

# C# PROGRAMMING PROJECT – APPLICATION LAUNCHPAD

This is a tool I developed for my own use. It lets you drag documents, program files or even entire directories out of the Windows File Explorer and drop them into a little window. Once dropped there, a button is created for each item so that you can launch the file or open the directory just by clicking the button.

This is a great project for developing your C# programming skills. It shows you how to create objects (such as buttons) at runtime and how to attach event-handlers (to deal with click events) in program code. You will discover how to extract icons to display on buttons, how to save and restore file paths into text files, how to create a 'Recently-opened File' menu and how to create XML-format configuration files so that your application's state (its size, location and appearance) can be saved when you quit using it and restored when it is next loaded.

I have published a long series of tutorials on YouTube, explaining how to program this tool from the ground up. I have never previously released the source code which accompanies those tutorials. I am now making that code available exclusively for students of this course. Be sure to download the code archive (available from the lesson online where you downloaded this document). The code is supplied as a set of individual projects so that you can easily follow the development of the project from its simple beginning to a program of some complexity.

To help you use the code, I recommend that you also watch the tutorials on my YouTube channel. I have linked to the tutorials down below. Click the link and use the relevant project in order to understand the code fully.

*To use the code, load the solution, Launcher.sln, into Visual Studio. Then right-click one of the project nodes shown in the Solution Explorer and select: 'Set As Startup Project'.*

# THESE ARE THE PROJECTS

## Launcher

<https://youtu.be/epjLqPOFqhM>

Drag and drop a file from Windows File Manager and click a button to launch it.

## Launcher2

<https://youtu.be/hVxbemMX37s>

Drag and drop multiple files onto the Launchpad and double-click a file name to load it.

## Launcher3

<https://youtu.be/Quv2ZzcCgGo>

Drag multiple program files or documents from the File Explorer in order to add buttons with the file name and an associated icon.

## Launcher4

[https://youtu.be/Em5D\\_oWCjqc](https://youtu.be/Em5D_oWCjqc)

Reload all the buttons on a form at runtime – so that your Launchpad is recreated whenever the program is run.

## Launcher5

<https://youtu.be/f-CVId4YPCo>

Create multiple named 'program groups' to save and load to and from disk.

## Launcher6

<https://youtu.be/wknFV5V7h8Q>

Add a Recently-Opened File menu.

## Launcher7

[https://youtu.be/19\\_LP4B84K8](https://youtu.be/19_LP4B84K8)

Add a popup mouse menu to let you delete or move controls at runtime.

## Launcher8

<https://youtu.be/0GQbSOoCikE>

Drag and drop folders as well as program files and documents.

<https://youtu.be/PtCOT74YKMI>

Drag controls without auto-alignment.

## DragCtrls

<https://youtu.be/51W8dTalSjs>

Drag controls on a form.

## Launcher9

<https://youtu.be/LPMI1AL1swk>

How to move controls around on the form while the program is running!

## Launcher10

<https://youtu.be/1HpcedPme0U>

Save application settings (size etc.) using XML configuration files. (Also see the project, **ConfigTest**).

# WHAT NEXT?

This is quite a complex project. However, there is plenty of scope for you to continue developing it (as I would urge you to do!). Here are some ideas on how it might be improved or extended.

- Make the form auto-resize so that it fits around buttons as they are added.
- Make Save menu item auto-save the current config rather than prompt for file name.
- Sort the Recently-Opened File menu items with the newest first.
- Add more error recovery (in case files or configurations can't be found).
- Add options to use buttons at different sizes.
- Sort buttons by file name or by type.

In fact, there are lots of other features you might want to add. See what you can come up with!

# MORE PROJECTS

I also have more C# programming projects that you might want to follow. On Udemy I have three courses:

Write an adventure game in C#  
Write a Media-Player in C#  
Write a Screen-Capture Tool in C#.

<https://www.udemy.com/user/huwcollingbourne/>

On My YouTube channel, I also have various C# programming projects. You may want to take a look through the videos and the playlists to see if anything appeals to you.

<https://www.youtube.com/codewithhuw>

Best wishes  
Huw