Vehicle clustering API

You are working on a product capable of dynamically clustering (thus aggregating) vehicle data (location, availability, pricing information). The primary goal of the service is to provide data for the visualisation of vehicle clusters on a map. Filtering vehicles (e.g., based on availability/location/other attributes) should be possible by passing parameters to the service. Design the API and implement a service that processes data from downstream services and makes it available to a client.

Considerations

- The service should implement the business logic and perform data processing/ transformation
- The service should expose the data to the client in an easily consumable/usable format
- The service should be able to filter data based on different attributes
- The code should be produced and verified up to production standards
- The service should expose basic metrics that enable monitoring & alerting
- The service should be easily testable on the local machine (including manual tests)
- [Bonus] Automation should be in place to support continuous delivery (placeholders are fine, making actual production deployments are not necessary).
- *[Bonus]* performance optimisation 🙂
- *[Bonus]* The service should be self-documenting, enabling developers to explore the API.

For obtaining vehicle data please use one of our publicly available API endpoints based on the GBFS standard: https://data-sharing.tier-services.io/tier_paris/gbfs/2.2

- The final deliverable should be a link to an accessible Git repository containing all of the code necessary to build and run the app, along with a README with relevant information.
- Please do not spend more than 3-4 hours on the implementation at home!
- Good luck and have fun!

Remarks

- We love unit and functional testing
- We care about simplicity & clarity, not the framework