

1- Create virtual environment by running the following command in the folder containing the whole project. (You can go to the file *Universities* with the File Explorer and type *cmd* in the research bar instead of typing *cd* followed by the whole path to the project.)

```
C:\Users\Atlantis\Documents\Flask\Universities>env\Scripts\activate
(env) C:\Users\Atlantis\Documents\Flask\Universities
```

The virtual environment is activated when you see the prefix '(env)'.

2- Type and enter the command below to run the app

```
(env) C:\Users\Atlantis\Documents\Flask\Universities\flask run
```

You should see this message:

```
* Environment: production
  WARNING: This is a development server. Do not use in a production environment.
  Use a production WSGI server instead.
* Debug mode: off
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
```

Congratulations, you have launched a local server running the file *app.py* in the url *http://127.0.0.1:5000/*.

3- Now you can go to a web browser and type requests for this server. The app asks an external API for its data. It is stocked in the variable *session.data* and has an expiration date *session.data_update* of 10 seconds. If a request is made after this date, the app will reload the data from the external API.

The application can answer 3 requests:

- <http://127.0.0.1:5000/api/university/list/> to show a list of all the universities of a country or corresponding to the alpha two code of the country.

- <http://127.0.0.1:5000/api/university/find/> to find a specific university with its name or returning the first university of a country.

- <http://127.0.0.1:5000/api/university/create/> to add a university to the dataset. A university is described by its name, province, country, alpha two code, webpage and domains.

To add parameters to your request type your request followed by *?name_of_parameter=actual_name*.

For example : http://127.0.0.1:5000/api/university/list/?country=canada&alpha_two_code=ca will return the list of all the universities in Canada.