

IDENTIFICATION: Brushup#3 / PELE

Overall Purpose

The overall purpose for the group of 'Brush-up' assignments is to be able to quick, safe and sure in creating and using model classes, methods using collections and basic string operations.

The whole group of assignments consist of five steps:

1. [A simple model class with constraints.](#)
2. [More advanced and complex model classes.](#)
3. **Testing a model class. (This Assignment)**
4. Methods deal with collections.
5. String manipulations.

Background Material:

C# note by Per Laursen from 1st semester

(<https://github.com/perl-easj/Teaching-materials/tree/master/CSharpProgramming/Notes>)

Chapters:

prog3-testing.

[Test-Note](#) by Peter Levinsky

This Assignment: Brushup#3

Purpose

The purpose of this assignment is to understand Unit testing and to build up skills in creating Testing.

Mission

You are to

- a. Create a unit test of the MenuItem class from Brushup#2
- b. Add functionality to the MenuCard class
- c. Expand the unit test to cover the MenuCard class

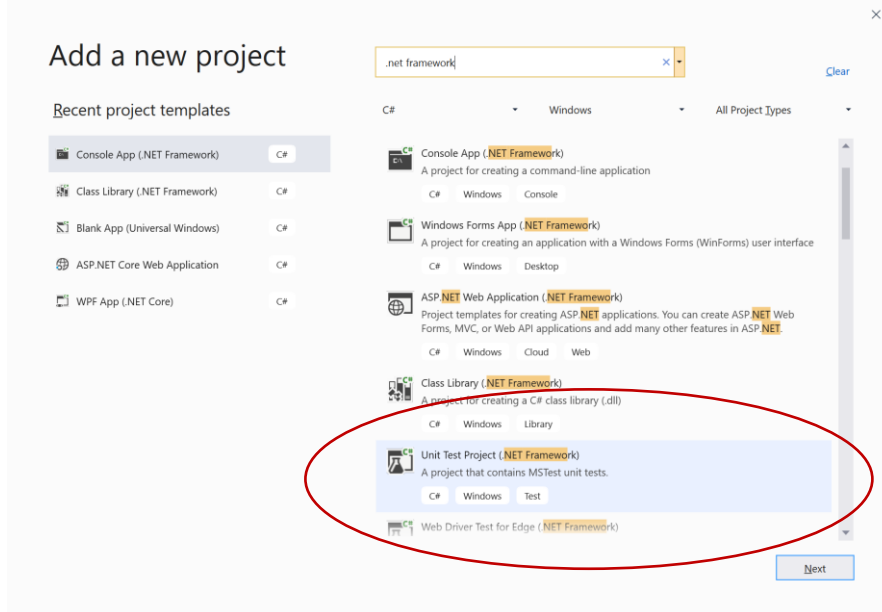
Domain description

In overall, you are to design and implement a unit test.

Assignment 1: Unit Test of the MenuItem class

Step 1:

In your solution, create a new project .Net Framework Unit Test:



Step 2:

Just as for referring to the Drink and Dish classes in the Console Application, you are to add a reference to the RestaurantModelLib.

Step 3:

Create the test methods for all your testcases.

Remember to test all boundaries e.g., the **name** is between 3-60 characters, the **price** is zero or positive.

Assignment 2: Add functionality to the MenuCard class

In the MenuCard class add a method :

```
public List<Drink> GetAll(string theTypeOfDrink)
```

which return all drinks of the specified type.

Assignment 3: Modify your Unit Test

Now extends your Unit Test so it also test this new function / method. You should try with different values as parameters. Make sure your choice have the effect that the method returns and empty list as well as a list of drinks

Assignment 4: How good is your test

In the test-tab choose the analyse code coverage for all test. Explain the result.

Assignment 5: Improve your test

Instead of make an instance of MenuCard in each TestMethod you can create a special method with the annotation [TestInitialize], which in turn is executed before each test.