

Trafilea | Tech Challenge

Introduction

A company is building an e-commerce platform for their coffee shop to sell products online and needs to build a RESTful API to handle the user cart products and calculate the total and discount of the order.

Functional requirements

The API needs the following operations

- Create a cart
- Add products to a cart
- Modify the quantity for a specific product in the cart
- Create an order from the cart

Special rules

- If you buy two or more products with category Coffee, then you receive one extra for free
- If you buy more than 3 products from the Equipment category, then you get free shipping
- If you spend more than 70 dollars on category Accessories then you receive 10% discounts

Model

Feel free to modify the model as it best suits your solution. But it should look something like this

- Product
 - Name: string
 - Category: string [Coffee, Equipment, Accessories]
 - Price: Number
- Cart
 - UserID: string
 - products: List of Product
- Order
 - CartID: string
 - Totals
 - Products: Number
 - Discounts: Number
 - Shipping: Number
 - Order: Number

Requirements for the challenge

- Implement a solution that satisfies the specifications in Functional requirements and Special rules. The API is intended to have one endpoint for each feature so a client can make REST requests.
- Upload your solution to a cloud repository (Github, Bitbucket, Gitlab)
- The solution must be in one of the following languages (Go, Ts, Js, Py, C# or Java)
- Unit tests for the most important methods

Recommendations

- It would be nice to have a Dockerfile to run the project
- There is no need to build a database for this solution as it is only a test, but feel free to implement one if you want
 - In case you don't implement a database, we expect to have the proper implementations to simulate one (local data structure or something)