Hi Barak,

Thanks for the time today!

These are the details of the small project I talked to you about. The concept is very simple, you'll see. The goal is not to produce a production-grade full-proof project but rather to evaluate your thinking and the way you architect components and then quickly discuss it over the phone. Let me know if you have any questions.

Regards,

David

Jit Backend Challenge

The main goal of this exercise is to evaluate your thinking when you write code, the things that are important to you, the way you architect the various parts of the code, how clean is your coding, and how you would test it... but first and foremost, the code needs to work!

Background

You are a good developer who likes to experiment with new projects. One of the most prolific sources you like to explore every day is Github and its trending repositories (there is no official API though, but there are some existing libraries/packages you can use). However, you are also security-aware and want to make sure you only check secured projects.

In order to identify those projects, you want to write a simple command-line interface (CLI) that retrieves the n top trending repositories from Github, and in addition to some basic information, you would also like to get some risk score. This score would currently only be based on a very simple algorithm (how many unused packages are defined for the Github project), but you are planning to write a more elaborate one in the future.

Implementation

You can write the CLI in the language you want, with a preference for either nodejs or python. The CLI takes as input the number of repositories to fetch and should return for each one of them some basic information (i.e. owner, URL) as well as the Security Score you will need to calculate.

In order to check the unused packages, you don't need to write the logic by yourself, you can use an existing package - i.e. `dependency-check` (nodejs) or `pip-check-reqs` (python, only works on projects with requirements.txt). Since usually those packages are only supporting one language, limit the Github fetch to a specific language (i.e. javascript or python).
This project should not take more than 2-3 hours to complete.

Bonus

There are a few optional features you can work on if you have some time:

- Encapsulate the logic that checks for unused packages inside a container
- Support more languages
- Write a more elaborate algorithm to calculate the score by including also a SAST scanner
- Wrap this service in a web service with a REST endpoint