

Interview Scenario

1 - Create a REST API Application server that gets the “city” key item in the body and shows the city temperature, and humidity in response in JSON format

Method: GET

URI: <url>/v1/weather

Response format:

```
{
  "city" : "<city>",
  "Temp" : "<city temperature>",
  "Hum"  : "<city humidity>"
}
```

TIP1: Use the free Weather API site to access weather data with API

(<https://www.weatherapi.com>)

TIP2: Authentication Required (Method of authentication is optional)

2 - Deploy a RDBMS database and connect to the python application to save the response data.

id	city	temperature	humidity	time(based on Api request time)

3 - Deploy an nginx to serve as a reverse proxy front of the python application

4- Create Docker compose for all implementation

5 - Push All of the code To GitHub or Gitlab

6 - The following Tasks are optional and they have extra bonuses.

- Make unit test for python application (optional)
- Consider Monitoring solutions in the following layer:
 - Containers performance (Memory, Cpu, Bandwith)
 - Reverse proxy (Monitor number of 200 status code requests)