

# BACKEND CODING TASK

## Service Manual

# Coding Task background

- We are building an application for our client for making records of factory device maintenance tasks.
- The factory has several targets (= devices) that the maintenance tasks relate to.
- All maintenance tasks are categorized by their severity: *critical*, *important* and *unimportant*
- A maintenance task knows into which target it is related to, the time the task was registered, description about the maintenance task, severity and the status of the task (open/closed).
- The maintenance tasks are presented firstly by their severity and secondly based on their registration time.
- The user should also be able to filter the maintenance tasks based on the target.

# Assignment: Implement a REST API for registering and querying maintenance tasks

- Implement a REST API for the following use cases:
  - Adding, querying, modifying and deleting maintenance tasks
  - Listing all maintenance tasks and filtering a list of maintenance tasks based on the target/device
- You can get a base project for the task for either ASP.NET Core or Spring Boot from Etteplan's GitHub:
  - <https://github.com/etteplanmore/servicemanual-csharp>
  - <https://github.com/etteplanmore/servicemanual-java>
  - The base projects contain a ready-made REST API for retrieving maintenance target (= device) information.
- You can freely choose what database you want to use for storing data.
- There's a CSV-file with some seed data in the repos but you can also create your own data/data structure.
- You do not need to take authentication and authorization into consideration in your implementation.
- Please also provide a README-file with instructions on how to start your application and on how to use your API (e.g. PostMan-queries, Swagger documentation etc.).

# Delivering your task implementation

- We recommend using a GitHub-account for sharing your code.
- It is possible to use other ways of sharing your code, if GitHub is not an option.

**Good luck!**