

# Fidenz Technologies - Front-end Assignment

Your assignment is to read the [cities.json](#) file and extract the 'CityCode' codes from it. Using CityCode as reference then you will call openweathermap.org weather APIs to get the latest weather information and present it as a provided UI design.

Below are the steps you have to follow in order to complete part one of your assignment. Suggested time to complete this part is **6 Hours**. You are free to use any resource and library files as needed.

**Step 1:** Extract City codes from [cities.json](#) file and load it into an array.

(Link to download cities.json:

[https://drive.google.com/file/d/1RsprTXnwRRKq64jo5zJFk-\\_ycXVf3S7M/view?usp=sharing](https://drive.google.com/file/d/1RsprTXnwRRKq64jo5zJFk-_ycXVf3S7M/view?usp=sharing))

**Step 2:** Referencing the City Codes, you now have to call openweathermap.org RESTful APIs to get the latest weather information from the servers. First, you may need to register with the openweathermap.org to access the APIs.

To get the weather info call the following API method (**Note:** You need to register with the [openweathermap.org](https://openweathermap.org) to access the APIs.)

## API Method

GET <http://api.openweathermap.org/data/2.5/group>

## Parameters

**id** City ID , **units** unit type (ex; metric), **appid** API Token

## Example request

<https://samples.openweathermap.org/data/2.5/group?id=524901.703448.2643743&units=metric&appid=439d4b804bc8187953eb36d2a8c26a02>

GET

/data/2.5/group?id=524901,703448,2643743&units=metric&appid=439d4b804bc8187953eb36d2a8c26a02

HTTP/1.1

Host: api.openweathermap.org

Cache-Control: no-cache

**Step 3:** After getting the latest weather information, you need to create a UI as of the provided [design file \(PSD\)](#). This UI should be implemented with a responsive layout that adjusts into both desktop and mobile resolutions(**Note:** No need to implement the Add City Functionality of the UI ). Your application should be compatible with the latest version of Chrome, Firefox & Safari browsers. (**Note:** You can use photoshop or [online tool](#) for open psd files )

Below is a sample object return from the API, you will have to show/extract content highlighted in yellow and last data update's timespan in green.

```

"coord":{
  "lon":37.62,
  "lat":55.75
},
"sys":{
  "type":1,
  "id":7323,
  "message":0.044,
  "country":"RU",
  "sunrise":1457582106,
  "sunset":1457623444
},
"weather":[
  {
    "id":800,
    "main":"Clear",
    "description":"Sky is Clear",
    "icon":"01d"
  }
],
"main":{
  "temp":7.75,
  "pressure":1026,
  "humidity":57,
  "temp_min":7,
  "temp_max":9
},
"visibility":10000,
"wind":{
  "speed":3,
  "deg":130
},
"clouds":{
  "all":0
},
"dt":1457609400,
"id":524901,1
"name":"Moscow"

```

**Step 4:** Implement a data caching mechanism in your application by storing data coming from openweathermap.org and serving it when the user requests the same data in subsequent requests. Caching of a particular data should expire in 5 minutes.

*Design Files:*

[https://drive.google.com/drive/folders/1P3A3KzMeMGaBSXw-JG-S72\\_N6d-U7Yib?usp=sharing](https://drive.google.com/drive/folders/1P3A3KzMeMGaBSXw-JG-S72_N6d-U7Yib?usp=sharing)

**Special Note:** You'll get extra points if you create a docker file to deploy your application with all required services. You can create a repository for this application on Github/Gitlab and share with us (careers@fidenz.com,academy@fidenz.com) once you've completed the assignment.