Project Development PhaseSprint II

Date	13 November 2022
Team ID	PNT2022TMID35583
Project Name	Signs with Smart Connectivity for better road safety

SPRINT TARGETS:

Sprint	Functional Requirement (Epic)	UserStory Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Connection	USN-4	Connecting with open weather API	20	Medium	Anusuya Hemananthini Meghaa Pragathii
Sprint -2	Cost	Usn-5	As we are reducing sensors , it reduces the cost for the user			Anusuya Hemananthini Meghaa Pragathii

CODE:

```
#include <SPI.h>
#include<WiFi.h>

const char* ssid = "Wokwi-GUEST";
const char* pass = "";
//open weather map api key
String apiKey= "2433516c3d8cf727338deab79e2ea38d";
//the city you want the weather for
String location= "torino,IT";
int status = WL_IDLE_STATUS;
char server[] = "api.openweathermap.org";
WiFiClient client;

void setup(){
  Serial.begin(115200);
  WiFi.begin(ssid, pass);
  while(WiFi.status() != WL_CONNECTED){
    delay(100);
    Serial.println(".");
  }
  Serial.println("WiFi Connected!");
  Serial.println(WiFi.localIP());
```

```
}

void loop(){
getWeather();
 delay(10000);
}

void getWeather() {
 Serial.println("\nStarting connection to server...");
 // if you get a connection, report back via serial:
 if (client.connect(server, 80)) {
   Serial.println("connected to server");
   // Make a HTTP request:
   client.print("GET /data/2.5/forecast?");
   client.print("q="+location);
   client.print("&appid="+apiKey);
   client.print("&cnt=3");
   client.println("&units=metric");
   client.println("Host: api.openweathermap.org");
   client.println("Connection: close");
   client.println();
 } else {
   Serial.println("unable to connect");
 }
 delay(1000);
 String line = "";
 while (client.connected()) {
   line = client.readStringUntil('\n');
   Serial.println(line);
 }
```

}


```arduino
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:0.1},"weather":[{"id":800,"main":"Clear","description":"clear sky","icon":"01n"}],"clouds":{"all":6},"wind":{"speed":3.46,"deg":298,"gust":4.04},"visibility":10000,"pop":0.09,"sys":{"pod":"n"},"dt_txt":"2022-11-21 00:00:00"}],"city":{"id":3165523,"name":"Province of Turin","coord":{"lat":45.1333,"lon":7.3667},"country":"IT","population":2297598,"timezone":3600,"sunrise":1668926108,"sunset":1668959845}}