PROJECT DEVELOPMENT PHASE

SPRINT-1

Date	16 November 2022
Team ID	PNT2022TMID04551
Project Name	Signs with Smart Connectivity for Better Road Safety

SPRINT-1:

- In sprint-1, we collect temperature and humidity data from OpenWeatherMap based on the location of the sign board.
- We have developed the code to upload the data from weather api to ibm Watson platform.

PYTHON CODE:

```python
import requests
import json
from datetime import datetime
import time
api_key = "528a86c2c07e0b806236f3e039d5f808"
weather_url = 'http://api.openweathermap.org/data/2.5/weather?q=' + 'Chennai' + '&appid='+api_key

while(1):
    response = requests.get(weather_url)
    weather_data = response.json()
    if weather_data['cod'] == 200:
        kelvin = 273.15
        temp = int(weather_data['main']['temp'] - kelvin)
        humidity = weather_data['main']['humidity']
        cloudy = weather_data['clouds']['all']
    print(f"Temperature (Celsius): {temp}")
    print(f"Humidity: {humidity}%")
    print(f"Cloud: {cloudy}%")
    time.sleep(3)
```

```
Published data Successfully: %s {'temperature': '26°C', 'humidity': '74%', 'c': 'mist', 'l': 'Chennai', 's': '40kmph'}
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(ml) sh-3.2$
```

IBM IoT WATSON PLATFORM: