

***C# Basics***

**Lab Guides**

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RECORD OF CHANGES

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|  | **CODE: Net.S.L005**  **TYPE: SHORT**  **LOC: 15**  **DURATION: 10 MINUTES** |

# Lab 5: Work With DateTime Data

Objectives:

* Understand about use of Data time data type in C#.

Prerequisites:

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

Problem Description:

* Write a C# console application to working with date and time.
* Use the DateTime to get current date and time.
* To calculate difference between 2 dates
* To get day of date.

Guidelines:

### Step 1: Create project named DateTime in Visual Studio

### Step 2: Open the **Program.cs** and add new method to get yesterday, get all format of DateTime.

/// <summary>

/// Take yesterday of the date entered.

/// </summary>

/// <returns></returns>

public static DateTime GetYesterday(DateTime dateTime)

{

//// Get yesterday.

return dateTime.AddDays(-1);

}

/// <summary>

/// Get all datetime formats.

/// </summary>

/// <param name="dateTime"></param>

public static void GetAllDateTimeFormat(DateTime dateTime)

{

// Các định dạng date-time được hỗ trợ.

string[] formattedStrings = dateTime.GetDateTimeFormats();

foreach (string format in formattedStrings)

{

Console.WriteLine(format);

}

}

### Step 3: Update Main method

//// Get present from system

System.DateTime now = System.DateTime.Now;

Console.WriteLine("Today is {0}", now.ToLongDateString());

Console.WriteLine("Year: {0}", now.Year);

Console.WriteLine("Month: {0}", now.Month);

Console.WriteLine("Day: {0}", now.Day);

Console.WriteLine("Hour: {0}", now.Hour);

Console.WriteLine("Minute: {0}", now.Minute);

Console.WriteLine("Second: {0}", now.Second);

//// To get month's name, use ToString method

Console.WriteLine("This month is: {0}", now.ToString("MMMM"));

//// To increment or decrement datetime value, use Add method

System.DateTime nextMonth = new System.DateTime(now.Year, now.Month, 1).AddMonths(1);

Console.WriteLine("Fisrt day of next month is {0}", nextMonth.ToLongDateString());

//// Define an uninitialized date.

Console.WriteLine($"Min of date is: {DateTime.MinValue}");

//// Determine a maximum date.

Console.WriteLine($"Max of date is: {DateTime.MaxValue}");

//// Enum {Monday, Tuesday,... Sunday}

DayOfWeek dayOfWeek = now.DayOfWeek;

//// Get day of week.

Console.WriteLine("Day of Week: {0}", dayOfWeek);

//// Get day off year.

Console.WriteLine("Day of Year: {0}", now.DayOfYear);

//// Get yesterday.

Console.WriteLine("Yesterday is: {0}", GetYesterday(now));

//// Get all datetime format.

Console.WriteLine("All datetime formats!");

GetAllDateTimeFormat(now);

//// Keep the console window open in debug mode.

Console.WriteLine("Press any key to exit.");

Console.ReadKey();

### Step 4: Choose the F5 key to run the project.

Outputs

