

Coding challenge task

METRO Markets Live-Coding Task

Your task is to create a CLI script which will read JSON based data from a specific endpoint via HTTP. The script will contain several sub-commands to filter and output the loaded data. The commands should be:

- Find objects by price range (given `price_from` and `price_to` as arguments).
- Find objects by a certain sub-object definition.

All given sub-commands should only output quantity of objects that are in stock.

For example:

```
php run.php count_by_price_range 12.00 145.80
php run.php count_by_vendor_id 42
```

There are few technical requirements:

- Use PHP or JVM languages.
- Use any framework or do not use framework at all.
- Implement the `ReaderInterface` for fetching the JSON HTTP endpoint and thus work with the `OfferCollectionInterface` and `OfferInterface` on the loaded data (see below). Feel free to adjust or extend interfaces if needed.
- Write at least one unit test for a small component of the script.
- Implement logging.

Appendix

List of interfaces you should implement (example in PHP):

```

<?php

/**
 * The interface provides the contract for different readers
 * E.g. it can be XML/JSON Remote Endpoint, or CSV/JSON/XML local files
 */
interface ReaderInterface {
    /**
     * Read in incoming data and parse to objects
     */
    public function read(string $input): OfferCollectionInterface;
}

/**
 * Interface of Data Transfer Object, that represents external JSON data
 */
interface OfferInterface {}

/**
 * Interface for The Collection class that contains Offers
 */
interface OfferCollectionInterface {
    public function get(int $index): OfferInterface;

    public function getIterator(): Iterator;
}

```

Example of JSON payload:

```
[
  {
    "offerId": 123,
    "productTitle": "Coffee machine",
    "vendorId": 35,
    "price": 390.4
  },
  {
    "offerId": 124,
    "productTitle": "Napkins",
    "vendorId": 35,
    "price": 15.5
  },
  {
    "offerId": 125,
    "productTitle": "Chair",
    "vendorId": 84,
    "price": 230.0
  }
]
```