

ADVANCE EXCEL

VB.NET – Windows Forms Controls

These are the **basic VB.NET Windows Forms controls**. They are very useful for beginners.

1. Forms

A **Form** is the main window of a VB application. We place controls such as buttons, text boxes and labels on the form.

Important Properties

Property	Meaning
----------	---------

Name	Name of the form
------	------------------

Text	Title displayed on the form
------	-----------------------------

BackColor	Background color
-----------	------------------

Size	Form size
------	-----------

StartPosition	Starting position
---------------	-------------------

Example

```
Public Class Form1
```

```
Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load
```

```
Me.Text = "My First VB Form"
```

```
End Sub
```

```
End Class
```

Output

My First VB Form

Windows Form	

2. Buttons

A **Button** is used to perform an action when the user clicks it.

Common Properties

- Name
- Text
- BackColor
- ForeColor
- Font
- Size

Example

Add a Button named btnShow.

```
Private Sub btnShow_Click(sender As Object, e As EventArgs) Handles btnShow.Click
```

```
    MessageBox.Show("Welcome to VB.NET")
```

```
End Sub
```

Output

When the user clicks **Show**:

Welcome to VB.NET	
OK	

3. Text Boxes

A **TextBox** is used to enter or display text.

For example:

- Name
- Address
- Phone number
- Password
- Marks

Important Properties

Property	Use
Name	Control name
Text	Text inside the box
Multiline	Allows multiple lines
PasswordChar	Hides password characters
ReadOnly	Prevents editing

Example

Suppose the TextBox name is txtName and Button name is btnShow.

```
Private Sub btnShow_Click(sender As Object, e As EventArgs) Handles btnShow.Click  
    MessageBox.Show("Your Name is " & txtName.Text)
```

```
End Sub
```

Output

Input:

Name: Priya

After clicking the button:

Your Name is Priya

4. Labels

A **Label** displays information or instructions on a form.

Examples:

- Name
- Age
- Address
- Enter your details

A Label normally does not accept user input.

Important Properties

- Name
- Text
- Font
- ForeColor
- BackColor
- AutoSize

Example

Label1.Text = "Welcome to G TEC Computer Education"

Output

Welcome to G TEC Computer Education

5. Check Boxes

A **CheckBox** allows the user to select **one or more options**.

Example:

- ☐ MS Word
- ☐ MS Excel
- ☐ PowerPoint
- ☐ Tally

The user can select multiple choices.

Important Property

Checked tells whether the CheckBox is selected.

Example

Suppose:

- chkWord
- chkExcel
- btnSubmit

Private Sub btnSubmit_Click(sender As Object, e As EventArgs) Handles btnSubmit.Click

Dim result As String = ""

If chkWord.Checked Then

result &= "MS Word" & vbCrLf

End If

If chkExcel.Checked Then

result &= "MS Excel" & vbCrLf

End If

MessageBox.Show(result)

End Sub

Output

If both are selected:

MS Word

MS Excel

6. Radio Buttons

A **RadioButton** is used when the user should select **only one option from a group**.

Example:

☐ Male

- o Female
- o Other

If **Male** is selected and the user selects **Female**, Male becomes unselected.

Example

Suppose:

- rdoMale
- rdoFemale
- btnSubmit

Private Sub btnSubmit_Click(sender As Object, e As EventArgs) Handles btnSubmit.Click

If rdoMale.Checked Then

 MessageBox.Show("Male selected")

ElseIf rdoFemale.Checked Then

 MessageBox.Show("Female selected")

End If

End Sub

Output

Female selected

CheckBox vs RadioButton

CheckBox

Multiple options can be selected Normally one option is selected

Used for independent choices

Example: Courses

RadioButton

Used for one choice from a group

Example: Gender

7. Menus

A **Menu** provides a list of commands that users can select.

Example:

File

- |—— New
- |—— Open
- |—— Save
- |—— Exit

Edit

- |—— Cut
- |—— Copy
- |—— Paste

In Windows Forms, the **MenuStrip** control is commonly used.

Creating a Menu

1. Open the Windows Form.
2. Select **MenuStrip** from the Toolbox.
3. Add menu items such as:
 - File
 - Edit
 - Help
4. Add submenu items.

Example – Exit Menu

Suppose the menu item is named ExitToolStripMenuItem.

Private Sub ExitToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles ExitToolStripMenuItem.Click

Application.Exit()

End Sub

When the user selects:

File → Exit

the application closes.

Complete Simple VB Form Example

Controls

Name: [_____]

Age: [_____]

☐ MS Word

☐ MS Excel

Gender: ☐ Male ☐ Female

[SUBMIT]

Button Code

Private Sub btnSubmit_Click(sender As Object, e As EventArgs) Handles btnSubmit.Click

Dim name As String = txtName.Text

Dim message As String = "Name: " & name & vbCrLf

If chkWord.Checked Then

message &= "MS Word selected" & vbCrLf

End If

If chkExcel.Checked Then

message &= "MS Excel selected" & vbCrLf

End If

If rdoMale.Checked Then

message &= "Gender: Male"

```
ElseIf rdoFemale.Checked Then  
    message &= "Gender: Female"  
End If
```

```
MessageBox.Show(message)
```

End Sub

Sample Output

If the user enters **Priya**, selects **MS Word** and **Female**:



Name: Priya

MS Word selected

Gender: Female

OK

Quick Revision

Form → Main window

Button → Performs an action

TextBox → Accepts text/input

Label → Displays text

CheckBox → Select multiple options

RadioButton → Select one option

MenuStrip → Provides commands/options

Form → Main window

VB.NET Form – Simple Notes

Form → Main window

A **Form** is the main window or screen of a VB.NET Windows application. It is the place where we add and arrange different controls.

Example

Student Registration	
Name: [_____]	
Age: [_____]	
Gender: ☐ Male ☐ Female	
[Submit]	

Here, the entire window is the **Form**.

Common Form Properties

Property	Meaning
Name	Name of the Form
Text	Title of the Form
Size	Width and height
BackColor	Background color
ForeColor	Text color
Font	Font style and size
StartPosition	Starting position of Form
FormBorderStyle	Form border style
MaximizeBox	Enable/disable maximize
MinimizeBox	Enable/disable minimize

Simple VB Code

```
Public Class Form1
```

```
Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load
```

```
Me.Text = "Student Registration"
```

```
Me.BackColor = Color.LightBlue
```

```
End Sub
```

```
End Class
```

Output

When the program runs, a window appears with the title:

Student Registration

and a light-blue background.

Important Point

A **Form** is the **container** for other controls such as:

- Button
- TextBox
- Label
- CheckBox
- RadioButton
- ComboBox
- PictureBox
- MenuStrip

Easy to remember:

👉 **Form = Main Window of the VB application**

Name Name of the Form

Text Title of the Form

Size Width and height

BackColor Background color

ForeColor Text color

Font Font style and size

StartPosition Starting position of Form

FormBorderStyle Form border style

MaximizeBox Enable/disable maximize

MinimizeBox Enable/disable minimize....more coding

Yes. Here are **more VB.NET Form properties with coding + output**, in a simple student-friendly format.

VB.NET Form Properties – More Coding

1. Name – Name of the Form

Public Class Form1

```
Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load
    Me.Name = "StudentForm"
End Sub
```

End Class

Output:

The Form's internal name is StudentForm.

2. Text – Form Title

```
Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load
    Me.Text = "Student Registration"
End Sub
```

Output:

Student Registration	
Windows Form	

3. Size – Width and Height

Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load

Me.Size = New Size(600, 400)

End Sub

Output:

The Form becomes **600 pixels wide** and **400 pixels high**.

4. BackColor – Background Color

Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load

Me.BackColor = Color.LightBlue

End Sub

Output:

The Form background becomes **Light Blue**.

5. ForeColor – Text Color

Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load

Me.ForeColor = Color.Red

End Sub

Output:

Text displayed on the Form uses the **red** foreground color where the control inherits it.

6. Font – Font Style and Size

Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load

Me.Font = New Font("Arial", 14, FontStyle.Bold)

End Sub

Output:

The Form's inherited text font becomes **Arial, 14, Bold**.

7. StartPosition – Form Starting Position

Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load

Me.StartPosition = FormStartPosition.CenterScreen

End Sub

Output:

The Form opens in the **center of the screen**.

Other options:

FormStartPosition.CenterScreen

FormStartPosition.CenterParent

FormStartPosition.Manual

FormStartPosition.WindowsDefaultLocation

8. FormBorderStyle – Border Style

Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load

Me.FormBorderStyle = FormBorderStyle.FixedSingle

End Sub

Output:

The Form gets a fixed-size border and cannot normally be resized by dragging the border.

Common values:

FormBorderStyle.FixedSingle

FormBorderStyle.FixedDialog

FormBorderStyle.Sizable

FormBorderStyle.None

9. MaximizeBox – Enable/Disable Maximize

Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load

Me.MaximizeBox = False

End Sub

Output:

The **Maximize** button is disabled.

To enable it:

```
Me.MaximizeBox = True
```

10. MinimizeBox – Enable/Disable Minimize

Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load

```
Me.MinimizeBox = False
```

End Sub

Output:

The **Minimize** button is disabled.

To enable it:

```
Me.MinimizeBox = True
```

More Form Properties

11. Opacity – Form Transparency

Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load

```
Me.Opacity = 0.8
```

End Sub

Output:

The Form becomes slightly transparent.

1.0 = completely visible

0.5 = 50% transparency

12. ControlBox – Control Form Buttons

Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load

```
Me.ControlBox = False
```

End Sub

Output:

The Form's control buttons such as close are hidden/disabled from the title bar.

13. ShowInTaskbar

Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load

Me.ShowInTaskbar = False

End Sub

Output:

The Form does not appear as a normal application button in the Windows taskbar.

14. TopMost

Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load

Me.TopMost = True

End Sub

Output:

The Form stays above other normal windows.

15. Cursor

Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load

Me.Cursor = Cursors.Hand

End Sub

Output:

The mouse pointer changes to a **hand cursor** when it is over the Form.

16. Change Form Title Using a Button

Suppose the button is called btnChange.

Private Sub btnChange_Click(sender As Object, e As EventArgs) Handles btnChange.Click

Me.Text = "Welcome to VB.NET"

End Sub

Output

Before clicking:

Form1

After clicking:

Welcome to VB.NET

17. Close Form Using Button

Private Sub btnClose_Click(sender As Object, e As EventArgs) Handles btnClose.Click

Me.Close()

End Sub

Output

When the user clicks **Close**, the current Form closes.

18. Change Form Background Using Button

Private Sub btnColor_Click(sender As Object, e As EventArgs) Handles btnColor.Click

Me.BackColor = Color.Yellow

End Sub

Output

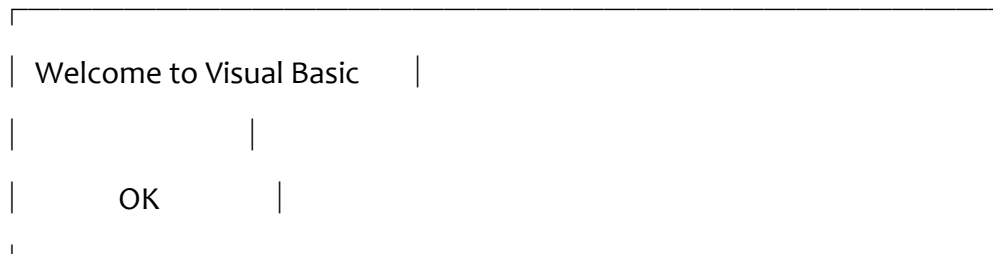
Clicking the button changes the Form background to **Yellow**.

19. Show Message Box

Private Sub btnMessage_Click(sender As Object, e As EventArgs) Handles btnMessage.Click

MessageBox.Show("Welcome to Visual Basic")

End Sub

Output

The screenshot shows a standard Windows message box. The title bar is not visible, but the text inside reads "Welcome to Visual Basic". At the bottom center, there is a single button labeled "OK". The message box has a thin border and a small icon in the top-left corner.

20. Complete Form Coding Example

Public Class Form1

Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load

Me.Text = "Student Registration"

Me.Size = New Size(600, 400)

Me.BackColor = Color.LightBlue

Me.ForeColor = Color.DarkBlue

Me.Font = New Font("Arial", 12, FontStyle.Bold)

Me.StartPosition = FormStartPosition.CenterScreen

Me.FormBorderStyle = FormBorderStyle.FixedSingle

Me.MaximizeBox = False

Me.MinimizeBox = True

End Sub

Private Sub btnWelcome_Click(sender As Object, e As EventArgs) Handles btnWelcome.Click

MessageBox.Show("Welcome to Student Registration")

End Sub

Private Sub btnClose_Click(sender As Object, e As EventArgs) Handles btnClose.Click

Me.Close()

End Sub

End Class

Output

| Student Registration _ □ X |

STUDENT REGISTRATION	
[Welcome] [Close]	

Easy Revision

Property	Purpose
Name	Form name
Text	Form title
Size	Form size
BackColor	Background color
ForeColor	Text color
Font	Font style
StartPosition	Starting location
FormBorderStyle	Border type
MaximizeBox	Maximize button
MinimizeBox	Minimize button
Opacity	Transparency
ControlBox	Control buttons
TopMost	Keep Form on top
Cursor	Mouse pointer
ShowInTaskbar	Taskbar visibility

