C# BASICS

Training Assignments

Document Code	25e-BM/HR/HDCV/FSOFT
Version	1.1
Effective Date	20/11/2012

Hanoi, 06/2019

RECORD OF CHANGES

No	Effective Date	Change Description	Reason	Reviewer	Approver
1.	01/Oct/2018	Create new	Draft		
2.	01/Jun/2019	Update template	Fsoft template	DieuNT1	

Contents

CODE:	NPL.M.A005
TYPE:	MEDIUM
LOC:	
DURATION:	180 MINUTES

Assignment 5: Basic Project Practice

Objectives:

- Understand and practice basic of C#.
- Practice code in Visual Studio
- Follow coding convention.

Business needs:

- TBD

Working requirements:

- Working environment: Visual Studio 2013 or higher.
- Practice code in Visual Studio
- Each exercise is one project inside 1 solution.
- Delivery: Source code, deployment and testing, reviewing evident packaged in a compress archive.

Technologies:

The product implements one or more technology:

- C# basic
- Control of Flows

IO:

- Console windows

Technical Requirements:

- Solution name must be **NPL.M.A005.**
- Must create 3 projects corresponding to each exercise:

  NPL.M.A005.Exercise1.

  NPL.M.A005.Exercise2.

  NPL.M.A005.Exercise3.

1. Exercise 1

Write a console application which allows users to input a string as name.

After that, write **NormalizeName(**string name**)** method to implement following requirements:

- Each word starts with upper case character, all following character(s) is lower case.
- Words are separated by one space only.

Example: “ Nguyen van tRan long “ should be format to: “Nguyen Van Tran Long”

Complete your code inside **NPL.M.A005.Exercise1.**
Run and check the result

Estimated time: 60 mins

2. Exercise 2

An email address is composed by 2 parts the local part, and the domain part.

The local-part of the email address may use any of these ASCII characters::

- uppercase and lowercase Latin letters A to Z and a to z;
- digits 0 to 9
- printable characters: !#$%&'*+-/=?^_{|}~
- dot ., provided that it is not the first or last character. It can’t be repeated

The domain part can contain:

- uppercase and lowercase Latin letters A to Z and a to z.
- digits 0 to 9, provided that top-level domain names are not all-numeric;
- the hyphen -, provided that it is not the first or last character. It can be repeated

Write a console application which allows users to input a string as email.

After that, write **IsEmail(**string email**)** method that validate email with above conditions.

Complete your code inside **NPL.M.A005.Exercise2.**
Run and check the result

Estimated time: 60 mins

3. Exercise 3

Write a console application which allows users input list of string as Full Name (First Name and Last Name).

After that, write **SortName(**string[] arr**)** method to implement following requirements:

- You need to sort their Last Name in alphabet.
- If Full Name has only one word, it will be treated as Last Name

Example:

Input: Tony Stark, Steve Rogers, Bruce Banner, Thor, Natasha Romanoff, Clint Barton, James Rhodes, Scott Lang, Doctor Strange, Carol Danvers, Peter Parker

Output: Bruce Banner, Clint Barton, Carol Danvers, Scott Lang, Peter Parker, James Rhodes, Steve Rogers, Natasha Romanoff, Tony Stark, Doctor Strange, Thor

Complete your code inside **NPL.M.A005.Exercise3**.

Update all comments in the project

Run and check the result

Estimated time: 60 mins