GLOBAL

Devices API

Your task is to develop a REST API capable of persisting and managing device resources.

Device Domain

- Id
- Name
- Brand
- State (available, in-use, inactive)
- Creation time

Supported Functionalities

- Create a new device.
- Fully and/or partially update an existing device.
- Fetch a single device.
- Fetch all devices.
- Fetch devices by brand.
- Fetch devices by state.
- Delete a single device.

Domain Validations

- Creation time cannot be updated.
- Name and brand properties cannot be updated if the device is in use.
- In use devices cannot be deleted.

Acceptance Criteria

- The application should compile and run successfully.
- The application must contain a reasonable test coverage.
- The API must be documented.
- The application must be capable of persisting resources on a database of your choice, excluding in-memory.
- The application must be containerized.
- The project must be delivered as a git repository.
- The project includes a README file with all project related/necessary documentation/instructions.

Requirements

- C# 13+

- .NET 9+

Tips

- Make sure to read all requirements, criteria and evaluation items before starting.
- Try to provide granular changes (e.g. commits) with comments and explanations on what is being changed.
- Provide additional comments of future improvements and possible missing/malfunctioning parts of your implementation.
- If you have questions or any additional information is required, don't hesitate to ask us!

Evaluation

The solution will be evaluated as per the following criteria:

- Implementation of all acceptance criteria.
- Usage of well-known best practices and design patterns.
- Code efficiency and general performance.
- Additional features and production readiness of the overall solution.

Final Remarks

- The project can either be delivered directly via email (zip file), or any remote repository provider such as GitHub, GitLab, etc. Just remember the deliverable must be a git repository.
- Make sure no references to the 1GLOBAL brand are present in the project, especially if hosted on a public remote repository.
- The project must be written in English for any provided documentation and/or free text included in the solution.

Good Luck!