Introduction to .NET – lab no. 2

Way of working: work in pair with one colleague.

Summary:

Keywords: unit testing, inheritance, collections, repository pattern, virtual, abstract

1. Create a class called **Manager** and expose the following properties:
   1. **Id**

**FirstName**

**LastName**

**StartDate**

**EndDate**

**Salary**

* 1. Expose the following behaviour:

**GetFullName**

**IsActive**

**Salutation(virtual or abstract?) =>** shouldreturn **“Hello” + manager or “Hello” + architect.**

* 1. Create a class called **Architect** and expose properties/behaviour described above.
  2. Using the inheritance principle extract a base class called **Employee**.
  3. Explain the option for Salutation method
  4. Create unit tests to have 100% code coverage for all the classes.

1. Preconditions: Use the Product class from 1st lab.
   1. Create Class ProductRepository
   2. Populate a List of products via constructor(minimum 3 products)
   3. Expose and test the following behaviour
      1. GetPoductByName(string productName)
      2. FindAllProducts()
      3. AddProduct(Product product)
      4. GetProductByPosition(int position)
      5. RemoveProductByName(string productName)
2. **Homework :**

**Use defensive coding techniques to cover the 2nd problem and write the appropriate unit tests**