

DEVELOP A PYTHON SCRIPT

Date	31 october 2022
Team Id	PNT2022TMID12798
Project Name	Project - Signs with smart connectivity for Better road safety

Signs with smart connectivity for Better road safety

Create a code snippet using python to

1. Extract weather data from OpenWeatherMap using APIs
2. Send the extracted data to the cloud
3. Receive data from the cloud and view it in the python compiler

The screenshot shows the OpenWeatherMap API website. The browser tabs include 'Welcome to Proj...', 'IBM', 'IBM-Project-103', 'Weather API - O...', 'OpenWeatherMap', 'IBM-Project-478', 'Publish Data to...', and '+'. The address bar shows 'openweathermap.org/api'. The website header includes the OpenWeather logo and navigation links: 'Weather in your city', 'Guide', 'API', 'Dashboard', 'Marketplace', 'Pricing', 'Maps', 'Our Initiatives', 'Partners', 'Blog', 'For Business', 'MUR...', and 'Support'. The main content area features a section for 'One Call API 3.0 NEW' with a 'Pay as you call' option. It lists features: 'Minute forecast for 1 hour', 'Hourly forecast for 48 hours', 'Daily forecast for 8 days', 'Historical data for 40+ years back by timestamp', and 'National weather alerts'. Pricing is shown as '1,000 API calls per day for free' and '0.0012 GBP per API call over the daily limit'. A 'Subscribe to One Call by Call' button is present. Below this, there is a section for 'Professional collections' which includes 'Current & Forecasts collection', 'Historical weather data collection', and 'Weather Maps collection'. The footer shows a Windows taskbar with a search bar and various application icons, along with system information: '28°C', 'ENG', '11:05', and '09-11-2022'.

Welcome to Proj... x IBM x IBM-Project-103 x Weather API - O... x OpenWeatherMap x IBM-Project-478 x Publish Data to... x +

openweathermap.org/api

OpenWeather

Weather in your city Guide API Dashboard Marketplace Pricing Maps Our Initiatives Partners Blog For Business MUR... Support

Please, [sign up](#) to use our fast and easy-to-work weather APIs. As a start to use OpenWeather products, we recommend our **One Call API 3.0**. For more functionality, please consider our products, which are included in **professional collections**.

One Call API 3.0 NEW

API doc [Subscribe](#)

Make one API call and receive all essential weather data in one response:

- Minute forecast for 1 hour
- Hourly forecast for 48 hours
- Daily forecast for 8 days
- Historical data for 40+ years back by timestamp
- National weather alerts

Read more about this API and subscription plan in the [FAQ](#).

Pay as you call

1,000 API calls per day for free
0.0012 GBP per API call over the daily limit

[Subscribe to One Call by Call](#)

This is a separate subscription plan, which include only One Call API.

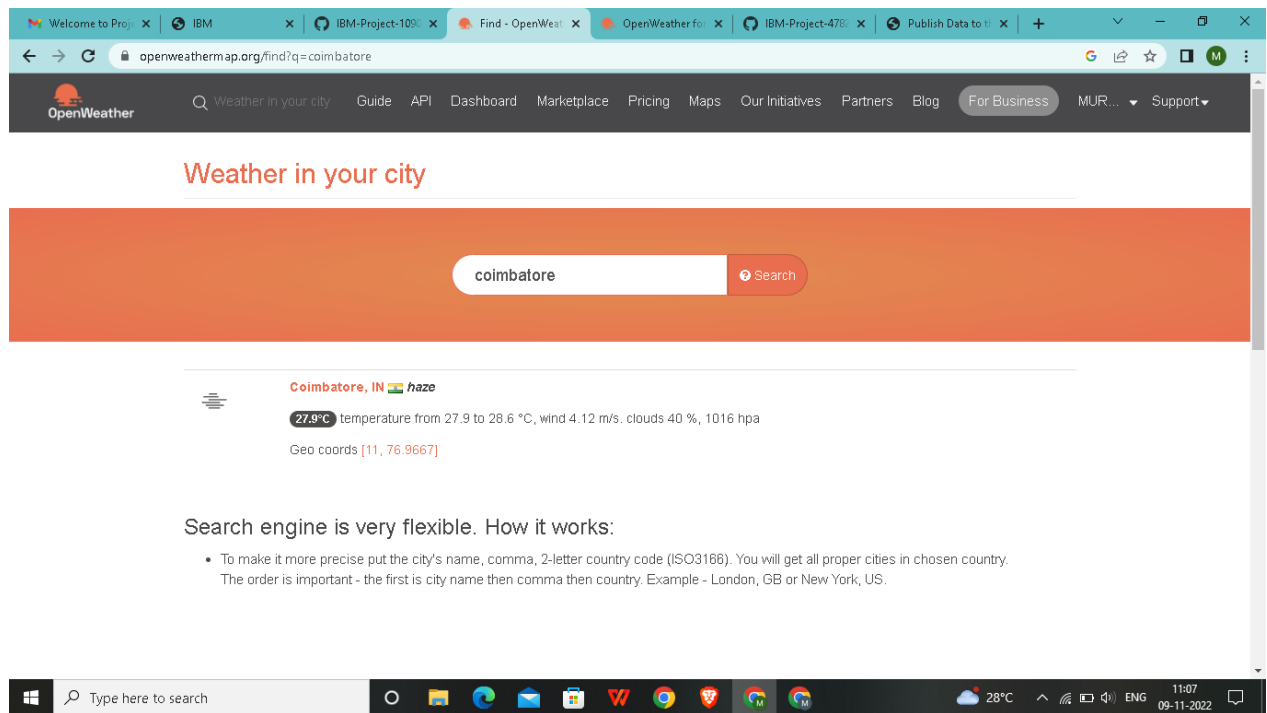
Professional collections

For professionals and specialists with middle sized project, we recommend our Professional collections, which included **Current & Forecasts collection**, **Historical weather data collection**, **Weather Maps collection** and other APIs.

For Enterprise level projects we provide Enterprise license, which is included all forecast products and current state, along with alerts, maps, and [other data collections](#).

Type here to search

28°C ENG 11:05 09-11-2022



Code :

```
import requests
a="https://openweathermap.org/weathermap?basemap=map&cities=true&la
yer=temperature&lat=13.0878&lon=80.2785&zoom=12"
r = requests.get(url=a)
data = r.json()
print(r)
print(data)
temp = data["main"]["temp"]
hum = data["main"]["humidity"]
print("Temperature is :",temp)
print("Humidity is :",hum)
```

```
eg.py - C:/Python/Python37/eg.py (3.7.4)
File Edit Format Run Options Window Help

import requests
a="https://api.openweathermap.org/data/2.5/weather?q=coimbatore,IN&appid=6d13d12f9cd34a07871a5795d01e2c47"
r = requests.get(url=a)
data = r.json()
print(r)
print(data)
temp = data["main"]["temp"]
hum = data["main"]["humidity"]
print("Temperature is :",temp)
print("Humidity is :",hum)
```

```
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 20:34:20) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Python/Python37/eg.py =====
<Response [200]>
{'coord': {'lon': 76.9667, 'lat': 11}, 'weather': [{'id': 721, 'main': 'Haze', 'description': 'haze', 'icon': '50d'}], 'base': 'stations', 'main': {'temp': 304.03, 'feels_like': 305.76, 'temp_min': 304.03, 'temp_max': 304.03, 'pressure': 1011, 'humidity': 51}, 'visibility': 5000, 'wind': {'speed': 3.09, 'deg': 60}, 'clouds': {'all': 40}, 'dt': 1667902461, 'sys': {'type': 1, 'id': 9206, 'country': 'IN', 'sunrise': 1667868332, 'sunset': 1667910373}, 'timezone': 19800, 'id': 1273865, 'name': 'Coimbatore', 'cod': 200}
Temperature is : 304.03
Humidity is : 51
>>> |
```

Ln: 2 Col: 63

Ln: 9 Col: 4

Type here to search

15:46 08-11-2022