

# Drive.

**Software Engineer Exercise**

Oct 2023

# Nevo Test Drive Service

The objective is to build a service that will provide on-demand scheduling of EV test drives to customers.

**Part 1:** The backend service will provide 2 functions:

A: Request the availability of a vehicle for a given datetime and location

- Vehicle of the given type must be available on the requested day at the requested location
- Vehicle must not already be scheduled for a test drive at those dates
- Test drive requests must be distributed evenly across available vehicles

## Request Example

location: Dublin  
vehicleType: Volkswagen\_ID4  
startDateTime: 2023-11-01T09:00:00Z  
durationMins: 45

B: Schedule a test drive for a vehicle and customer

- Vehicle slot will be reserved if available

## Request Example

vehicleId: 017  
startDateTime: 2023-11-01T09:00:00Z  
durationMins: 45  
customerName: John Smith  
customerPhone: +353851234567  
customerEmail: John@Smith.com

**Part 2:** Provide a simple front-end UI component that uses the above services to allow a user to book a test drive

- Vehicle type is configurable in the component when embedding on the page (i.e. the user doesn't need to select it)
- Bookings are available for up to 14 days in the future

**Drive.**

# Implementation Notes

- Any appropriate communication technology for other services can be used.
- Third-party packages can be used where appropriate.
- Example vehicle details are provided as a JSON file, data persistence can also be in JSON files. You are free to change the structure of these files if it makes it easier for your services.
- Timezones can remain as UTC
- You do not need to host the services or front-end, but please provide instructions on how we can test your solution locally
- Please prepare your solution as a project in GitHub. When you're ready, please invite the GitHub user `DriveInc-IE` to collaborate on your project and drop us an email so we can take a look