

Self-Learning Module 4 (Week 4)

I. Topic: Visual Basic 2010 – Using checked DateTimePicker Control

II. Competency

Understand other different controls to be used in a program.

III. Objectives

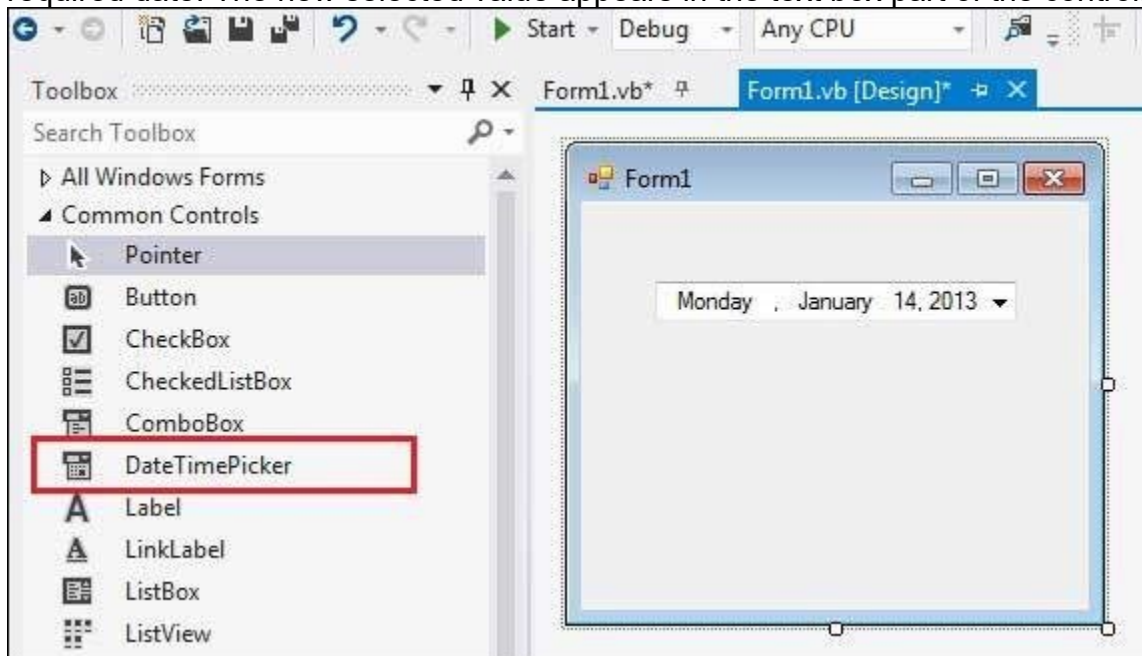
- Use of **DateTimePicker Control** in a program;
- Understand the event and properties of **DateTimePicker Control**;
- Incorporate **DateTimePicker Control** in basic program;

IV. Key Point

The DateTimePicker control allows selecting a date and time by editing the displayed values in the control.

V. Core Content

The DateTimePicker control allows selecting a date and time by editing the displayed values in the control. If you click the arrow in the DateTimePicker control, it displays a month calendar, like a combo box control. The user can make selection by clicking the required date. The new selected value appears in the text box part of the control.



The **MinDate** and the **MaxDate** properties allow you to put limits on the date range.

Properties of the DateTimePicker Control

The following are some of the commonly used properties of the DateTimePicker control

Sr.No.	Property & Description
1	BackColor Gets or sets a value indicating the background color of the DateTimePicker control.

2	BackgroundImage Gets or sets the background image for the control.
3	BackgroundImageLayout Gets or sets the layout of the background image of the DateTimePicker control.
4	CalendarFont Gets or sets the font style applied to the calendar.
5	CalendarForeColor Gets or sets the foreground color of the calendar.
6	CalendarMonthBackground Gets or sets the background color of the calendar month.
7	CalendarTitleBackColor Gets or sets the background color of the calendar title.
8	CalendarTitleForeColor Gets or sets the foreground color of the calendar title.
9	CalendarTrailingForeColor Gets or sets the foreground color of the calendar trailing dates.
10	Checked Gets or sets a value indicating whether the Value property has been set with a valid date/time value and the displayed value is able to be updated.
11	CustomFormat Gets or sets the custom date/time format string.
12	DropDownAlign Gets or sets the alignment of the drop-down calendar on the DateTimePicker control.
13	ForeColor Gets or sets the foreground color of the DateTimePicker control.
14	Format Gets or sets the format of the date and time displayed in the control.
15	MaxDate Gets or sets the maximum date and time that can be selected in the control.
16	MaximumDateTime Gets the maximum date value allowed for the DateTimePicker control.
17	MinDate

	Gets or sets the minimum date and time that can be selected in the control.
18	MinimumDateTime Gets the minimum date value allowed for the DateTimePicker control.
19	PreferredHeight Gets the preferred height of the DateTimePicker control.
20	RightToLeftLayout Gets or sets whether the contents of the DateTimePicker are laid out from right to left.
21	ShowCheckBox Gets or sets a value indicating whether a check box is displayed to the left of the selected date.
22	ShowUpDown Gets or sets a value indicating whether a spin button control (also known as an up-down control) is used to adjust the date/time value.
23	Text Gets or sets the text associated with this control.
24	Value Gets or sets the date/time value assigned to the control.

Methods of the DateTimePicker Control

The following are some of the commonly used methods of the DateTimePicker control –

Sr.No.	Method Name & Description
1	ToString Returns the string representing the control.

Events of the DateTimePicker Control

The following are some of the commonly used events of the DateTimePicker control –

Sr.No.	Event & Description
1	BackColorChanged Occurs when the value of the BackColor property changes.
2	BackgroundImageChanged Occurs when the value of the BackgroundImage property changes.
3	BackgroundImageLayoutChanged Occurs when the value of the BackgroundImageLayout property changes.
4	Click

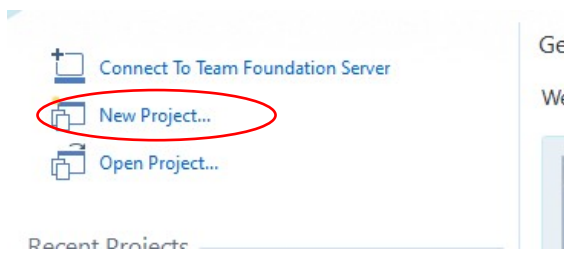
	Occurs when the control is clicked.
5	CloseUp Occurs when the drop-down calendar is dismissed and disappears.
6	DoubleClick Occurs when the control is double-clicked.
7	DragDrop Occurs when a drag-and-drop operation is completed.
8	ForeColorChanged Occurs when the value of the ForeColor property changes.
9	FormatChanged Occurs when the Format property value has changed.
10	MouseClicked Occurs when the control is clicked with the mouse.
11	MouseDoubleClick Occurs when the control is double-clicked with the mouse.
12	PaddingChanged Occurs when the value of the Padding property changes.
13	Paint Occurs when the control is redrawn.
14	RightToLeftLayoutChanged Occurs when the RightToLeftLayout property changes.
15	TextChanged Occurs when the value of the Text property changes.
16	ValueChanged Occurs when the Value property changes.

Example

Step 1: Click Microsoft Visual Studio 2010 icon on your desktop.



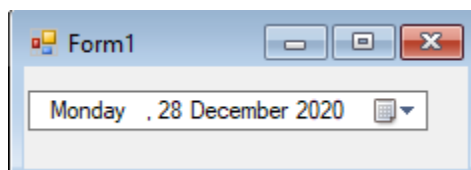
Step 2: Click New Project



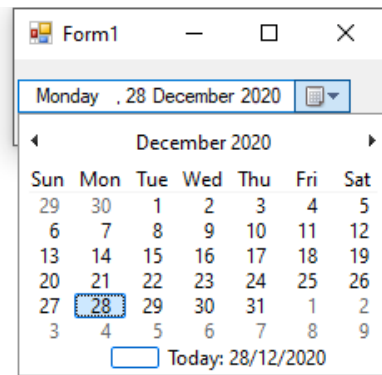
Step 3: Type “datetime” in the name as your filename.



Step 4: On your toolbox look for DateTimePicker and insert it to your form. And it should like this



Try to run the program and you should be able to use the DateTimePicker.

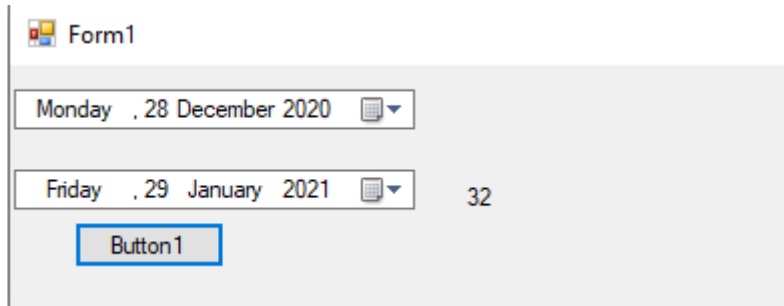


Step 5: Go back to the form and then add another DateTimePicker, a label and a button.

Step6: Double click the button then type the codes below;

```
Dim date1 As DateTime = DateTimePicker1.Value
Dim date2 As DateTime = DateTimePicker2.Value
Dim result As TimeSpan = date2.Subtract(date1)
Dim days As Integer = result.TotalDays
Label1.Text = days
```

Run the program then select a different date on the second DateTimePicker, like the image below



The program will display the number of days from date 1 to date 2.

Explanation:

We declare 2 variables to hold the value of the DateTimePickers just to make it more shorter when it comes to our codes.

```
Dim date1 As DateTime = DateTimePicker1.Value
```

```
Dim date2 As DateTime = DateTimePicker2.Value
```

```
Dim result As TimeSpan = date2.Subtract(date1)
```

This line has the variable that will hold the difference between 2 dates.

Worksheet 1

I. Topic: Use *DateTimePicker* in a program

II. Objectives

- Incorporate *DateTimePicker* to perform math problems.
- Use *DateTimePicker* to initiate an event.

III. Activity 1

Create a program that will display your age on a label using only with one *DateTimePicker*.