

Chapter 1: First Program in VB.NET

Chapter Summary

In this chapter, a demonstration of writing first program is made. The purpose of these programs is to have something done for us by the VB.NET program.

We will create two applications to get started with programming. First application will be named HelloWorldGUI and second will be HelloWorldConsole.

Note: *GUI stands for Graphical User Interface – Used to specify an Application with forms and buttons. While Console Application is text based application and it works in command prompt.*

HelloWorldGUI:

1. Open Visual Basic IDE.
2. **File > New Project (Ctrl + N)** and Select **Windows Forms Application**

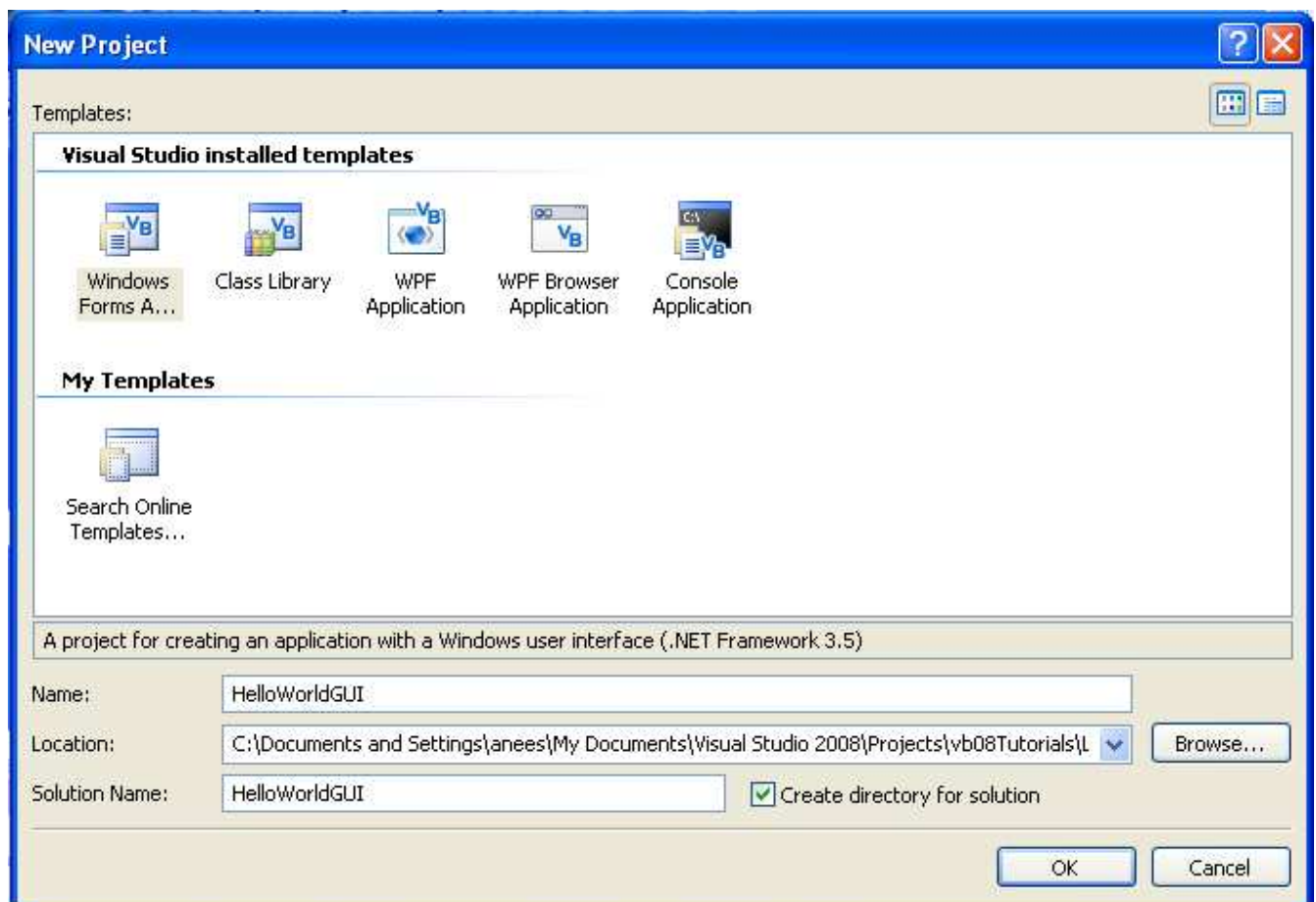
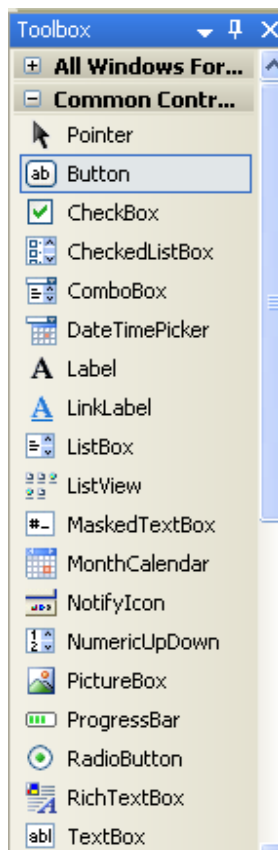


Figure 1: New Project Window

3. In Name box, write: **HelloWorldGUI**. Use Browse button to select folder location for this Application and press *OK*.
4. A new application will be created and Form will appear. Drag and drop the button from the toolbox on the form.

**Figure 2: Toolbox Window**

5. Select the form and change **Text** property of the button to **HWGUI**.

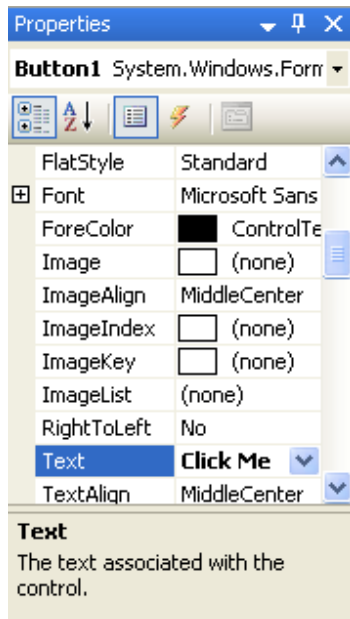


Figure 3: Property Window

6. Select the button and change **Text** property of the button to **Click Me!**. Double click the button to open code page and Add the following line.

```
MsgBox("Hello World! GUI")
```

7. To run the code, press **F5** or go to **Debug > Start Debugging**

Note: A program has 3 states i.e., **Design, Pause and Runtime**. In **Design time**, program interface is designed, properties of controls are adjusted and coding is done. In **Pause time**, program get freeze. All active variables remain in memory. **Debugging or code modification is done in this state**. In **Runtime**, program is ready to take input, execute command and gives the result.

8. In run mode, Press the button of **Click Me!** . A popup will appear displaying the message **Hello World! GUI**.

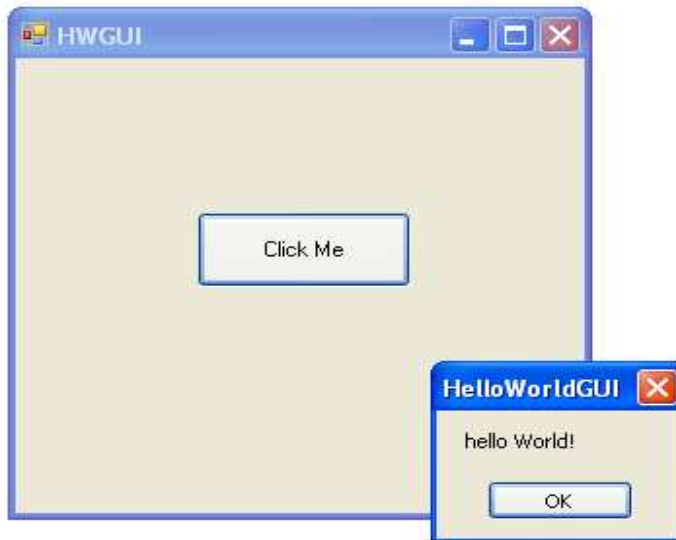


Figure 4: Hello World Application at runtime

9. You can run this application by clicking the exe file from
..\HelloWorldGUI\HelloWorldGUI\bin\Debug folder

Note: IDE is Integrated Development Environment, Compiler, Debugger and all tools are provided in single Application.

>HelloWorldConsole:

1. Open Visual Basic IDE.
2. **File > New Project (Ctrl + N)** and Select **Console Application**.
3. In Name box, write: **HelloWorldConsole**. Use Browse button to select folder location for this Application and press **OK**.
4. A new application will be created and code page will appear with no visual interface.
5. Write the following code with in block of **Sub Main() / End Sub**

```
Console.WriteLine("Hello World! Console")
```

6. To run the code, press **F5** or go to **Debug > Start Debugging**
7. A text based window like a command prompt will appear displaying **Hello World! Console**. The window will close very quickly as it prints the output.
8. Go back to code page and add another line after the first one to wait for a key press. So Application will wait for a press of a key before its exit.

```
Console.ReadKey()
```

9. You can this application from.. \HelloWorldConsole\HelloWorldConsole\bin\Debug using cmd – the command prompt.

```
Module Module1
    Sub Main()
        Console.WriteLine("Hello World! Console")
        Console.ReadKey()
    End Sub
End Module
```

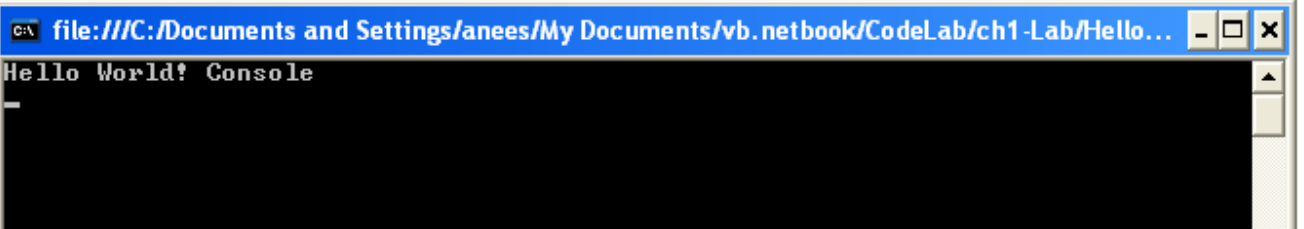


Figure 5: Console Application at runtime