

# (데이터수집) 데이터 준비하기

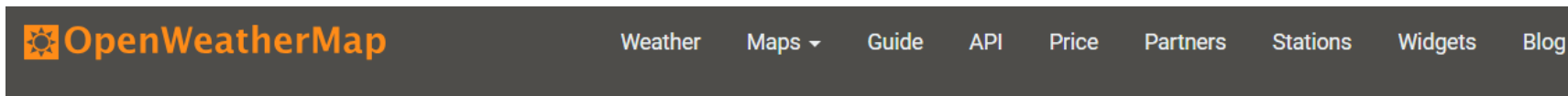
백석대학교 강윤희

# 수업목표

- 데이터 수집 준비하기
- Open API를 사용하기 위한 과정을 익힘
- Open API의 사용을 위한 요청과 응답 처리를 이해함
- 파이썬으로 Open API의 요청과 응답 처리를 프로그래밍 함

# 데이터 준비

- 계정 생성



## Weather API

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Please **sign up** and use our fast and easy-to-work weather APIs for free. Look at our **monthly subscriptions** for more options than Free account can provide you. Read **How to start** first and enjoy using our powerful weather APIs.

### Current weather data

[API doc](#)

[Subscribe](#)

- Access current weather data for any location including over 200,000 cities
- Current weather is frequently updated based on global models and data from more than 40,000 weather stations
- Data is available in JSON, XML, or HTML format
- Available for Free and all other paid accounts

### Hourly forecast <sup>NEW</sup>

[API doc](#)

[Subscribe](#)

- Hourly forecast is available for 4 days
- Forecast weather data for 96 timestamps
- Higher geographic accuracy
- Forecast is available in JSON and XML
- Available for Developer, Professional and Enterprise accounts
- **Free trial for all users until 1st May 2019!**

### 16 day / daily forecast

[API doc](#)

[Subscribe](#)

- 16 day forecast is available at any location or city
- 16 day forecast includes daily weather
- Forecast is available in JSON and XML
- Available for all paid accounts

# 데이터 준비

## • API 키 얻기



2019-03-06 (수) 오후 2:49

OWM Team <robot2@openweathermap.org>

OpenWeatherMap Create Account

받는 사람 Customer


 이 메시지가 표시되는 방식에 문제가 있으면 여기를 클릭하여 웹 브라우저에서 메시지를 확인하십시오.

**Thank you for subscribing to OpenWeather API!**

Dear Customer!

Thank you for subscribing to Free [OpenWeather API!](#)

API key:

- Your API key is a0  2012b4

- Within the next couple of hours, it will be activated and ready to use

- You can later create more API keys on your [account page](#)

- Please, always use your API key in each API call

응답 등록키

# (데이터 준비) JSON 응답

- 도시 날씨 정보를 openweathermap에 요청함
  - (사전작업) 요청을 위해 id를 얻어야 함

요청

<http://api.openweathermap.org/data/2.5/weather?q=Seoul&appid=등록id>

응답

```
{"coord":{"lon":126.98,"lat":37.57},"weather":[{"id":501,"main":"Rain","description":"moderate rain","icon":"10n"}, {"id":701,"main":"Mist","description":"mist","icon":"50n"}],"base":"stations","main":{"temp":277.91,"pressure":1014,"humidity":93,"temp_min":276.15,"temp_max":279.15,"visibility":6000,"wind":{"speed":2.6,"deg":10,"gust":6.2},"rain":{"1h":1.78},"clouds":{"all":90},"dt":1554817200,"sys":{"type":1,"id":5509,"message":0.0044,"country":"KR","sunrise":1554757599,"sunset":1554804038},"id":1835848,"name":"Seoul","cod":200}}
```

# (예상)과제 결과

```
← → ↺ 🏠 ⓘ api.openweathermap.org/data/2.5/weather?q=Seoul&appid=a070fcd8fc2db8d5d1f140466a2012b4 📖 ☆ ☆ 🔍 ↗ ...  
{  
  "coord": {  
    "lon": 126.98,  
    "lat": 37.57  
  },  
  "weather": [ {  
    "id": 803,  
    "main": "Clouds",  
    "description": "broken clouds",  
    "icon": "04d"  
  } ],  
  "base": "stations",  
  "main": {  
    "temp": 279.27,  
    "feels_like": 276.14,  
    "temp_min": 276.15,  
    "temp_max": 281.15,  
    "pressure": 1016,  
    "humidity": 81  
  },  
  "visibility": 10000,  
  "wind": {  
    "speed": 2.35,  
    "deg": 202  
  },  
  "clouds": {  
    "all": 75  
  },  
  "dt": 1586215306,  
  "sys": {  
    "type": 1,  
    "id": 8117,  
    "country": "KR",  
    "sunrise": 1586207309,  
    "sunset": 1586253571  
  },  
  "timezone": 32400,  
  "id": 1835848,  
  "name": "Seoul",  
  "cod": 200  
}
```