

Introduction

The purpose of this test is for you to demonstrate your strengths. Don't spend more than a few hours working on this. You can code it in any language you are comfortable with

Task

Create an HTTP Service that reports on Melbourne weather. This service will source its information from either of the below providers:

1. weatherstack (primary):

```
curl "http://api.weatherstack.com/current?access_key=YOUR_ACCESS_KEY&query=Melbourne"
```

Documentation: <https://weatherstack.com/documentation>

2. OpenWeatherMap (failover):

```
curl "http://api.openweathermap.org/data/2.5/weather?q=melbourne,AU&appid=2326504fb9b100bee21400190e4dbe6d"
```

Documentation: <https://openweathermap.org/current> **Specs**

- The service can hard-code Melbourne as a city.

- The service should return a JSON payload with a unified response containing temperature in degrees Celsius and wind speed.
- If one of the provider goes down, your service can quickly failover to a different provider without affecting your customers.
- Have scalability and reliability in mind when designing the solution.
- Weather results are fine to be cached for up to 3 seconds on the server in normal behaviour to prevent hitting weather providers. Those results must be served as stale if all weather providers are down.
- The proposed solution should allow new developers to make changes to the code safely.

Expected Output

Calling the service via curl (<http://localhost:8080/v1/weather?city=melbourne>) should output the following JSON payload

```
{  
  
  "wind_speed": 20, "temperature_degrees": 29  
  
}
```

Please provide:

- Working code and instructions provided as zip or hosted on private GitHub (share with *kurl* and *mike-asm*)

- Running code hosted or instructions to build and run locally provided.

- Trade-offs you might have made, anything you left out, or what you might do differently if

you were to spend additional time on the task.