



Full stack SW engineer – Interview task

Thank you for taking the time to do and complete this assignment.

This assignment is part of our Candidate Selection Process, and will be used, among other criterias, to determine the fit to the position of Full Stack Developer.

For the coding exercises, please share the code in Git and give us access.

Description and informative data can be added as comments in the code, or as a separated document which needs to be shared with us as well.

Please read the following task description, and evaluate the time needed to complete it. You should first reply with the estimation you have, and the timeline you think you will be able to hand in the task.

If you will need additional time, please let us know and we will discuss a new timeline.

Once the exercise is handed, we will schedule a review meeting.

After you will hand in the task, we will have face to face meeting in order to review it and deep dive into the results.

The following task was defined for you by Product Manager and R&D manager

Task:

The user needs to see github data for specific profiles.

In order to achieve this you will need to develop the following :

Data Collection :

1. Create a data retrieval module which uses github api. This module should get a name of github repository and returns the following data : ID, Stars, Owner, Description, Forks, Languages, number of forks, topics.

*NOTE: If the search result is several repositories, take the first one.

You should find how to use Github API

(<https://docs.github.com/en/rest?apiVersion=2022-11-28>)



2. Data should be kept in a database.
3. The module should have a specific API, which can be used in order to trigger the collection of a specific repository's data.
4. In order to write this task you can use either node.js or python based logic with appropriate api.
5. If data transformation logic is needed, please state it in the design document and implement accordingly.

Microservice :

1. Need to create a microservice using node.js , which exposes APIs to get the repository's data according to its name or to its ID.
2. Main APIs -
 - a. Get all repositories (limited field set).
 - b. Get a specific repository, according to name or ID .
3. In the case of getting a name that was not found in the database, you should go and search for it using the data collection layer.
4. In the case of an ID that was not found - return an error.

Web application :

1. Need to create a simple web application, using Angular, in order to expose the data to the user.
2. Main functionalities : Browse, Find.
 - a. Browse: Display a list of all repository objects to the user. Once a repository is selected - present the repository's data to the user.
 - b. Find: A user can look for a specific repository name, using the appropriate API from the microservice. (User will enter name)
3. Data should be retrieved using the api developed in the previous part.
4. Data should be displayed in the most appropriate way according to its type and occurrences.



Tools and technologies :

node.js (with nest.js or express as api framework) , angular, github.

Python can be used also, mainly for data collection.

Database - preferably mongodb.

Deliverables for the task :

1. A short design document, which includes the data design, process and functional design.
2. All code should be shared via git repository.

By performing the assignment described above you acknowledge and agree that:

1. Grading of your submission will be performed by us as we deem fit and at our sole discretion;
2. Your submission, and the grade awarded to it by us, forms only a part of the parameters that we consider when determining your suitability for the position;
3. Performance of the assignment by you and/or our assessment of your submission and other parameters does not in any way constitute an offer of employment or oblige us to invite you to an interview or to consider you for or to offer you the position, all of which are at our sole discretion;
4. The assignment, your submission to the assignment described above, or any part thereof, (e.g., code, questions, comments, suggestions and the like), and all rights, including intellectual property rights in your submission shall belong exclusively to us, and by performing the assignment and making your submission to us you hereby irrevocably and unconditionally transfer and assign to us all such rights in your submission and waive any and all moral rights that you may have in respect thereto; and
5. For the purposes hereof "us", "we" and "our" means Fintech Next Ltd. (d/b/a Entrio).