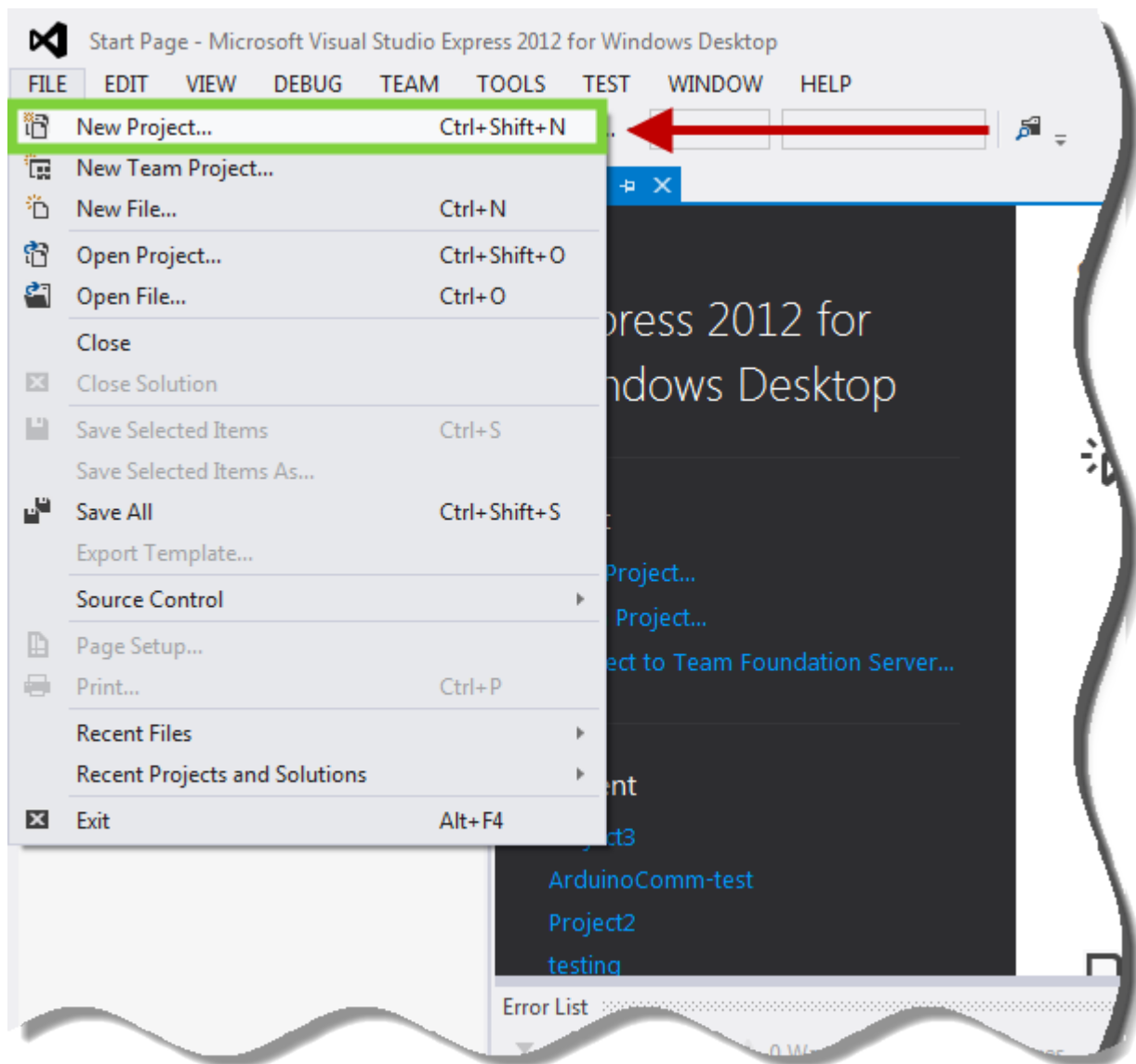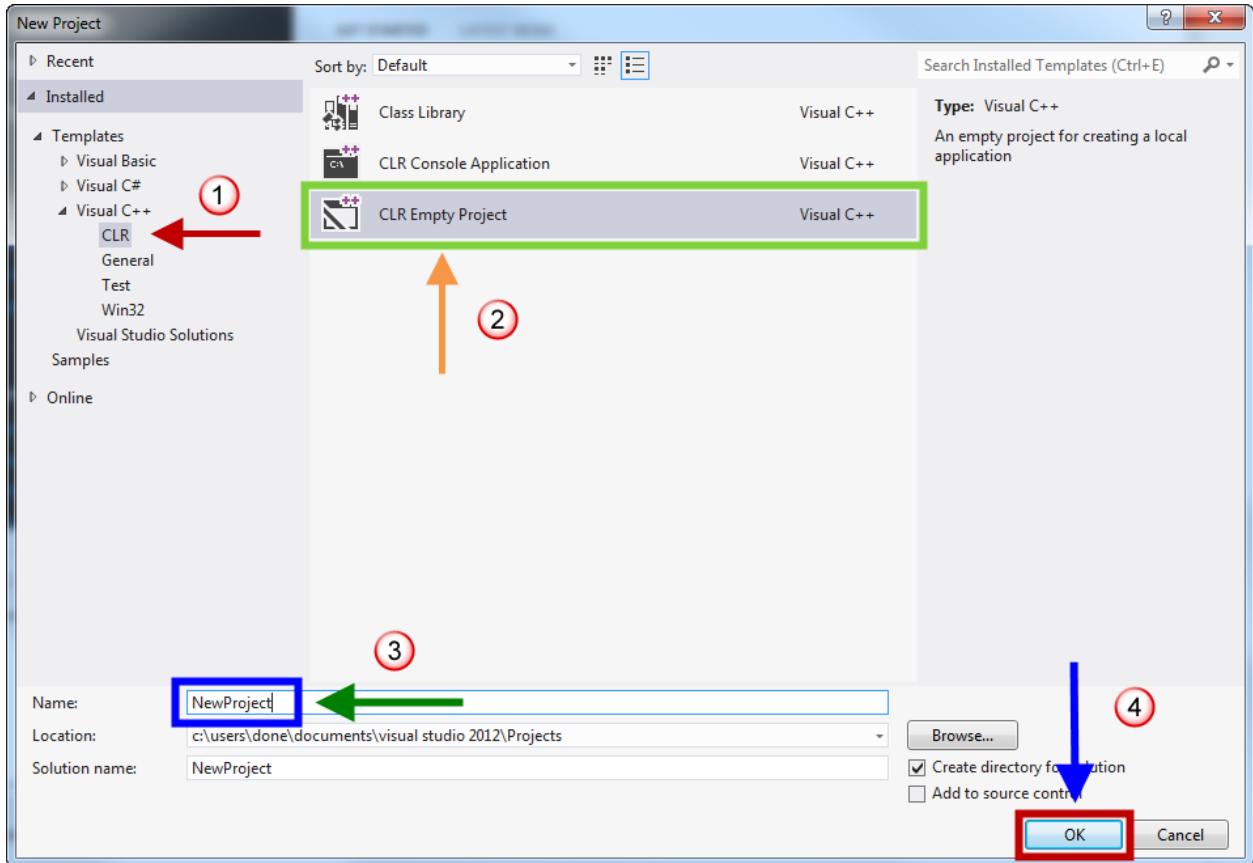# Visual C++ Express 2012: Creating a Windows Form Project

1. File > select **New Project**.
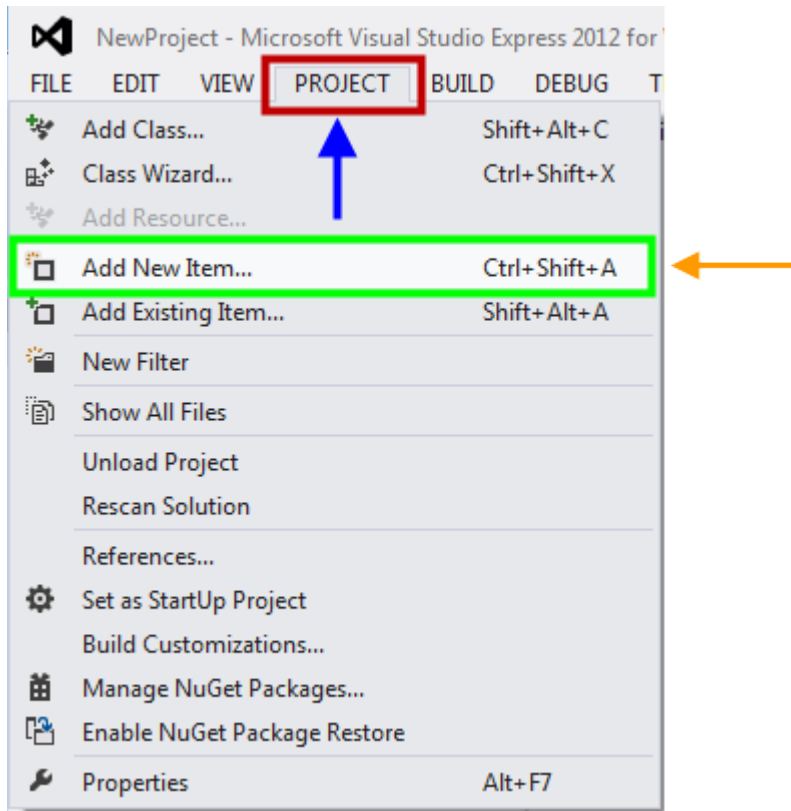
2. New Project Window > 1 (under Visual C++) CLR > 2 select **CLR Empty Project** > 3 enter **<Project_name>** > 4 click **OK**.
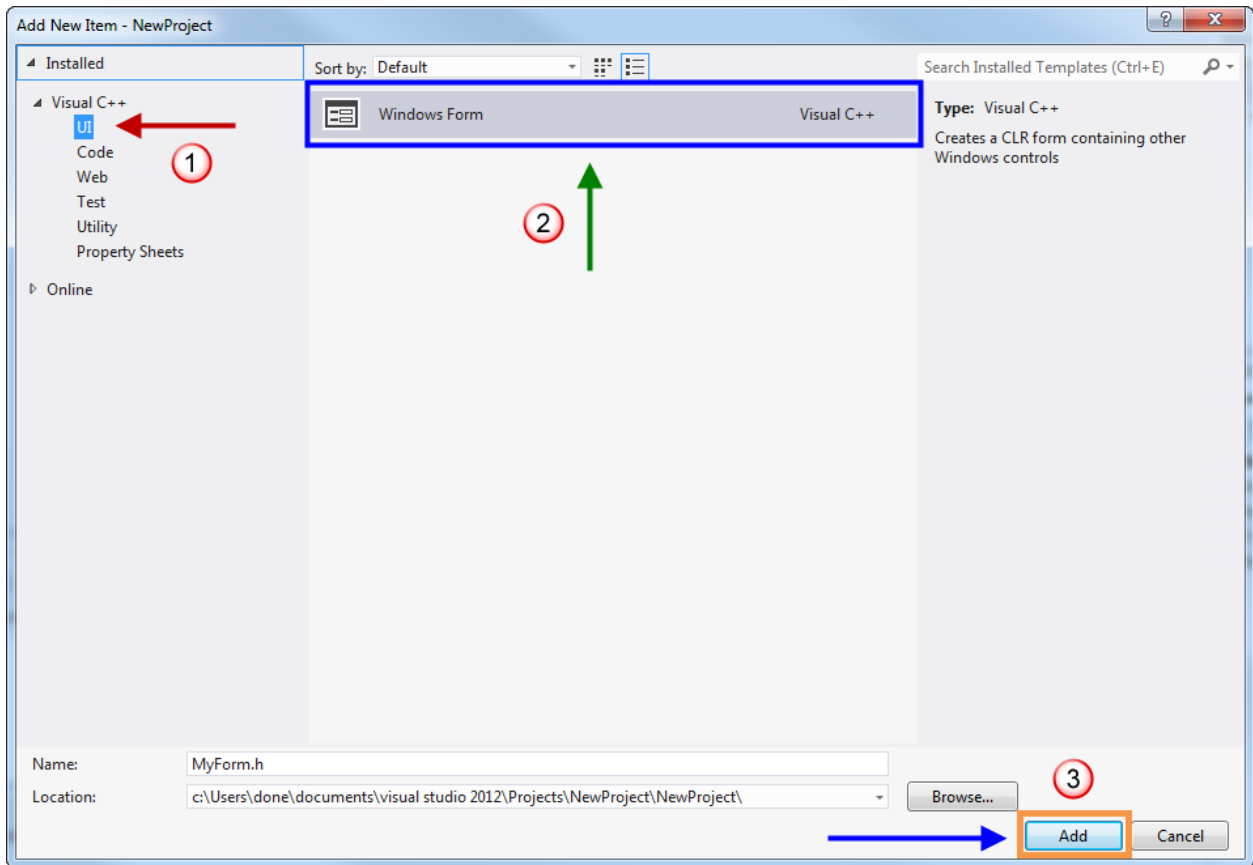
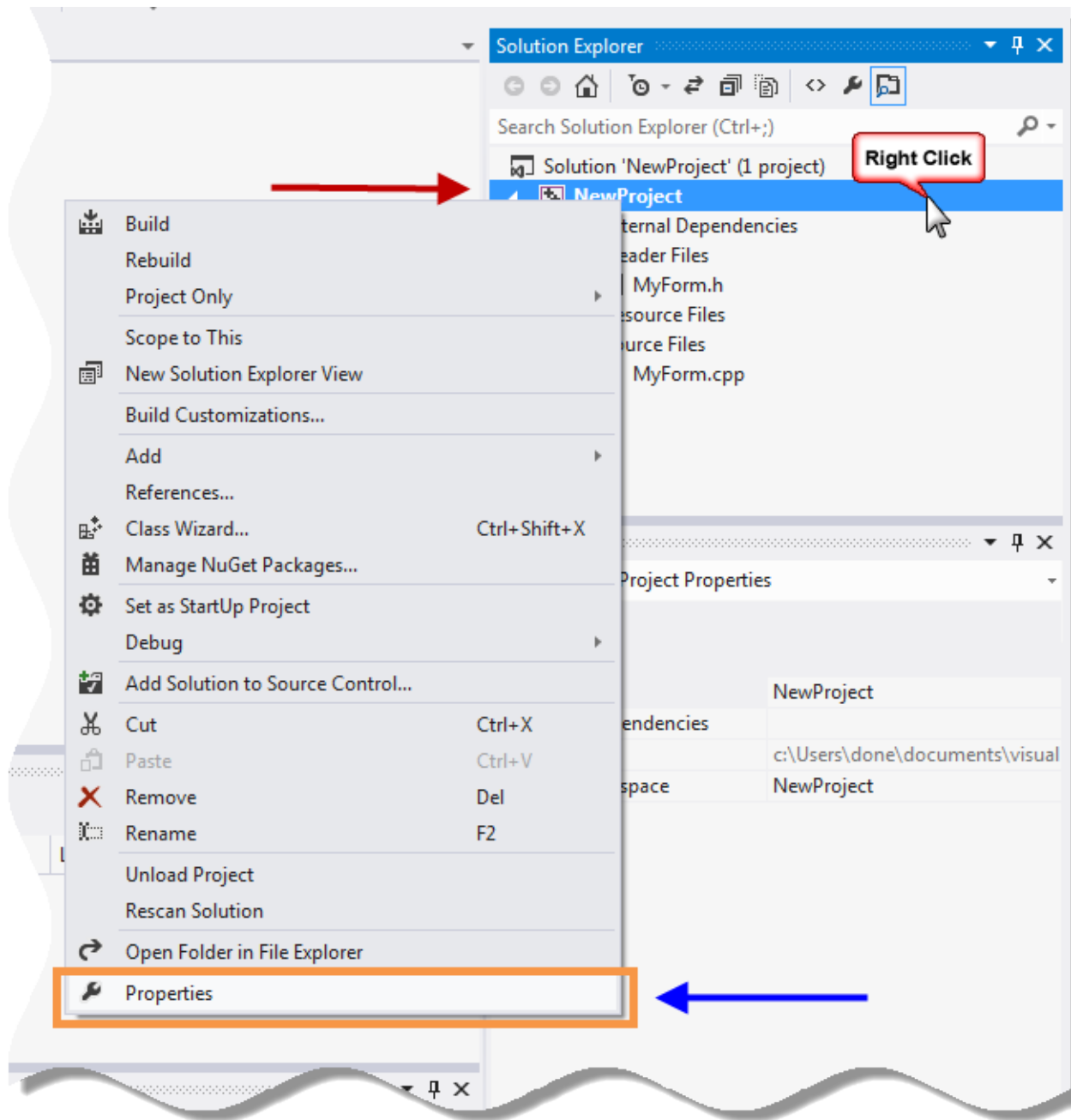> ➤ **Optional:** Change the **Location** of the Project.

3. Project > select **Add New Item**.
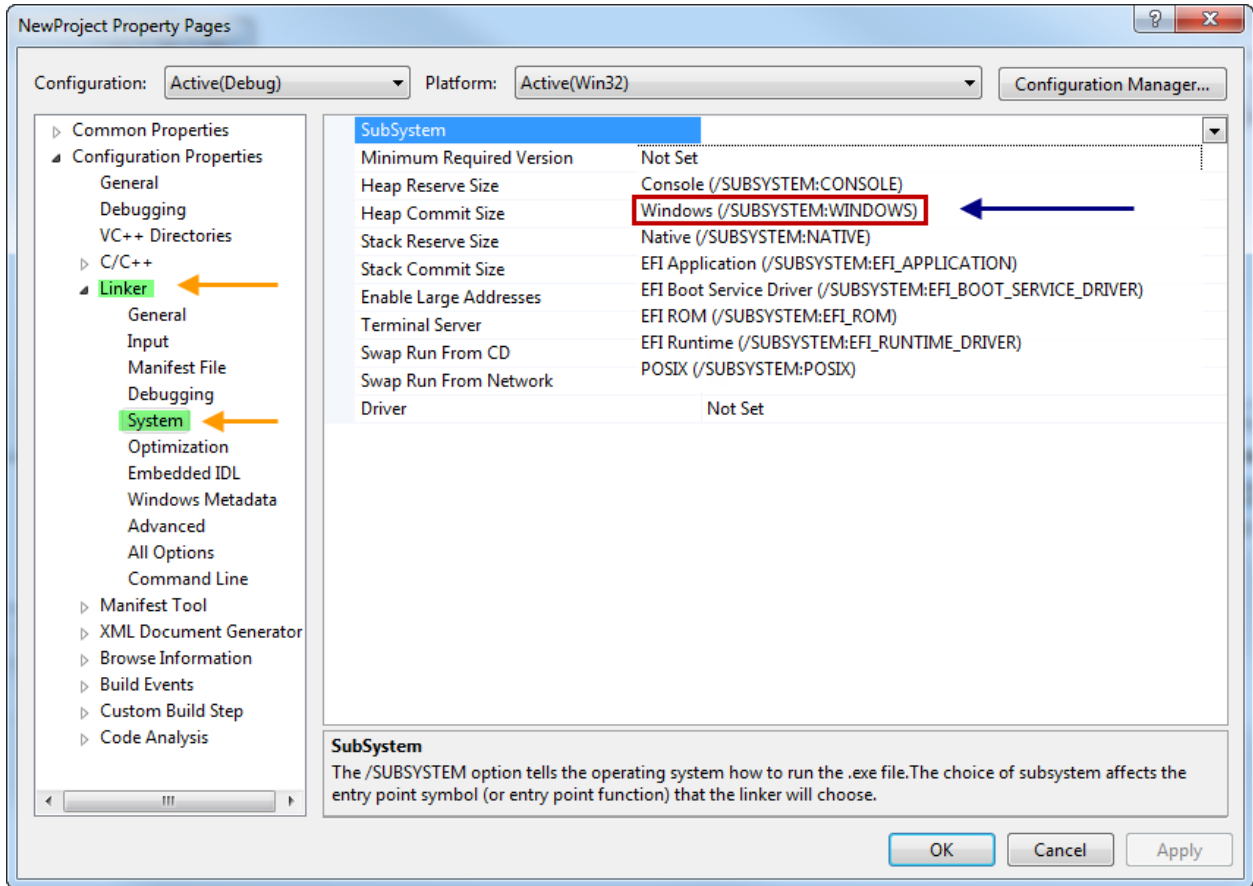
4. 1 (Under Visual C++) > UI > 2 select **Windows Form** > 3 click **OK**.
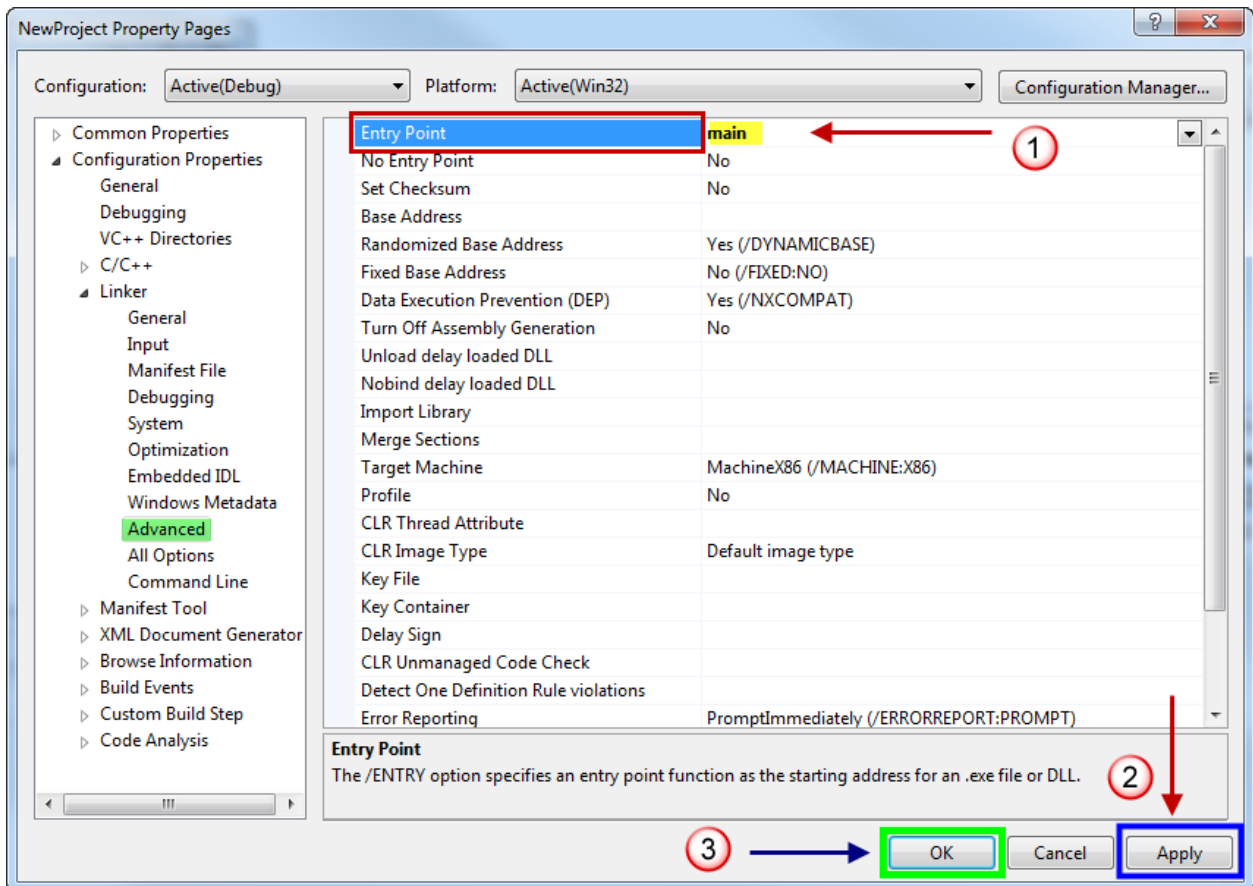
5. (Under Solution Explorer) > right-click on ***<Project_name>*** > select **Properties**.

6. Project Property Pages (pop-up window) > Configuration Properties > Linker > System > (right-hand panel) System SubSystem (dropdown menu) > select **Windows (/SUBSYSTEM:WINDOWS)**.

7. (Still in the Project Property Pages window) > Advanced > (right-hand panel) > Entry Point > 1 type in **main** > 2 click **Apply** > 3 click **OK**.

8. Go to *<Project_name>*.cpp > **enter the following code**:
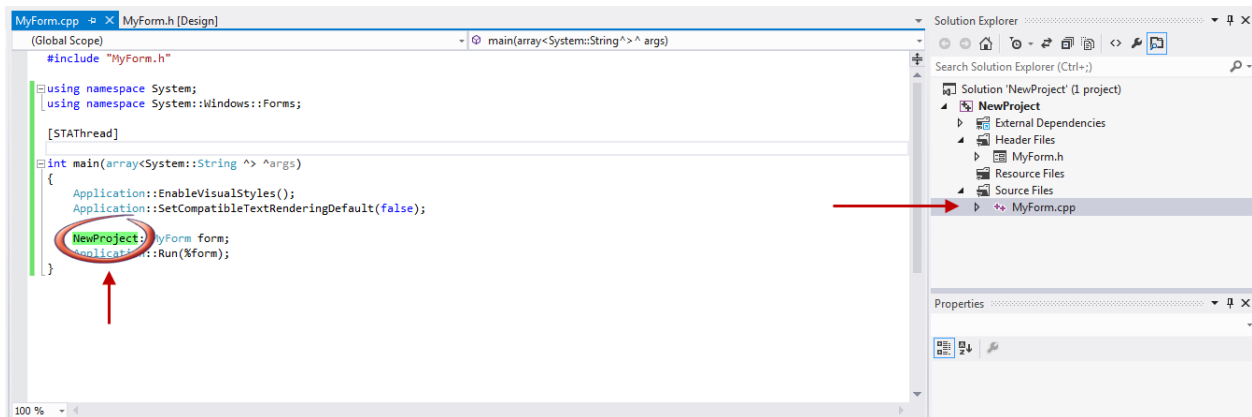
```cpp
using namespace System;
using namespace System::Windows::Forms;

[STAThread]

int main(array<System::String ^> ^args)
{
        Application::EnableVisualStyles();
        Application::SetCompatibleTextRenderingDefault(false);

        NewProject::MyForm form;
        Application::Run(%form);
}
```
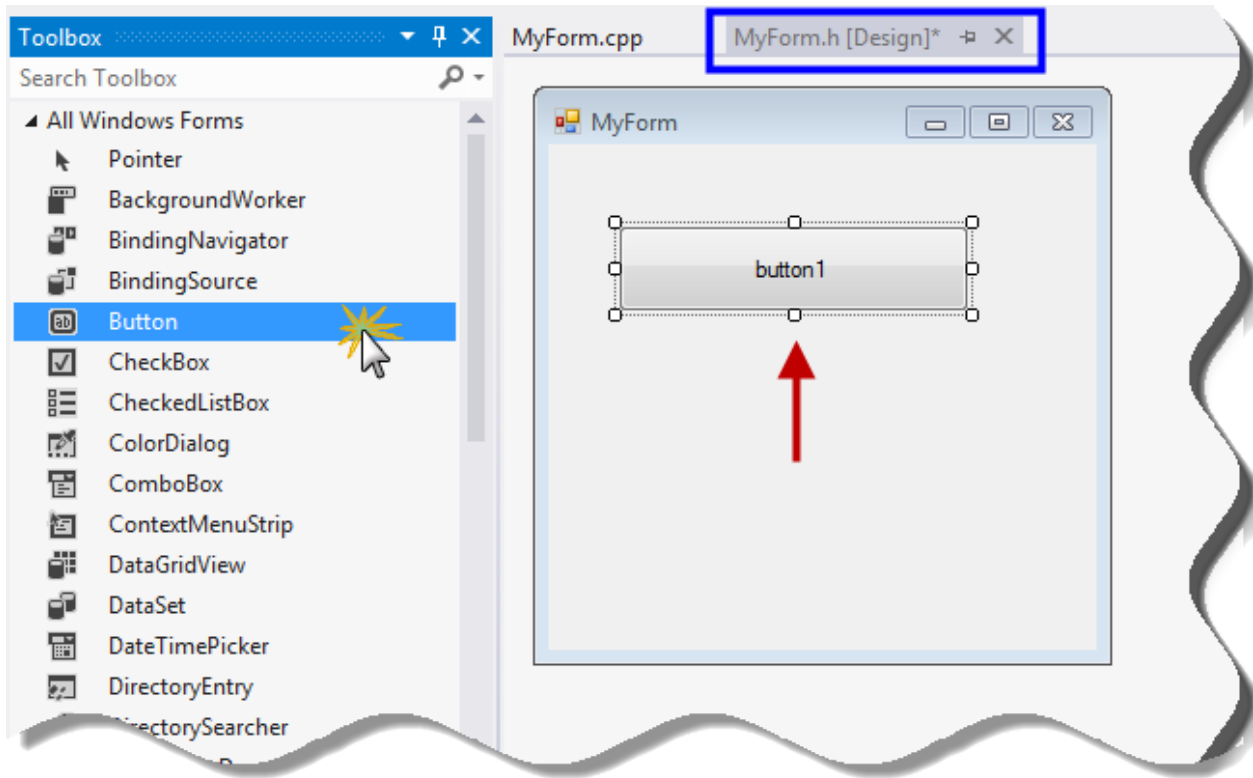
> ➤ ***Note:*** *The highlighted green area should be your unique project's name.*
> ➤ ***Note:*** *Change* `MyForm` *as well if you also gave the code file a different name.*
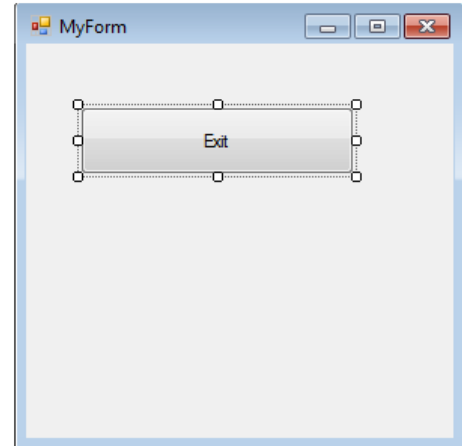> ➤ ***Recommended:*** *Run the debugger to check for errors.*
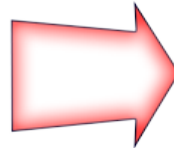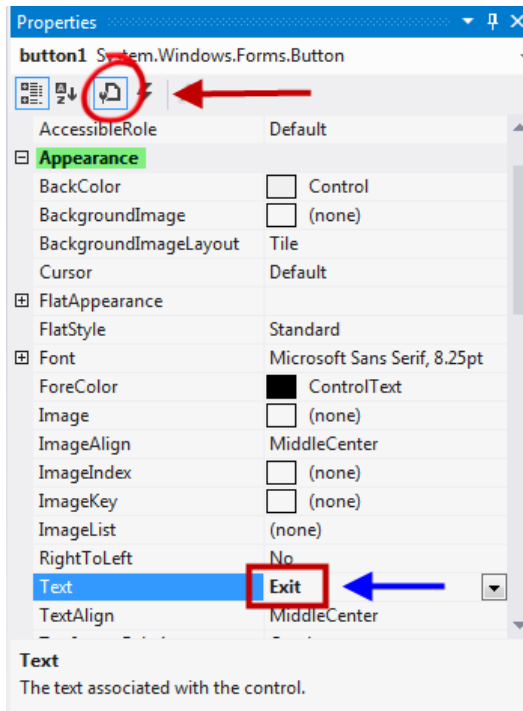
9. Got to *<Project_name>*.h [Design] > Toolbox > add **Button** to the form.

Tip: If you don't have the Toolbox panel open go **to View > Toolbox** (or Ctrl+W, X).
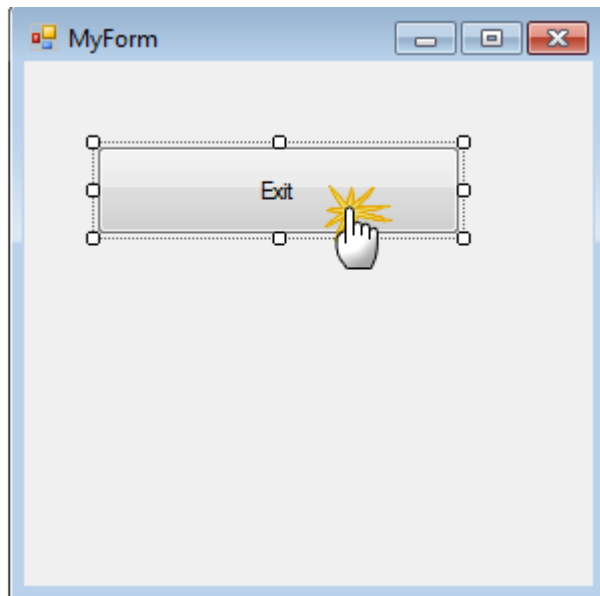
10. (Under) Properties > Appearance > Text > enter **<button text>**.

11. On the form > click the **button**.

(This will route to the *<project_name>*.h file where a user may enter the proper code.)

12. In the *<project_name>*.h file, under

```
#pragma endregion
private: System::Void button1_Click(System::Object^  sender, System::EventArgs^  e) {
```

enter the following code:

```
Application::Exit();
```

Recommended: Run the debugger again and test.

Notes:

Credits:

YouTube video by Ong Hoe Yuan
URL: *http://youtu.be/U14ZpnAmoXg*

Arduino Serial Communication With C++
URL: *http://webhole.net/2010/05/01/arduino-visual-c-plus-plus-tutorial/*

The void main() from Yuan's code was generating an error so `int main(array<System::String ^> ^args)` was utilized from the WebHole article.

Other references:

MSDN forum post with answers:
http://social.msdn.microsoft.com/Forums/en-US/Vsexpressvc/thread/a6d92d96-4a86-4ef7-a815-7f588a6073ea