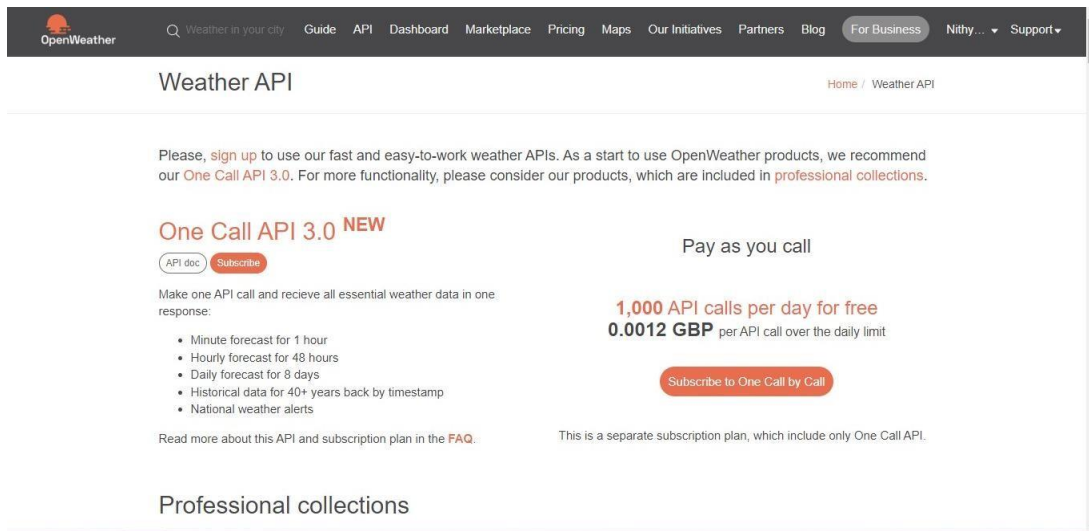


# Develop a Python script

Date	7 November 2022
Team ID	PNT2022TMID22779
Project Name	Project - Signs with smart connectivity for Better road safety



The screenshot shows the OpenWeather website's 'Weather API' page. The header includes the OpenWeather logo and navigation links like 'Weather in your city', 'Guide', 'API', 'Dashboard', 'Marketplace', 'Pricing', 'Maps', 'Our Initiatives', 'Partners', 'Blog', 'For Business', 'Nithy...', and 'Support'. The main heading is 'Weather API'. Below it, a paragraph encourages signing up for the fast and easy-to-work weather APIs, recommending the 'One Call API 3.0'. A 'Subscribe' button is visible. The 'One Call API 3.0' is highlighted as 'NEW'. A 'Pay as you call' section offers '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. A list of features for the One Call API is provided: 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. A link to the FAQ is also shown.

OpenWeather

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

## Weather API

Home / Weather API

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](#).

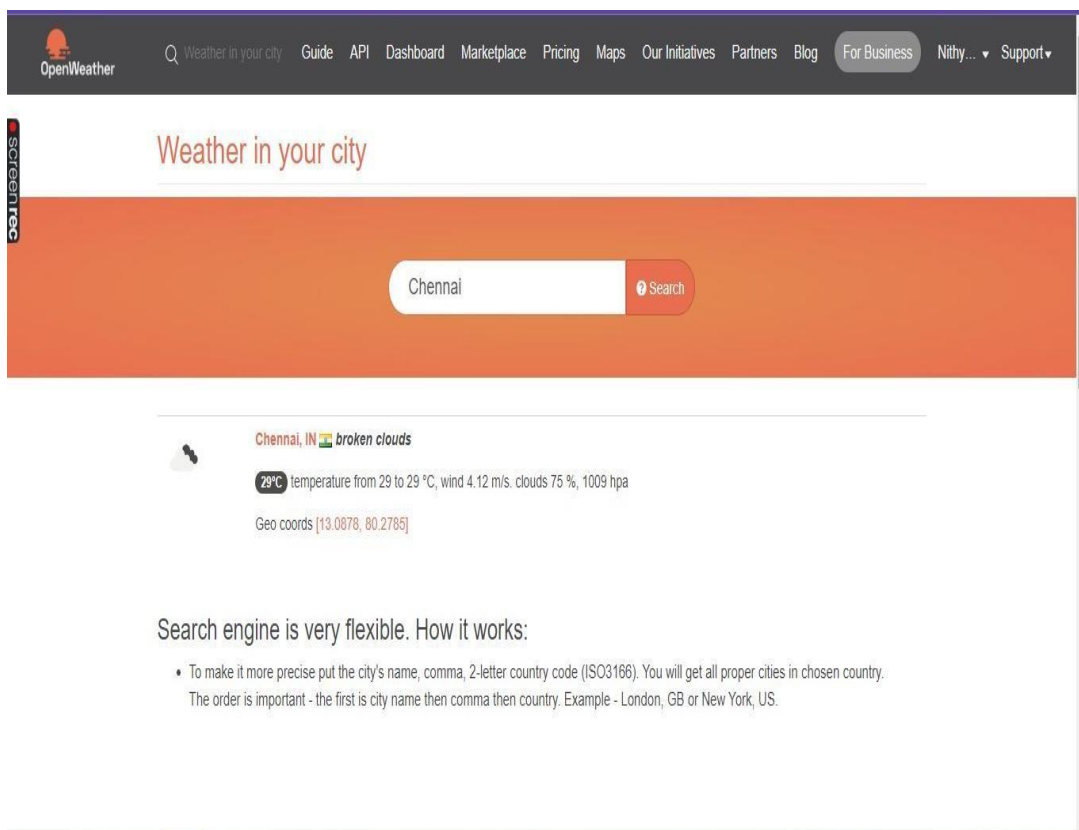
Pay as you call

**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




The screenshot shows the OpenWeather website's 'Weather in your city' page. The header is identical to the previous screenshot. The main heading is 'Weather in your city'. Below it, a search bar contains the text 'Chennai' and a 'Search' button. The search results for Chennai, IN show 'broken clouds' and a temperature of 29°C. The temperature range is from 29 to 29 °C, wind is 4.12 m/s, clouds are 75 %, and pressure is 1009 hpa. The geo coordinates are [13.0878, 80.2785]. A section titled 'Search engine is very flexible. How it works:' explains that to get more precise results, the city's name, comma, and 2-letter country code (ISO3166) should be used. The order is important: the first is the city name, then the comma, then the country. Examples given are 'London, GB' or 'New York, US'.

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## Weather in your city

Chennai Search

Chennai, IN  broken clouds

**29°C** temperature from 29 to 29 °C, wind 4.12 m/s, clouds 75 %, 1009 hpa

Geo coords [13.0878, 80.2785]

### Search engine is very flexible. How it works:

- To make it more precise put the city's name, comma, 2-letter country code (ISO3166). You will get all proper cities in chosen country. The order is important - the first is city name then comma then country. Example - London, GB or New York, US.

```
import requests
a = "https://api.openweathermap.org/data/2.5/weather?q=Chennai,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 3.6.5 Shell
File Edit Shell Debug Options Window Help

<Response [200]>
Temperature is : 298.14
>>>

===== RESTART: E:/IBM/pre/weatherMap.py =====
====

<Response [200]>
{'coord': {'lon': 80.2785, 'lat': 13.0878}, 'weather': [{'id': 701, 'main': 'Mist', 'description': 'mist', 'icon': '50n'}, {'id': 500, 'main': 'Rain', 'description': 'light rain', 'icon': '10n'}], 'base': 'stations', 'main': {'temp': 298.14, 'feels_like': 299.15, 'temp_min': 298.14, 'temp_max': 298.14, 'pressure': 1012, 'humidity': 94}, 'visibility': 2500, 'wind': {'speed': 1.54, 'deg': 350}, 'rain': {'1h': 0.12}, 'clouds': {'all': 75}, 'dt': 1667317416, 'sys': {'type': 1, 'id': 9218, 'country': 'IN', 'sunrise': 1667262751, 'sunset': 1667304738}, 'timezone': 19800, 'id': 1264527, 'name': 'Chennai', 'cod': 200}
Temperature is : 298.14
Humidity is : 94
>>>
```