



## ***C# BASICS***

# **Training Assignments**


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**RECORD OF CHANGES**

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## Assignment 3: DateTime

### Objectives:

- » Understand and practice DateTime of C#.
- » Use formats DateTime and Convert DateTime

### Business needs:

- » TBD

### Prerequisites:

- » Working environment: Visual Studio 2013 or higher.
- » Practice code in Visual Studio
- » Each exercise is one project inside 1 solution.

### Technologies:

The product implements one or more technology:

- » DateTime data type

### IO:

- » Console windows

### Technical Requirements:

- » Solution name must be NPL.M.A003.
- » Must create projects corresponding to each exercise:

**NPL.M.A003.Exercise1.**

**NPL.M.A003.Exercise2.**

**1. Exercise 1: Caculate datetime values****Function Requirement:**

A system A allows employees to submit payment invoices, to post to the browser manager. Every time the employee submits the invoice, a record of the invoice is created in the database. To remind you to manage the invoice approval, the system has the following reminder and operation functions:

- If the record has been submitted 7 days earlier, but has not approved the record, send a reminder notice for the first time.
- If prompted for the first time, but the manager has not approved then after 2 days, reminded the second time.
- If the second reminder, but the manager still hasn't approved, then send a reminder email every 3 days, 4 times, 5 times.
- Only send up to 5 reminders.

**Software requirements:**

Write the console application to make the request as follows:

Input: Allows users to enter 1 day in the format: date / month / year.

Output: Print all dates that will send a reminder notice:

Example: Enter date is 08/01/2019, Print out the day:

1<sup>st</sup> reminder: 15/01/2019

2<sup>nd</sup> reminder: 17/01/2019

3<sup>rd</sup> reminder: 18/01/2019

4<sup>th</sup> reminder: 19/01/2019

5<sup>th</sup> reminder: 20/01/2019

**Technical requirements:**

- Write on console application, comply with Fsoft coding conventions
- Check input data according to date / month / year format. Display format error if entered incorrectly

**Expand the problem:**

In case of day, only working days (from Monday to Friday, excluding Saturday and Sunday). That is, after 7 working days, send a reminder notice for the first time ...

Example: Enter date is 08/01/2019, Print out the day:

1<sup>st</sup> reminder: 17/01/2019

2<sup>nd</sup> reminder: 21/01/2019

3<sup>rd</sup> reminder: 22/01/2019

4<sup>th</sup> reminder: 23/01/2019

5<sup>th</sup> reminder: 24/01/2019

**Estimated time:** 90 mins

## 2. Exercise 2: Convert Datetime

### Function Requirement:

Input data is a multi-line piece of text, each line is an information about creating and editing records:

Example:

“Created at 28/02/2018 10:15:35 AM by Andy.

Updated at 03/03/2018 02:45:10 PM by Mark

Clear name at 02/03/2018 11:34:05 AM by Andy”

Include information:

Include informationThe update time is one of the formats: dd / MM / yyyy or dd / MM / yyyy hh: mm: ss tt or dd / MMM / yyyy

Lines are not saved in the correct order in time. Therefore, it is necessary to standardize by, rearranging the lines in the right order of increasing time.

### Software requirements:

Students write the console application to make the request as follows:

Input: Allows the user to enter multiple lines of text, press Ctrl + Enter to finish typing.

Output: Standardize by, rearranging lines in the right order of increasing time.

### Technical requirements:

- write on console application console application, comply with Fsoft coding conventions

**Estimated time:** 90 mins