Assignment for Back-end developer (1/2)

E-mail with context and assignment

Hi there! How are you?

Thank you for you interest in our job opening. To test your technical skills, we'd like to you to complete the below assignment and send back your solution within 24 hours of receiving it.

Once we receive your solution, we'll review it and get back to you within a week. If we like your solution, you will be invited for a VC interview where you can tell us what you did previously (your experience). If you also manage to navigate that interview, we will invite you for a final VC interview where you can tell us who you are (your personality). If all goes well, you will be joining us soon!

The assignment involves creating a backend to manage different equipment of an FPSO (Floating Production, Storage and Offloading). This system will be used for other applications in the organization and we should have APIs with the appropriate HTTP request methods to be able to reuse them. The data should be stored in the database (you can use in-memory database).

Next steps

Our technical team will review the solution, scoring the candidate on tools/frameworks used and conceptual skills demonstrated

Then, our recruiting contacts candidates with a decision for the next round, which will include questions about your approach

Assignment for Back-end developer (2/2)

E-mail with context and assignment

The main functionalities of this software are:

1 – Registering a vessel. The vessel data input is its code, which can't be repeated (return the HTTP code appropriate and an error message if the user tries to register a existing code). For instance, a valid input of a vessel is: "code": "MV102".

2 – Registering a new equipment in a vessel. The data inputs of each equipment are name, code, location and status. Each equipment is associated to a given vessel and has a unique code, which can't be repeated (return the HTTP code appropriate and an error message if the user tries to register a existing code). For each new equipment registered, the equipment status is automatically active. For instance, a valid input of a new equipment related to a vessel "MV102" is:

```
{
        "name": "compressor",
        "code": "5310B9D7",
        "location": "Brazil"
}
```

3 – Setting an equipment's status to inactive. The input data should be one or a list of equipment code.

4 – Returning all active equipment of a vessel

Feel free to use the programming language and tools you would like. Once you're done, please send us a zip file containing all your code and a document explaining step by step the technologies used and how to run your code. We will evaluate:

1 – Best practices on how you design your solution

2 – Unit tests are mandatory

3 – Software engineering principles: API design, separation of concerns and modularity

Thank you for your time and we hope you have fun!

Next steps

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