

Test Automation Mentoring Program: Advanced

# UNIT TESTING. HOME TASK

Tech stack: .Net

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### INTRODUCTION

You will be working with already implemented Online Store application.

The scope of this task is to implement unit tests as well as to work with Moq library.

## **MARKS**

Points	Mark	Description	
1	0.5	Unsatisfactory	
2	1	Unsatisfactory	
3	1.5	Unsatisfactory	
4	2	Satisfactorily	
5	2.5	Satisfactorily	
6	3	Satisfactorily	
7	3.5	Good	
8	4	Good	
9	4.5	Excellent	
10	5	Excellent	

Home task is DONE if more than (>=) 4 points received.

Mentor can take away points if Mentee's code quality does not meet his/her requirements.

### **DEADLINE**

It's expected that Mentee completes a task in 2 weeks. The deadline can be adjusted in case of:

- 1. Vacation
- 2. Illness
- 3. Business trip
- 4. Exceptional case

Before adjusting the deadline please notify and confirm with Coordinator about changes.

### **PRECONDITION**

1. Mentee imported the Online Store application (attached)

## **TASKS**

## 1. UNIT TESTS

Complexity	Points	Necessity
Basic	5	Task is Mandatory

### **TASK**

Implement unit tests to cover requirements to the imported application:

- 1. User can add products to the shopping cart
- 2. User can remove products from the shopping cart
- 3. User can get the total price of the shopping cart

### **DEFINITION OF DONE**

You have at least 5 unit tests covering the application requirements.

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## 2. MOCKING

Complexity	Points	Necessity
Basic	5	Task is Mandatory

### **TASK**

Using Moq library Implement a unit test to verify OrderService class with its dependency on the IDiscountUtility interface. Use Setup and Verify methods. Test scenario:

- 1. Verify that for a user named John Smith born on "1990/10/10", the amount of the provided discount is equal to 3.
- 2. Verify that the mocked object is called only once.
- 3. Verify that there are no other interactions with the mocked object.

## **DEFINITION OF DONE**

A unit test with mocking dependency is created.

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Ver.	Description of Change	Author	Date
1.0	Initial Version	Artsemi Silivonchyk	Sep-2020

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