**Task**

The task is to build a web API in C# that allows dealers to manage their car stocks. The application should support the following functions:

1. Add/remove car
2. List cars and stock levels
3. Update car stock level
4. Search car by make and model

Technical requirements:

1. Assume there are multiple dealers that will consume this API. Each dealer cannot access/modify other dealer’s cars or stock. Consider how you will authenticate users to support this, e.g. Cookies or JWT.
2. The API should receive and respond with JSON data.
3. Consider how you will validate request input, as well as handle any errors.
4. For the database, to remove the need for an actual database running on a server and to make it easier for us to check your work, you may use an SQLite database with the database file stored locally.
5. Use Dapper and SQL queries for querying the database so we can see that you know how to work with a database. The actual work you do on the job if hired won’t involve using an ORM.
6. Use Fast-Endpoints as back-end framework: <https://fast-endpoints.com/> This is what we use every day, so it will help you to get familiar with it. If you’ve used ASP.NET Minimal APIs before, you should find it simple to use.

Submitting:

1. Create a readme.md file with information about running your project as well as any relevant details we should know about how your project works.
2. Submit your source code, SQLite database file and readme.md to your Github/Bitbucket public repo and email us back with the link.
3. Alternatively, you may zip your repo and email us the zip file. Do not include project artefacts such as /.vs, /bin and /obj folders as these increase the file size and will also likely cause the email to be lost in junk/spam filters.

Here is a sample car data model. Feel free to modify it to suit your work.

Make: Audi (string)

Model: A4 (string)

Year: 2018 (int)