Coding challenge

Background

We are a new eCommerce portal. In our database, we are starting to store products and carts (1 cart: N products) and we will provide interfaces to manage them.

We need to provide the below capabilities:

- get all products
- get all products of a single cart
- add a product to a cart

Challenge

Provide interface specifications for the above functions / capabilities.

Provide implementation of the formulated specifications.

You can assume the products as a static data structure that is initialised when your program runs.

Language

Java

Deliverables

Interface specifications, the source files and any test code – preferably in a github / bitbucket public repo.

The solution will be evaluated based on the following criteria:

* Correctness

* Code structure

* Data structures

* Extensibility

* Maintainability

* Test coverage

* Performance