



## Backend Exercise v2.1

### **What is the goal?**

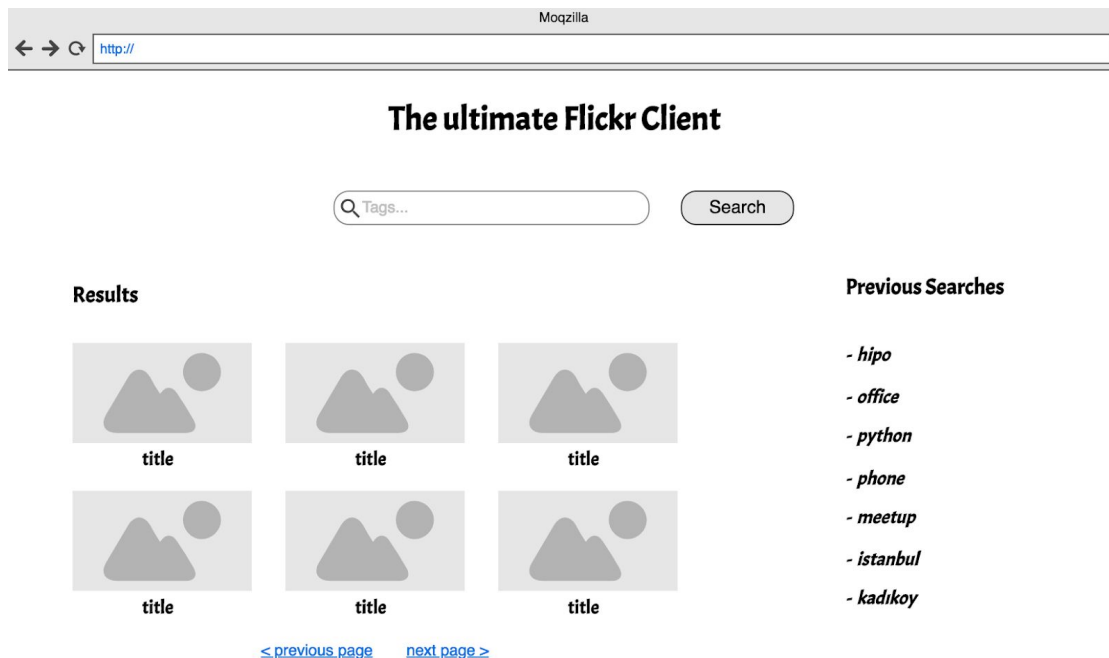
The topics covered by this exercise are actually the basics of backend development. Completing this exercise will prepare you for Hipo. Having a decent knowledge on these topics will allow you to easily join the team and learn new skills faster.

### **Basic topics covered by this exercise are:**

- Version control (GIT)
- Basic HTTP commands and usage (GET, POST)
- Python
- Django
- ORM
- JSON

### **What should you build?**

We want you to build a Flickr client using Django Framework. Don't worry, it's quite simple. Here is a mockup of what we want.



- In this micro website, users will search photos by tags. For example, someone interested in the cars, may type “car” into search bar.
- The website will use the Flickr API (using Python and Requests library, please do not use the Flickr API Kits) and fetch the photos that contain the keyword that the user entered. It will then present these photos to the user in a proper way.
- The website will store the keyword in some database (SQLite is fine but you can be fancier if you are brave) and display most recent 20 previous searches at the right side of the page.

### Some important key points:

- Previous search clicks should bring the photos that belong to that search
- You don't have to limit the results by 6 per page. Just show what you receive page by page from the Flickr API
- You may find Flickr API endpoints information on  
<https://www.flickr.com/services/api/>  
<https://www.flickr.com/services/api/flickr.photos.search.html>  
<https://www.flickr.com/services/api/misc.urls.html>
- Please use JSON response format. You should set "format" and "nojsoncallback" query parameters as stated.

format=json  
nojsoncallback=1

Example: [https://api.flickr.com/services/rest/?method=flickr.photos.search&api\\_key=1ddb7df62cbdc4e07f6ec75ca78e2960&tags=car&format=json&nojsoncallback=1](https://api.flickr.com/services/rest/?method=flickr.photos.search&api_key=1ddb7df62cbdc4e07f6ec75ca78e2960&tags=car&format=json&nojsoncallback=1)  
 For more information <https://www.flickr.com/services/api/response.json.html>

**Access Keys**

You can use this access key to connect to the API.

API KEY: 1ddb7df62cbdc4e07f6ec75ca78e2960

**Timing**

You should complete this exercise in one week or so. Applicants who do not complete this exercise will not be accepted to the internship.

**Questions?**

If you are stuck at some point, or if you have questions about the scope, we are always here to help you. You can message [yigit@hipolabs.com](mailto:yigit@hipolabs.com) anytime for help.

**Hints**

Use requests library instead of urllib. (<http://docs.python-requests.org/en/latest/>)

**Bonus Points**

Additional features and improvements on the basic requirements are welcome. A few ideas:

- Deploy this project somewhere (Heroku, PythonAnywhere, AWS, Google Cloud, etc...)