

***C# Basics***

**Lab Guides**

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RECORD OF CHANGES

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|  | **CODE: Net.S.L013**  **TYPE: SHORT**  **LOC: 100**  **DURATION: 30 MINUTES** |

# Lab 13: Work With Collections

Objectives:

* Understand collection in C# and Use List with general method.

Prerequisites:

* Download and installs Visual Studio (included .net Framework)

Problem Description:

* Declare new list of products
* Add values into the list
* Get value from the list
* Remove value from the list
* Sort list

Print list Guidelines:

### Step 1: Create project named **CollectionLab** in Visual Studio

### Step 2: Add code to Main method:

static void Main(string[] args)

{

//// Declare new list of string

List<string> listProduct = new List<string>();

//// Add values into the list

listProduct.Add("Dell Latitude E6440");

listProduct.Add("HP Elitebook");

listProduct.Add("Asus X541UA-XX272T");

listProduct.Add("Lenovo Thinkpad X220");

listProduct.Add("Apple Macbook");

//// Gets the number of elements actually contained in the list

Console.WriteLine("List have {0} product(s)", listProduct.Count);

//// Print current list

PrintList(listProduct);

//// Get value by index.

//// Remember that, start posision is rezo (0):

//// First element at position 0

//// Second element at position 1, ....

Console.Write("The third product in the list is: ");

Console.WriteLine(listProduct[2]);

//// Remove an element from the list by passing value

Console.WriteLine("Remove one product Asus X541UA-XX272T from list");

listProduct.Remove("Asus X541UA-XX272T");

PrintList(listProduct);

//// Remove an element from the list by passing possition

Console.WriteLine("Remove product at position 3");

listProduct.RemoveAt(2);

PrintList(listProduct);

//// Sort the list is very simple

Console.WriteLine("Sort the list");

listProduct.Sort();

PrintList(listProduct);

Console.ReadKey();

}

### Step 3: Add method PrintList

static void PrintList(List<string> listProduct)

{

//// Change color text to Magenta

Console.ForegroundColor = ConsoleColor.Magenta;

Console.Write("List product is: ");

//// Print all products in the list

foreach (string product in listProduct)

{

Console.Write("{0}, ", product);

}

Console.WriteLine();

//// Reset color text to default (black)

Console.ResetColor();

}

### Step 4: Run the application

Outputs

