GastroSmart 3.0
Hiring for Backend Development
March 2024

Introduction to the Task
The task is to see whether you'd be able to fit with the needs of this particular project. The project needs a backend developer with extensive knowledge of latest javascript, websocket and HTTP2 transport technologies.

Given the code found in the node-base repository, which you find in the provided zip file and without using literally any other package than the ones already installed, please consider the following task.

The task
Write a backend service that fetches a cursor for a collection of data with a certain schema that has multiple layers of depth. The service will be consumed on an HTTP2 stream by a browser client. For the purpose of the task you will write a simple consumer client. It only needs to work on the latest version of the Google Chrome and Safari.

The cursor shall be kept open while there's a consumer on its HTTP2 stream and there's more data to be fetched on it. Announcer streams for fetching more data should be made available to load more events, as well as resetting the cursor & changing the sorting order. All changes to the query that need to make another cursor will do so on a brand new stream if necessary but only if necessary.

The stream will only fetch as many documents as the client requests or will provide with a default amount on the initial and subsequently load more calls based on availability. The service shall be written using the existing code base such that it can be consumed from a websocket should the need arise but the main focus shall be its functionality on the HTTP2 transport.

The task shall be written with latest version of javascript in mind on the latest version of node current. The code is expected to be JSDOC commented as much as possible but not written in actual typescript. There should be no build stages.

Service selector and routing shall be made on HTTP2 custom headers and custom methods.

Evaluation Criteria
The evaluation will be made on how clean the code is, how much it is adhering to standards, how well the task was completed, knowledge about the protocols and features of the server and client.

You will find a few bugs in the node-base code. These were purposefully placed. Fixing the bugs and understanding how the existing code works is part of the task. We're evaluating your capability to work in existing large codebases with brand new concepts.

Please send your questions and finished work either through the upwork messaging system or directly to dev@gastro-smart.com
Thank you for your interest and please do let me know if you need help with anything.
Have fun!

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