What I used

In this Project, I am going to list out the technologies, languages and tools that I used to perform the task.

NOTE: I used Local DB to access Data. So make sure you point “MYSQLCONNECTION” in appsettings to use your Local DB or any SQL server you want . Tables are created automatically by EF core when you run the project for the first time.

1: Language Used: C#

2: Developed Web API in .NET Core3.1

3: Used ORM tool Entity Framework Core for DB connectivity.

4: Used Local SQL Server DB for data storage.

5: Used Fluent Validation and Action filters for data validation purpose.

6: Used Auto mapper for mapping objects and simplify the code.

7: X-Unit, MOQ frameworks for Unit testing. And used (EF core in memory DB) for test cases. So it doesn’t actually affect existing database.

8: I have implemented Global Exception handling. So any exceptions will be handled gracefully.

I used inbuilt .NET Core dependency injection instead of AutoFac. As we do not have too many classes.

I did not use MediatR and CQRS pattern on purpose, as for a simple project performing CRUD operations; I do not want to complicate or write un-necessary code, which is of no use.

I wrote necessary test cases where the main crud operations that are performed.

**Project Flow:**

1: Since in the Task description you guys have mentioned to use JSON as input and output formats, so I have created a WEB API project.

2: Whatever the data that is provided as input to the project, will be validated by Fluent validation and action filters, before reaching out the controller, If the data is as expected by the application. Then it reaches out the specific method in controller (TruckServiceController)

3: All the operations have been defined in Service Class. And will get invoked from controller method.