

## Assignment: iOS coding Challenge

### The challenge

We'd like you to create an app that uses the Flickr image search API and shows the results in a 2-column scrollable view.

### Requirements:

- Use Swift
- Clearly user should be able to search images with specific search term.
- The app should implement lazy loading; it starts by loading only enough data, and automatically request and display more images when the user scrolls to the bottom of the view.
- The app should provide history of past search terms.
- Feel free to use any technologies or third party libraries that you are comfortable with.

### Your priorities are

- Delivering a working app. Quick solutions are acceptable, given the time constraints; just be ready to discuss your choices.
- Clean code and architecture. Try to make good use of this task to demonstrate and show off your coding skills.

### Deliverables:

The source code of the project, and a set of instructions if there is any project-specific configurations needed to build and the run the project.

### Worth highlighting

We expect these requirements can be delivered in 4 to 6 hours, so no need to implement features that would definitely require much more time. However it is not a speed test. Take your time! Anyway, your feedback on how much actual time you was needed to deliver the task will be very helpful but will not be used for the evaluation.

You are free to use whatever technologies or libraries to deliver the needed functionality, but be prepared to explain other solutions that you would have implemented if you have more time.

### Your Result

When finished, please send a Git repo that includes the whole project to your contact person within Mobiquity. The assignment will be examined by one of our developers.

## Crucial points:

- Clean - production ready – code
- Comments
- Tests
- Avoid over engineering
- It has to be working :P
- Try to avoid too many steps to make the app compile, and if there are steps (configurations) needed, should be explained clearly.

Good luck with this assignment! If you have any questions, don't hesitate to ask your contact person within Mobiquity.

## Need some quick hints for Flickr? keep reading!

### Flickr API

You can make this call to the Flickr API to return a JSON object with a list of photos.

```
https://api.flickr.com/services/rest/?method=flickr.photos.search&api\_key=11c40ef31e4961acf4f98c8ff4e945d7&format=json&nojsoncallback=1&text=kittens
```

The `text` parameter should be replaced with the query that the user enters into the app.

The JSON response you'll receive will have items described like this example.

```
{
  "id": "23451156376",
  "owner": "28017113@N08",
  "secret": "8983a8ebc7",
  "server": "578",
  "farm": 1,
  "title": "Merry Christmas!",
  "ispublic": 1,
  "isfriend": 0,
  "isfamily": 0
},
```

You can use these parameters to get the full URL of the photo:

```
http://farm{farm}.static.flickr.com/{server}/{id}\_{secret}.jpg
```

So, using our example from before, the URL would be

```
http://farm1.static.flickr.com/578/23451156376\_8983a8ebc7.jpg
```

More information about Flickr search API can be found  
at: <https://www.flickr.com/services/api/explore/flickr.photos.search>

If you faced any issues related to Mobiquity-specified API key, you can generate your own  
at [https://www.flickr.com/services/api/misc.api\\_keys.html](https://www.flickr.com/services/api/misc.api_keys.html)