Full Stack Developer Case Study

Oh no! The sales team just closed a deal for a huge new customer. As part of this deal, we're required to stand up a new API endpoint. And the customer is expecting this API to be ready by the end of business today (which is just 4 hours from now)!

Okay, that's a bit ridiculous. But as a startup, we have a lot of constraints on our time and resources, which requires us to take a very pragmatic approach to development. In this exercise, we want you to build a solution based on the requirements below, spending no more than 4 hours on your code. Although this is an exercise, approach it as you would a real-life project at Navix.

You'll then have a one hour meeting with a small group of Navix developers to present your solution. There are no requirements for the presentation, and you don't need to send us any code or commit it anywhere. Just be ready to share your screen when we meet and to walk through your work.

This exercise and presentation will help us assess how you think about problems, write code, adhere to requirements, make trade-offs, and communicate with a team.

Project Requirements

1. You'll create a new API with a single endpoint.
2. Your endpoint will return a list of vehicles, in a format similar to this: https://navixrecruitingcasestudy.blob.core.windows.net/manufacturers/target-format.json
3. The source of your vehicle data is another API, which you'll need call within your application: https://navixrecruitingcasestudy.blob.core.windows.net/manufacturers/vehicle-manufacturers.json
4. Your endpoint needs to allow API consumers to query the underlying vehicle list based on vehicle type, manufacturer ID, or both, returning the transformed vehicle data.

Additional Information

1. Your API does not need any form of authentication.
2. You do not need to write any unit tests.
3. Your code should use C#/.NET.
4. You may use third-party Nuget packages if you'd like.
5. Be sure to think through edge and error cases – data validation, bad requests, etc.

Have fun!