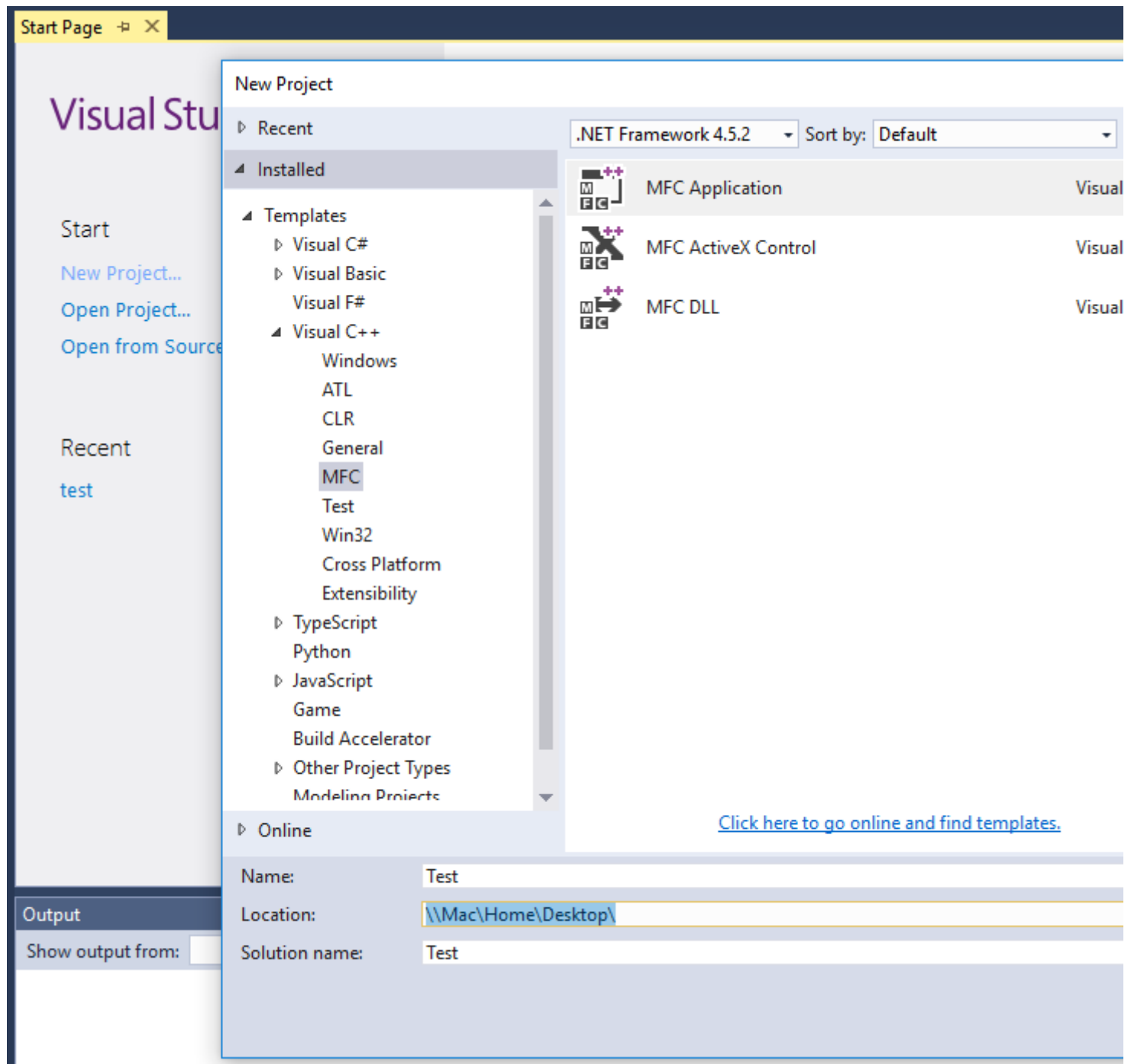# A GUI Hello World, Reading

The first thing any programmer wants to do in a new programming environment is to write the Hello, World app. Here's how in VS2015.
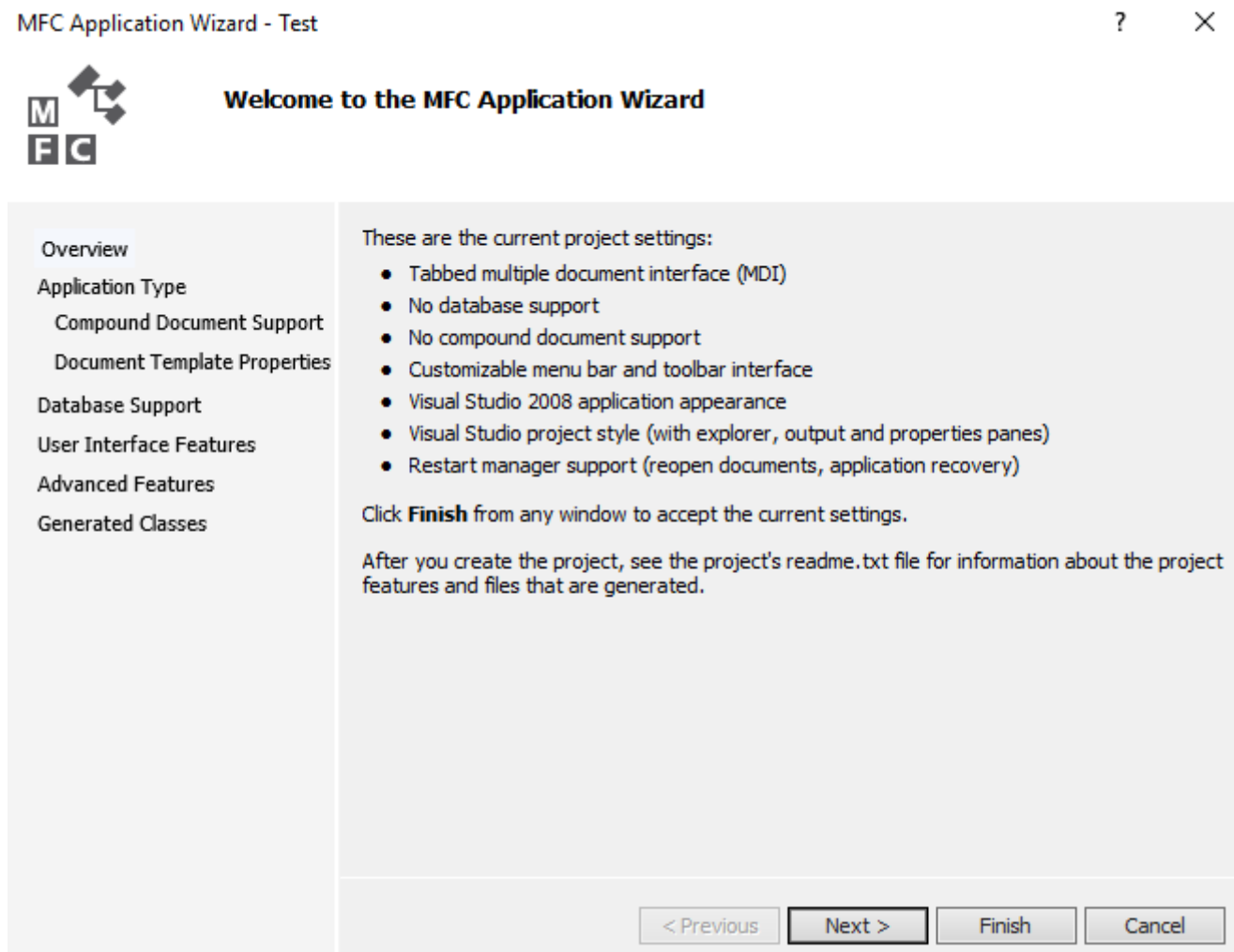
Start VS and choose **New Project...**, **Visual C++**, **MFC**, **MFC Application**, and type a **name** for your app -- something like "Test". A good **location** is your Desktop:
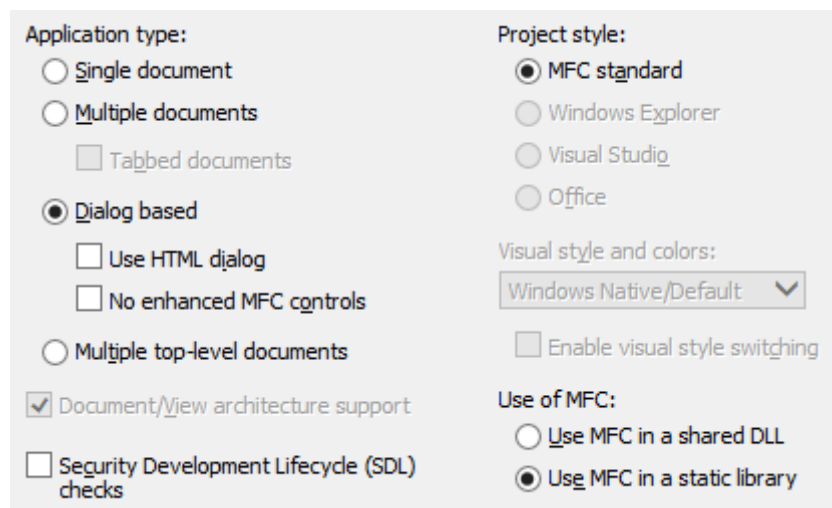

Make sure "**Create directory for solution**" is checked. By "directory" they mean "folder". The folder on the desktop will be named the same as the "Solution Name" which defaults to the application's
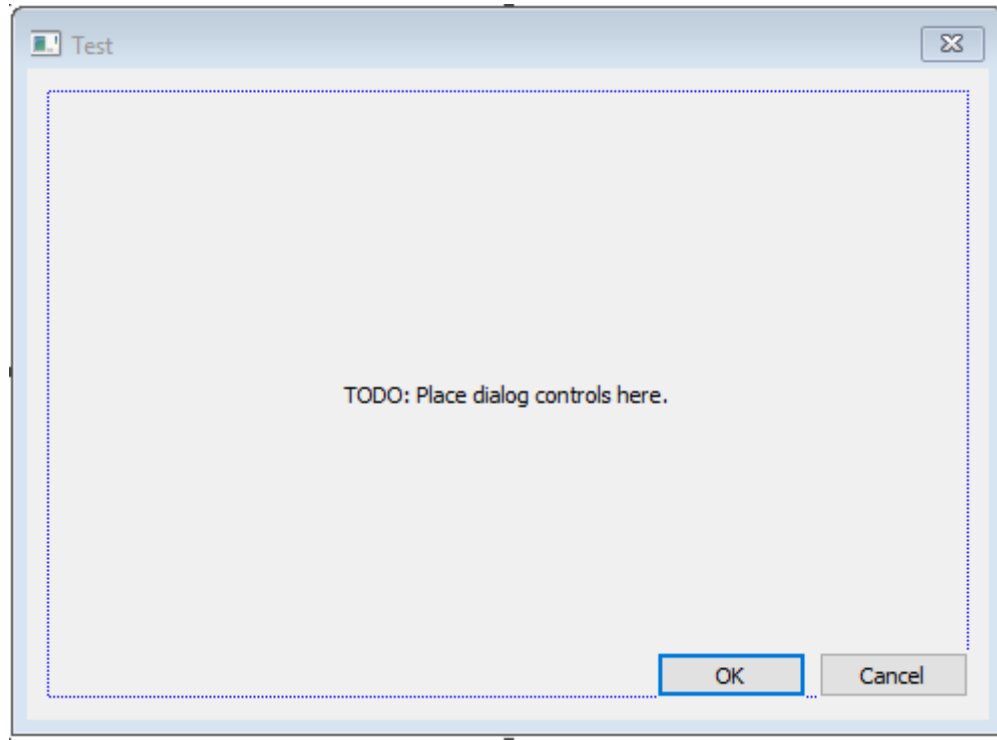
Name.

Wait -- we're not done. You have to explain to VS what *kind* of app you want to make. Is it a document viewer like Notepad, or a multi-document editor and viewer like Word? Or is it a display with buttons and menus and checkboxes like Calculator? In the "Wizard", choose **Next >**.

MFC Application Wizard - Test   ?   X

M F C   **Welcome to the MFC Application Wizard**

Overview

Application Type

   Compound Document Support

   Document Template Properties

Database Support

User Interface Features

Advanced Features

Generated Classes

These are the current project settings:

- Tabbed multiple document interface (MDI)
- No database support
- No compound document support
- Customizable menu bar and toolbar interface
- Visual Studio 2008 application appearance
- Visual Studio project style (with explorer, output and properties panes)
- Restart manager support (reopen documents, application recovery)

Click **Finish** from any window to accept the current settings.

After you create the project, see the project's readme.txt file for information about the project features and files that are generated.

[< Previous]   [Next >]   [Finish]   [Cancel]

Choose **Dialog Based**, uncheck **Security Development Lifecycle (SDL)**, choose **Use MFC in a static library**, and then **Finish**:

Application type:
- ◯ Single document
- ◯ Multiple documents
  - ☐ Tabbed documents
- ◉ Dialog based
  - ☐ Use HTML dialog
  - ☐ No enhanced MFC controls
- ◯ Multiple top-level documents

☑ Document/View architecture support

☐ Security Development Lifecycle (SDL) checks

Project style:
- ◉ MFC standard
- ◯ Windows Explorer
- ◯ Visual Studio
- ◯ Office

Visual style and colors:
[Windows Native/Default ⌄]

☐ Enable visual style switching

Use of MFC:
- ◯ Use MFC in a shared DLL
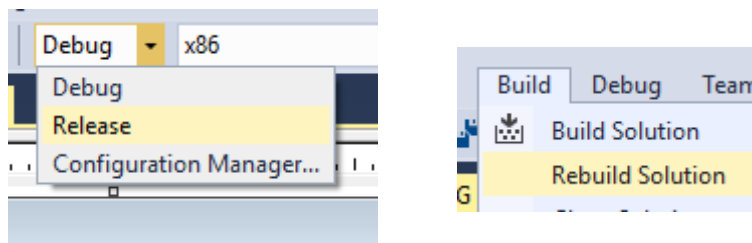- ◉ Use MFC in a static library

That starts a process of file generation. When it's done you'll have a blank window where you can start building your app by dropping and dragging "controls" (like buttons and menus):
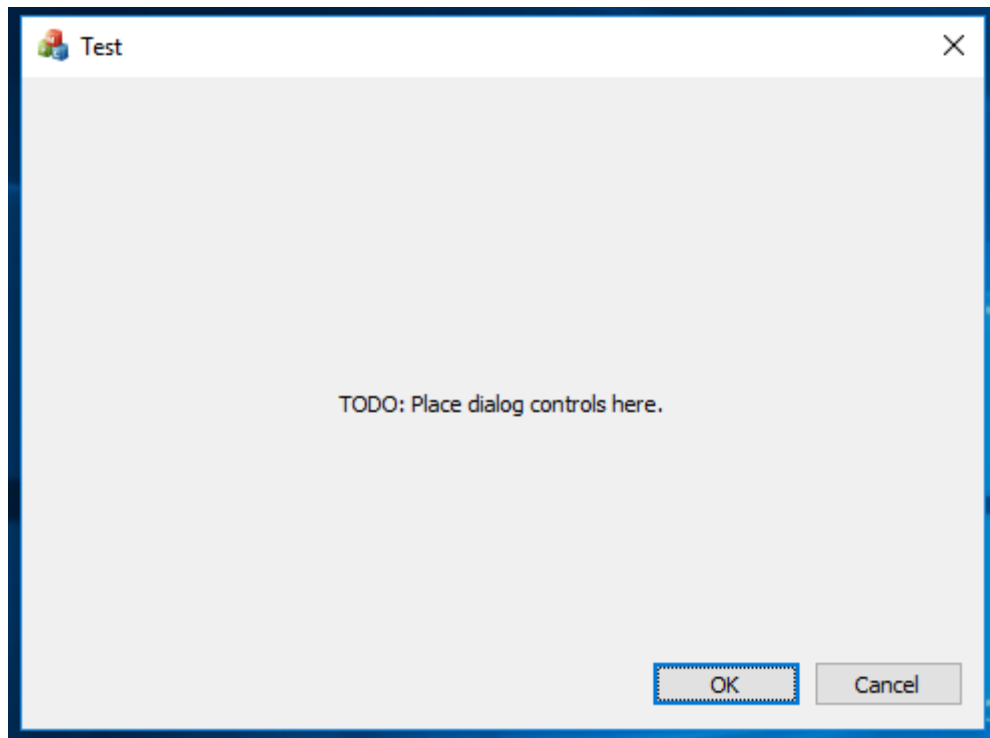

In this course we'll refer to this as the ***"visual layout editor"***.
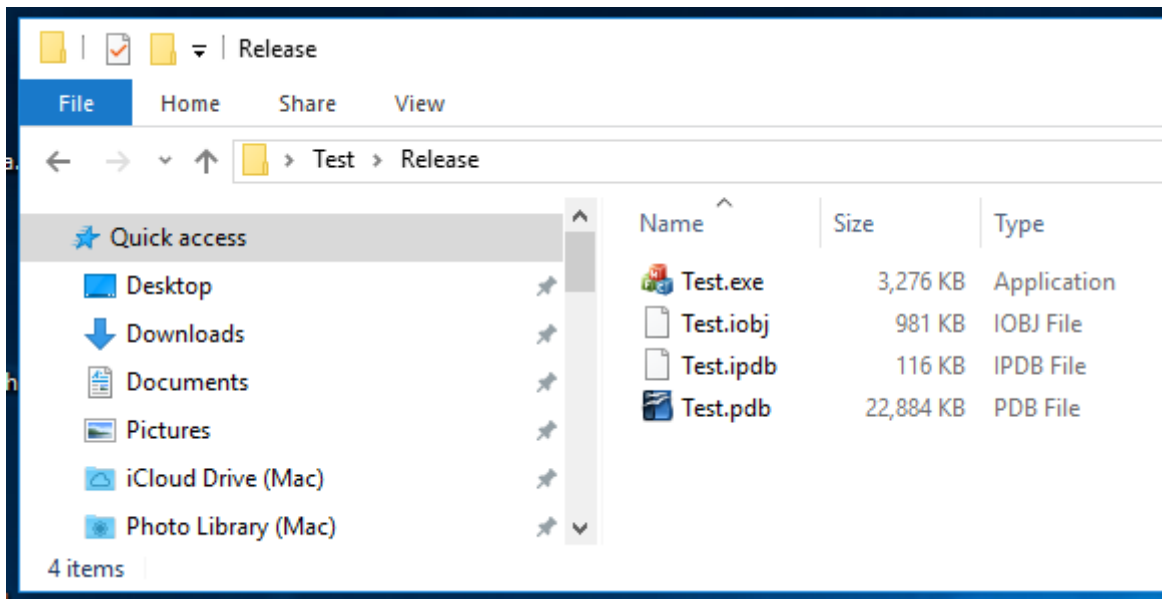
Hello, World

Without doing another thing, you now have your Hello, World! Now to compile and run. Before doing so it is *strongly* recommended that you work in "**Release**" mode instead of the default "Debug" mode. Then choose "**Rebuild Solution**" from the "Build" menu, and *then* after "**Rebuild All: 1 succeeded, 0 failed, 0 skipped**" appears in the Output window, you can run it by pressing the **F5** key.

At that point you may minimize your VS window so you can more clearly see your own app running:

When you're done admiring your work, look in the project's folder on your desktop. Look in its Release folder. There's the EXE for your app -- fully complete and ready to be shared with PC and Mac users!

Now you can close the folder and the app and go back to VS.

Mac Users?

Did we say Mac users? Yes -- Mac users can run your EXE! But they first have to download and install a free program called **Wine** **(https://www.winehq.org/)**. Start Wine and use the Mac Finder or Wine's File Manager to navigate to the EXE file -- double-click to run!