

PRE-REQUISITES


Develop A Python Script

DATE	17 NOVEMBER 2022
TEAM ID	PNT2022TMID33506
PROJECT NAME	Intelligent Specific Intelligent Fire Management System

The things we want to follow ,

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

 OpenWeather

How to start **API docs** Libraries GitHub repo Blog Support

global and local weather models, satellites, radars and a vast network of weather stations. Data is available in JSON, XML, or HTML format.

Call current weather data

How to make an API call

API call

```
https://api.openweathermap.org/data/2.5/weather?lat={lat}&lon={lon}&appid={API key}
```

Parameters

lat, lon	required	Geographical coordinates (latitude, longitude). If you need the geocoder to automatic convert city names and zip-codes to geo coordinates and the other way around, please use our Geocoding API .
appid	required	Your unique API key (you can always find it on your account page under the "API key" tab)
mode	optional	Response format. Possible values are <code>xml</code> and <code>html</code> . If you don't use the <code>mode</code> parameter format is JSON by default. Learn

Call current weather data

How to make an API call

Bulk downloading

Weather fields in API response

JSON

XML

List of condition codes

Min/max temperature in current weather

API and forecast API

Other features

Geocoding API

Built-in geocoding

Built-in API request by city name

Built-in API request by city ID

Built-in API request by ZIP code

Format

Units of measurement

Multilingual support

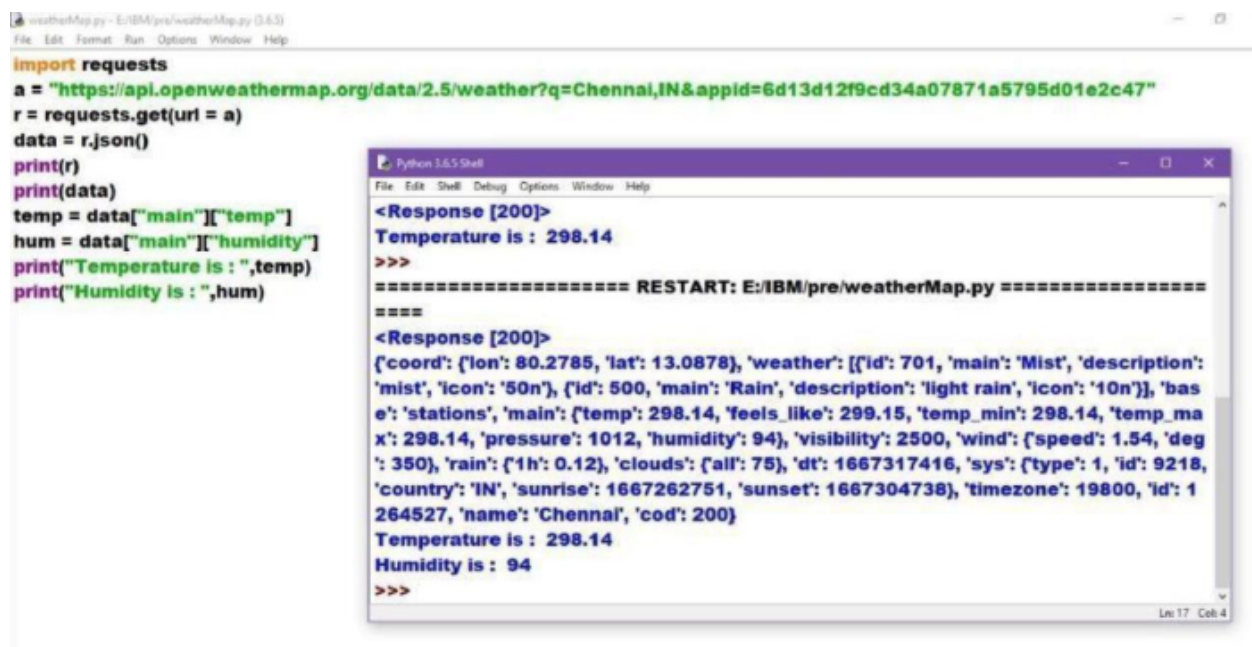
Call back function for JavaScript code

API :

`https://api.openweathermap.org/data/2.5/weather?lat=35&lon=139&appid={API key}`

Copy the API and Type in the python Idle

And you got the following output for the respective program



The image shows a Python IDE window titled 'weatherMap.py - E:\IBM\pre\weatherMap.py (3.6.3)' with a menu bar (File, Edit, Format, Run, Options, Window, Help). The script content is as follows:

```
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)
```

To the right, a 'Python 3.6.3 Shell' window displays the output of the script. It shows the raw JSON response from the API, followed by a restart of the script, and then the formatted output: 'Temperature is : 298.14' and 'Humidity is : 94'.

```
<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
>>>
```