

# Multitudes Software Internship Tech Challenge

Due date: 12pm Tuesday 12 October

### Objective

We want to build a command-line interface (CLI) to extract data from Github. We are interested in looking at the number of open pull requests on Github repositories. The interface will need to take in a repository owner and repository name, then compute the number of currently **open** pull requests.

This CLI can be in any language of your choosing (ideally javascript, Java, C#, Go or python), however, you will need to give instructions on how to install/build and run the program.

### Requirements

- 1. Create a CLI which takes in a user input of repository name and owner
- 2. Query the Github REST API's <u>pull request endpoint</u> to retrieve a list of **open** pull requests for the given repository
- 3. Count the number of open pull requests and display this to the user
- 4. Include README.md file explaining how to install and run your solution
- 5. Have fun!

For example, the CLI run may look a little something like:

```
$ Welcome to Multitudes CLI! Let's process some Github Data!
$ Who is the repo owner?
    microsoft
$ What is the repo name?
    TypeScript
$ Excellent! Querying microsoft/Typescript for open PRs!
$ # of open PRs: 265
$ Bye!
```

In this instance, it would have queried the microsoft/Typescript repo.



# Evaluating your solution

Your solution will be evaluated against the following criteria:

- 1. We can use the CLI to get the correct number of open pull requests
- 2. We are able to easily build and run your code. Code will be tested on macOS with any necessary runtimes installed.
- 3. Code quality is your code clean, simple and commented where necessary?

#### What we aren't assessing

- Choosing a language you are free to choose whichever language you prefer as long as it can run a CLI (and you give us instructions to do so)
- The way in which you use git to develop code (how you commit code etc.).
- Starting from scratch vs. using existing libraries you are free to use any libraries, templates or codebases that you see fit.

### Important Things to Note

- You should use open source repositories (i.e. public) for testing as they do not require
  any authentication to retrieve data via the GitHub API (although you can implement the
  auth flow if you would like).
- We are all nice people here so if you need more time or life stuff crops up, please reach out and let us know. We are more than happy to accommodate your needs.
- If you don't understand something or would like something clarified feel free to ask! Not everyone interprets things the same way and we'd be happy to discuss it with you.
- Be careful about the rate limit on the Github API!
- Cute <u>ASCII art</u> is highly encouraged (but not mandatory!)

#### Submission

You can submit in any one of the following ways:

- 1. Link to your public Github repository
- 2. Add <u>kanocarra</u> (Emily's Github profile) as a collaborator to your private Github repository (you can do this after you have finished the project)
- 3. Zip file emailed to <a href="mailto:hiring@multitudes.co">hiring@multitudes.co</a>