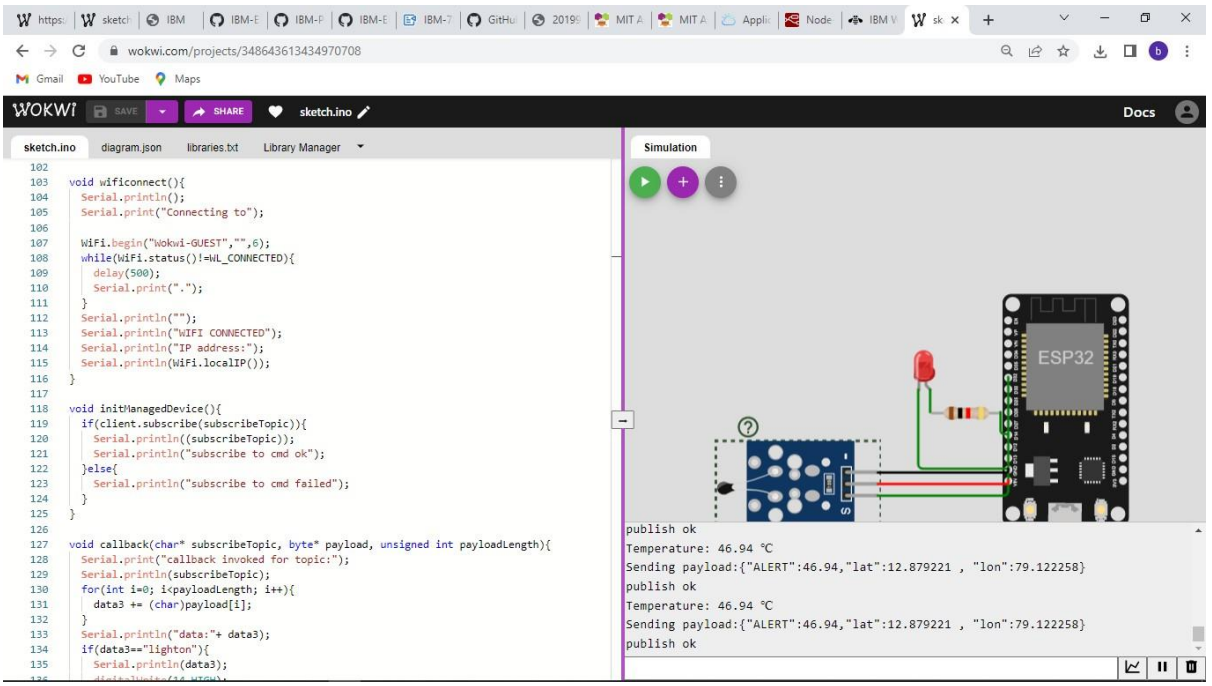
Serial.println("publish failed");
}
}
void PublishData2(float tem){
mqttconnect();
String payload= "{\"ALERT\":";
payload += tem;
payload += ",";
payload += "\"lat\":12.879221 , \"lon\":79.122258";
payload+="}";
Serial.print("Sending payload:");
Serial.println(payload);
if(client.publish(publishTopic,(char*)payload.c_str())){
Serial.println("publish ok");
} else{
Serial.println("publish failed");
}
}
void mqttconnect(){
if(!client.connected()){
Serial.print("Reconnecting to");
Serial.println(server);
while(!!!client.connect(clientID, authMethod, token)){
Serial.print(".");
delay(500);
}
initManagedDevice();
Serial.println();
}
}
publish ok
Temperature: 46.94 ℃
Sending payload:{"ALERT":46.94,"lat":12.879221 , "lon":79.122258}
publish ok
Temperature: 46.94 ℃
Sending payload:{"ALERT":46.94,"lat":12.879221 , "lon":79.122258}
publish ok




```
102
103  void wificonnect(){
104    Serial.println();
105    Serial.print("Connecting to");
106
107    WiFi.begin("Wokwi-GUEST","",6);
108    while(WiFi.status()!=WL_CONNECTED){
109      delay(500);
110      Serial.print(".");
111    }
112    Serial.println("");
113    Serial.println("WIFI CONNECTED");
114    Serial.println("IP address:");
115    Serial.println(WiFi.localIP());
116  }
117
118  void initManagedDevice(){
119    if(client.subscribe(subscribeTopic)){
120      Serial.println((subscribeTopic));
121      Serial.println("subscribe to cmd ok");
122    }else{
123      Serial.println("subscribe to cmd failed");
124    }
125  }
126
127  void callback(char* subscribeTopic, byte* payload, unsigned int payloadLength){
128    Serial.print("callback invoked for topic:");
129    Serial.println(subscribeTopic);
130    for(int i=0; i<payloadLength; i++){
131      data3 += (char)payload[i];
132    }
133    Serial.println("data:"+ data3);
134    if(data3=="lighton"){
135      Serial.println(data3);
```

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