**Backend assignment:** A small eCommerce backend platform to manage products, inventory, orders. In this assignment, developer is supposed to develop a RESTful service which takes care of followings:

1. We should be able to perform CRUDs on Product entity (name, price, category etc)
2. We should be able to manage our inventory for all of our products
3. We should be able to place an order of multiple available products

Test plan:

1. I will be adding 2 products (Milk Packet, Salt Bag)
2. I will create following Purchase Order
   1. I have purchased 10qty of Milk Packet (10rs)
   2. I have purchased 100qty of Salt Bag
3. Now, I fetch the current inventory details, which should reflect 10qty of Milk Packet and 100qty of Salt Bag
4. I will create a SaleOrder of 3qty of Milk Packet
5. Now, I fetch the current inventory details, which should reflect 7qty of Milk Packet and 100qty of Salt Bag
6. If I will create a SaleOrder of 160qty of Salt Bag,
   1. It should fail with a reason indicating that stock is not available
7. I will create a SaleOrder of 50qty of Salt Bag and 2qty of Milk Packet
8. Now, I fetch the current inventory details, which should reflect 5qty of Milk Packet and 50qty of Salt Bag
9. Now, I will fetch the list of orders / transactions
   1. It should reflect total 3 orders (1 purchase and 2 sale orders)
10. I will increase the Milk Packet price
11. I will create a SaleOrder of 5qty of Milk Packet
12. Now, I fetch the current inventory details, which should reflect 0qty of Milk Packet and 50qty of Salt Bag
13. Now, I will fetch the list of orders / transactions
    1. It should reflect total 4 orders