

# Backend PHP tech homework

Musement API has the endpoint GET /api/v3/cities that returns the cities where Musement has activities to sell. We now need to add weather information for each city available in Musement's catalogue.

## Step 1 | Development

The candidate must write an application that:

gets the list of the cities from Musement's API using <https://api.musement.com>

for each city gets the forecast for the next 2 days using <http://api.weatherapi.com> and print to STDOUT "Processed city [city name] | [weather today] - [weather tomorrow]"

Example:

```
Processed city Milan | Heavy rain - Partly cloudy
```

```
Processed city Naples | Sunny - Sunny
```

## Step 2 | API design (no code required)

Now that we have a service that reads the forecast for a city, we want to save this info in the Musement's API. The endpoint that receives information about weather for a city **does not exist**, we only have these 2 endpoints for cities

```
GET /api/v3/cities
GET /api/v3/cities/{id}
```

Please provide the design for:

- endpoint/s to set the forecast for a specific city
- endpoint/s to read the forecast for a specific city

Please consider that we need to answer questions like :

- What's the weather in [city] for today ?
- What's the weather in [city] for tomorrow ?
- What's the weather in [city] for [day] ?

For each endpoint provide all required information: endpoint, payload, possible responses etc and description about the behavior.

## Notes

- <http://weatherapi.com> has a free plan. Create your own account to get a key
- we suggest to use the call [http://api.weatherapi.com/v1/forecast.json?key=\[your-key\]&q=\[lat\],\[long\]&days=2](http://api.weatherapi.com/v1/forecast.json?key=[your-key]&q=[lat],[long]&days=2) to get the forecast for a city but feel free to use the one you prefer
- we are only interested in the information under "condition" from <http://weatherapi.com>
- OpenAPI specs for Musement's API are here [https://api.musement.com/swagger\\_3.5.0.json](https://api.musement.com/swagger_3.5.0.json)
- let's pretend that all the Musement cities are returned by GET /api/v3/cities and you don't need to paginate
- latitude and longitude set for cities in Musement database are not always accurate. For Amsterdam we have 52.374 and 4.9 so when you query <http://weatherapi.com> using these values you get "De Wallen". Let's forget about this and let's pretend it is ok

## Mandatory requirements

- Use PHP8.X
- Use Docker
- Write Unit TESTS
- Must have a clear README with all needed info about the project
- Must have a consistent coding standard and a tool configured to prove it
- Must have a clear GIT history that let people understand the evolution of the project
- Should have a static code analyser with the higher level possible (for interpreted languages)
- Should have a good test coverage that allows people to change pieces of code without being afraid to introduce/reintroduce bugs
- Should provide a docker environment to easily setup the needed dev environment

## Sharing

VERY IMPORTANT

Specify in the README: your name and surname from Jagaad

You can share your work with all these accounts

- Github:
  - <https://github.com/nsn0x01>
  - <https://github.com/fsicurezza>
  - <https://github.com/dumetskiy>