Project development phase - sprint 2

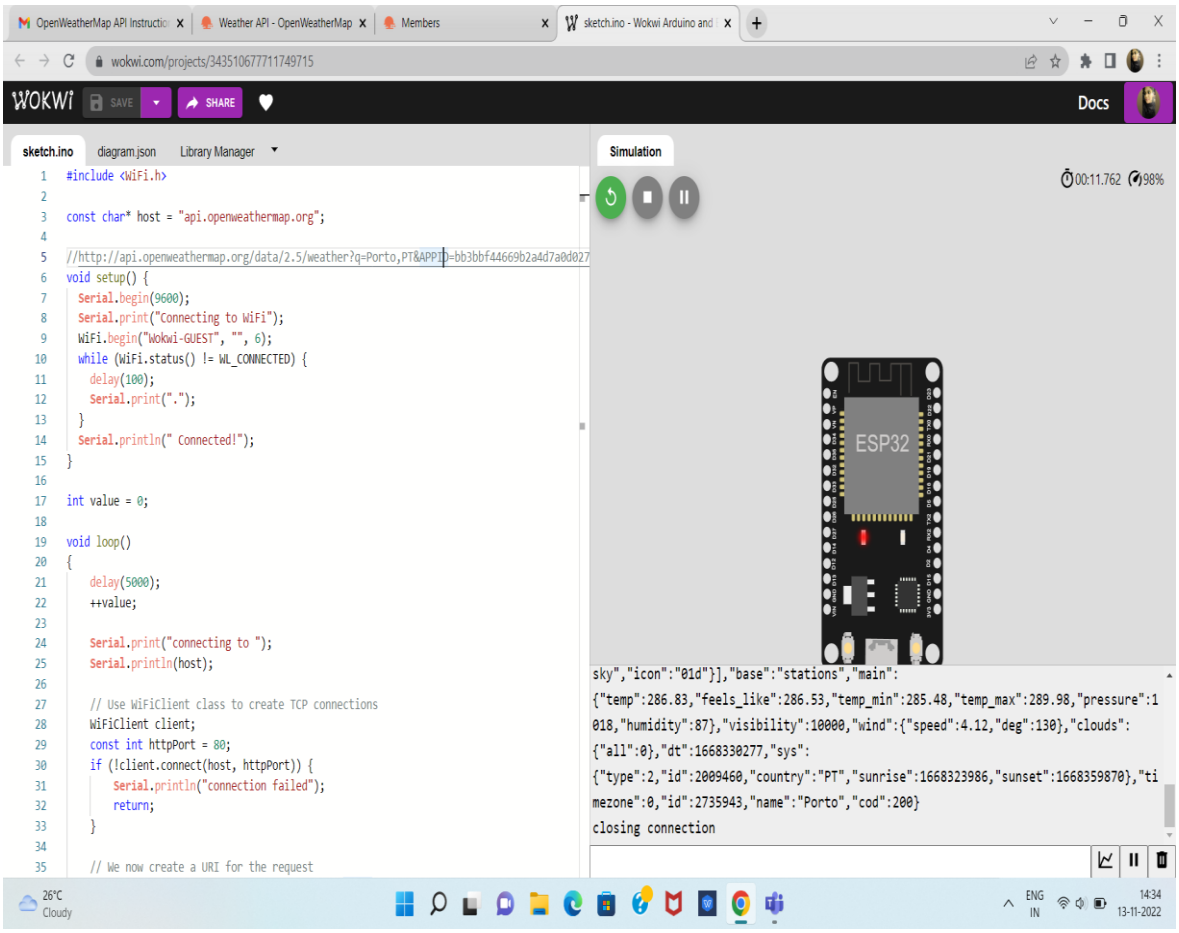
Date:	8th november 2022
Student name:	Haripriya.U
Register number:	510119106002
Project name:	Signs with smart connectivity for bettr road safety

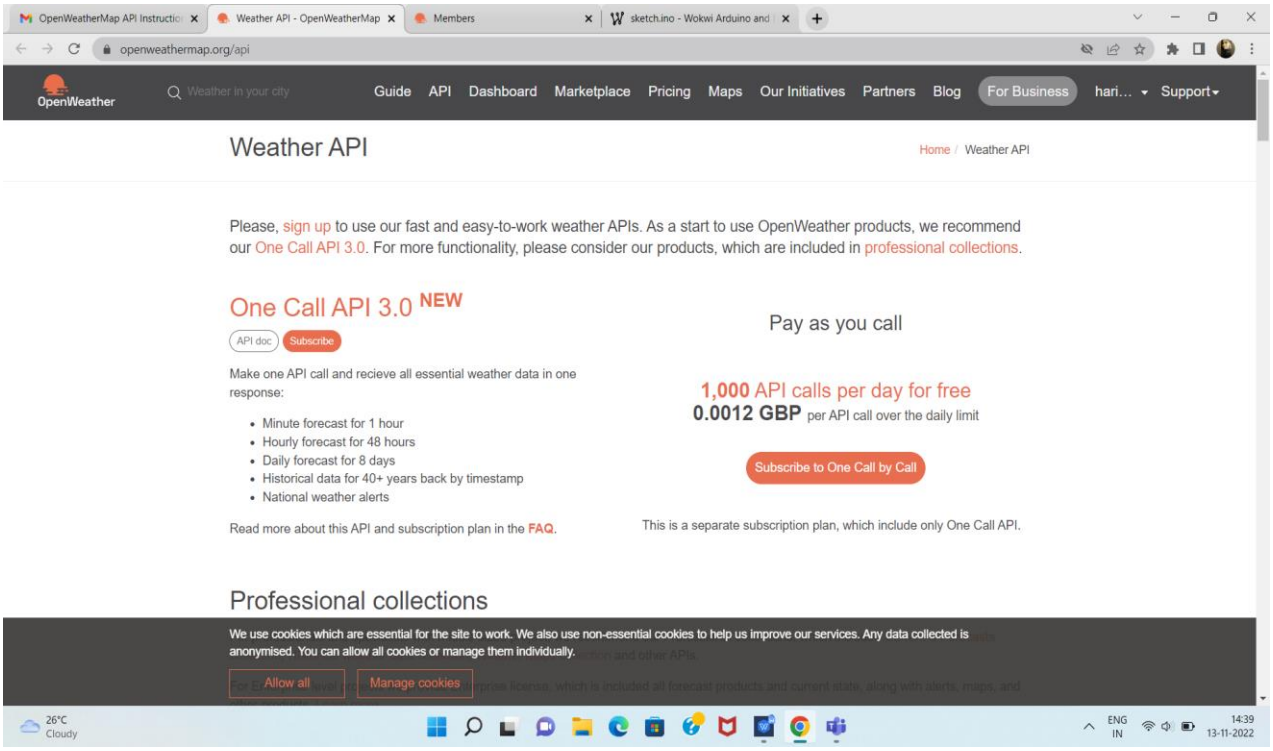
Configure open weather map services.

Code:

```
#include <WiFi.h>

const char* host = "api.openweathermap.org";

//http://api.openweathermap.org/data/2.5/weather?q=Porto,PT&APPID=bb3bbf44669b2a4d7a0d02794894ebda
void setup() {
  Serial.begin(9600);
  Serial.print("Connecting to WiFi");
  WiFi.begin("Wokwi-GUEST", "", 6);
  while (WiFi.status() != WL_CONNECTED) {
    delay(100);
    Serial.print(".");
  }
  Serial.println(" Connected!");
}

int value = 0;

void loop()
{
    delay(5000);
    ++value;

    Serial.print("connecting to ");
    Serial.println(host);

    // Use WiFiClient class to create TCP connections
    WiFiClient client;
    const int httpPort = 80;
    if (!client.connect(host, httpPort)) {
        Serial.println("connection failed");
        return;
    }

    // We now create a URI for the request
    String url = "/data/2.5/weather?q=Porto,PT&APPID=27c3fd2d668ceb8332f42e3b4f943524";


    Serial.print("Requesting URL: ");
    Serial.println(url);
```

```
    // This will send the request to the server
    client.print(String("GET ") + url + " HTTP/1.1\r\n" +
                 "Host: " + host + "\r\n" +
                 "Connection: close\r\n\r\n");
    unsigned long timeout = millis();
    while (client.available() == 0) {
        if (millis() - timeout > 5000) {
            Serial.println(">>> Client Timeout !");
            client.stop();
            return;
        }
    }

    // Read all the lines of the reply from server and print them to Serial
    while(client.available()) {
        String line = client.readStringUntil('\r');
        Serial.print(line);
    }

    Serial.println();
    Serial.println("closing connection");
}
```






```
{"coord":{"lon":-0.1257,"lat":51.5085},"weather":[{"id":741,"main":"Fog","description":"fog","icon":"50d"}],"base":"stations","main":
{"temp":284,"feels_like":283.65,"temp_min":282.9,"temp_max":285.37,"pressure":1020,"humidity":96},"visibility":600,"wind":{"speed":4.63,"deg":100},"clouds":{"all":100},"dt":1668330927,"sys":
{"type":2,"id":2075535,"country":"GB","sunrise":1668323693,"sunset":1668356089},"timezone":0,"id":2643743,"name":"London","cod":200}
```