

# C# assignment - **SnappFood!** Technology Department

Consider a simple online store in which users can buy only one product in each order. This system has the following entities:

## Entities:

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### **Product**

- *Id*
- *Title*
- *InventoryCount*
- *Price*
- *Discount* (percentage)

### **User**

- *Id*
- *Name*
- *Orders*

### **Order**

- *Id*
  - *Product*
  - *CreationDate*
  - *Buyer*
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## Requirement

We need some "Rest API"s as follows:

- Add a product with a predefined *InventoryCount*. *product*'s title must be validated to be less than 40 characters. Also, *product*'s name must be unique.
- Increase *InventoryCount* of a product and update the product.
- Get a *product* by *id* with proper *price* considering current *discount* value.
- "Buy" endpoint that changes the inventory count of a product and adds an order to user orders.
- Write unit tests for two use cases of the application.

## Sidenotes

- You have to use *ef core* as your ORM (code first).
- For the third API you have to apply a caching procedure (any simple caching solution like in memory, ...) to reduce database hits.
- There is no need to use an auth system.
- Both simplicity and cleanliness of your code matters.
- Add some sample users without any orders