

## Bullish - Java Backend Technical Assessment

We are building the Java back-end of a web-based electronics store's checkout system. From the requirements below develop a set of RESTful endpoints and their implementation.

Usage of a framework such as Micronaut or Spring Boot is encouraged but not mandatory - if you feel more comfortable using something else, then please do so.

Persistence should be achieved either through an In-memory DB or Java data structures – in either case being sure to demonstrate an understanding of safe concurrent usage.

## Electronic Store's Requirements

### Admin User Operations

- Create a new product
- Remove a product
- Add discount deals for products (Example: Buy 1 get 50% off the second)

### Customer Operations

- Add and remove products to and from a basket
- Calculate a receipt of items, including all purchases, deals applied and total price

## Your Submission

- Everything should be tested with automated tests. If any requirement is not satisfied, a test should fail
- Include this document in your repo
- There should be one documented command to start the app
- There should be one documented command to run the tests
- Optimise for code clarity instead of performance
- Push your code to a publicly available git repository and provide a link (github.com is our preferred.)

### Out of scope

- Logging
- Continuous Integration
- Deployment
- Metrics

**Any further questions, please feel free to contact us for clarification.**

**HINT: If you do well in the assignment then your next round will be based on adding features to it, so design your application to be easy to extend.**