

## Position - Python Engineering

**Weather API:** <https://openweathermap.org/api>

In this assignment, you will need to build a set of APIs for a weather application. We would require you to develop the following RESTful APIs using Django Rest Framework / Flask / Node JS.

1. Login API
2. Logout API
3. Get Weather Information API

- This API should return Weather information of 30 cities in JSON format.

### Main considerations:

1. Code should follow proper rest framework guidelines
2. Create one username and password and inform us when you are sending your code.
  - We will use the username/password to authenticate using your login API.3. APIs 2 &3 should work only in authenticated mode.
3. APIs 3 should be paginated. Use pagination techniques to paginate the results. Ideal page size – 10 items.
4. Comment wherever appropriate and make your code easily understandable
5. Provide your output as a runnable app. This means -
  - IF Python / Django is used, A proper requirements.txt file with all the dependencies should be present. We will create a virtual environment and install only the dependencies that you provide in the requirements file. The app should run within the virtual environment.
  - Any other tools or deployment scripts should be included

### Submission:

You need to share the following:

- Code for the assignment. A zip works. Or a private GitHub/bitbucket repo URL (the code should not be made public).
- A document (Google doc or even plain text file) explaining your thought process, like what considerations you have, what trade-offs you decided to make, and other solutions you could think of (which are not implemented).

- It should be at least 1 page. But don't hesitate to rain down a 5-pager upon us, if you have more to say.
- Make sure you submit your comments to code snippets and extensibility. Include deployment scripts for us to run your solution quickly.

**BROWNIE POINTS:**

1. If you can figure out a way to get the data refreshed every 30 minutes so that you need not call the third party APIs every time the “ Get Weather Information API ” is hit, which means you would need to call a third-party API once every 30 Mins.

2. Deploy your applications and give us the URLs (both the URLs i.e. application URL and GitHub/bitbucket repo URL)