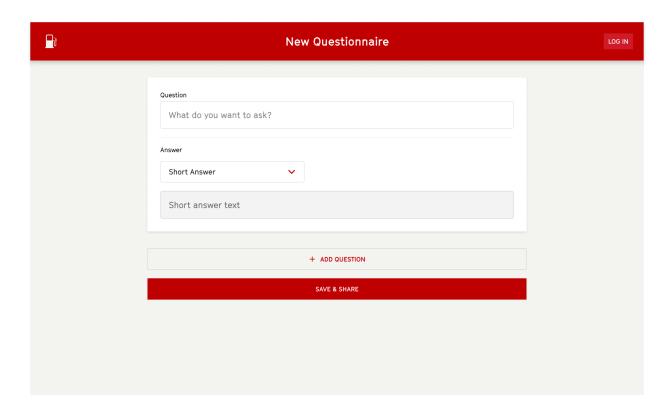


CODE EXERCISE

Position: Senior Backend Engineer

THE BRIEF

Your task is to take this design in Figma and build a GraphQL API using this boilerplate:



The API must provide the following functionality using queries and mutations:

- Add/update a questionnaire containing a title and any number of questions.
- You can delete or re-order any question in the questionnaire.
- Implement only one type of answer, i.e., short answer type.
- You should be able to publish it & get a shareable link.

CODE EXERCISE 1

WHAT WE'RE LOOKING FOR

- A well-designed database & GraphQL schema. You should understand the requirements from the wireframes and build an API schema and supporting data models in PostgreSQL.
- Code organization and variable naming. You should pay extra attention to the naming of variables and functions. You should organize your code based on the separation of concerns.
- **Database Optimisations.** You need to optimize your code for the most efficient storage and retrieval of data from PostgreSQL. This app can be designed in several ways; you should be able to explain your design choices around database schema.
- You need to write tests. Writing meaningful tests to ensure the correctness of APIs schema and behavior of different parts of your code.

WHAT WE'RE NOT LOOKING FOR

- **Don't worry about caching.** You don't need to write code to cache data to improve performance.
- Don't worry about the handling of malicious queries. You don't need to worry about query analysis like depth-limiting or cost-complexity analysis.
- Extensive Documentation. Your code and GraphQL schema should be self-documenting. Don't bother yourself with documenting everything very extensively.
- **Logging.** Don't go crazy about logging everything.

SUBMITTING YOUR SOLUTION

Along with your actual code, put together a short README.md file for your solution that talks about any interesting things you ran into, decisions you made, etc. Think of it as a little postmortem to talk through anything you found notable about the project. You can also use it as a place to explain any "I know this might look weird at first glance but hear me out..." sort of decisions you made.

CODE EXERCISE 2

When you're done, create a private repo on GitHub that just contains your project and invite me to it (I'm theskumar). Also, create an archive ".zip" of your project and send it to us.

Once we've had a chance to review your submission, we'll get back to you with the next steps.

Thank you!

CODE EXERCISE 3