Installing SharpDevelop's Free Visual Basic.NET Compiler

BASIC (Beginner's All-purpose Symbolic Instruction Code) is a language designed to be easy for new programmers to use. To improve it, Microsoft wrote Visual Basic (VB), which provides a simple interface for making graphical user interfaces (GUIs). Recently, Microsoft developed a new version of Visual Basic, called Visual Basic.NET (not a URL, .NET is just the release of Visual Basic), because it is revamped for more powerful, especially Internet, use. The syntax is slightly different than for the original VB, and the language is much more powerful. However, if you know the old VB, you should have no problem using VB.NET. Note that Visual Basic generally runs only on Windows (I think Mac users are out of luck).

Since Microsoft Visual Studio, Microsoft's compiler, is quite expensive, I direct you to SharpDevelop's free open-source VB.NET compiler.

Don't be scared if the interface is overwhelming at first, it will all make sense in time. Post to the forum or Google Group if you have questions or comments (tpprogrammers.net, click on Forum)!

Note: multiple times during this process you will be asked to run or download a .exe file (for Windows). Don't worry about the warning, these sites all are credible.

Downloading SharpDevelop

1. Go to http://sourceforge.net/projects/sharpdevelop/
2. Click the big button that says Download SharpDevelop
3. Click on the Download button to the right of SharpDevelop 2.x (or in the future, it may be 3.x or even greater, but download the latest version)
4. Scroll down and click on the link that says SharpDevelop_2.2.1.2648_Setup.msi (or whatever the version is, but it is important to download the .msi file)
5. Open it and follow installation instructions onscreen
6. Time to start some serious coding!

Getting Started with SharpDevelop

SharpDevelop is also a C# and other languages compiler. If you know the others, great. If not, stick to VB.NET.

1. Open SharpDevelop (look in All Programs)
2. Choose File > New > Solution
3. Click the + on VBNet folder on the left
4. Click on Windows Applications
5. Then select Windows Application in the right pane
6. Fill out the name, project name, and location boxes at the bottom of the dialog.
7. Click create.
8. Now you can switch between source and design view by clicking the tabs at the bottom of the main pane. In Design view, you can add components by going View > Tools. You can view object properties by going View > Properties.
9. The syntax looks slightly different (and more scary), your program initially might look like:

```
'
```

```
' Created by SharpDevelop.
' User: Jacob
' Date: 9/25/2007
' Time: 3:58 PM
'
' To change this template use Tools | Options | Coding | Edit Standard
Headers.
'
Public Partial Class MainForm
      Public Sub New()
            ' The Me.InitializeComponent call is required for Windows
Forms designer support.
            Me.InitializeComponent()

            '
            ' TODO : Add constructor code after InitializeComponents
            '
      End Sub

      Sub MainFormLoad(ByVal sender As Object, ByVal e As EventArgs)
            'code here runs on load
      End Sub

End Class
```

10. Forget the `(ByVal sender As Object, ByVal e As EventArgs)` part for now in all your Subroutines (Sub). Place code that you want to execute on the loading of the program in the spot with the comment that says `'code here runs on load` (comments in VB are denoted by ', a single quote. These are portions of the code that are not executed but just exist for clarification).
11. When you create a button named button1 (VB is case-insensitive), you can execute code on click by adding:

```
Sub Button1Click(ByVal sender As Object, ByVal e As EventArgs)
      'code here runs when Button1 is clicked
End Sub
```

This automatically appears when you double-click on the button in design view (I think)

Thus, code that changes the text of Label1 to "blah" when you click on button1 would be:

```
Public Partial Class MainForm
      Public Sub New()
            ' The Me.InitializeComponent call is required for Windows
Forms designer support.
            Me.InitializeComponent()

            '
            ' TODO : Add constructor code after InitializeComponents
            '
      End Sub

      Sub MainFormLoad(ByVal sender As Object, ByVal e As EventArgs)
            'code here runs on load
      End Sub

      Sub Button1Click(ByVal sender As Object, ByVal e As EventArgs)
            label1.Text="blah"
      End Sub
End Class
```

12. Yay! You are programming VB.NET!