How to setup Minecraft 1.12.2 with Computercraft as part of a PortableApps installation
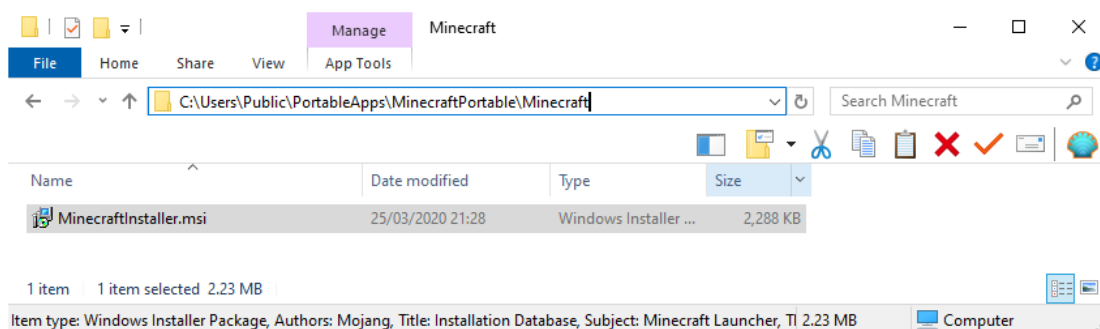
This tutorial will show you how to setup Minecraft 1.12.2 with Computercraft and related mods in a form that works with the PortableApps system

You will need a Mojang account for the Java edition of Minecraft in order to set things up.

Step 1: Prepare the Directories

Minecraft will *initially* be run from a specific folder which you MUST create exactly as shown:

C:\Users\Public\PortableApps\MinecraftPortable\Minecraft

Why?

Some helper software written in C# / Java is responsible for running and controlling the Minecraft installation along with other PortableApps and this path is hard-coded. You can also run a large number of PortableApps from the same location. When complete 'PortableApps' can be moved to a USB device or any file path you have access to.(Keep away from Program Files and Program files (x86) as writing to these directories needs Admin privileges)
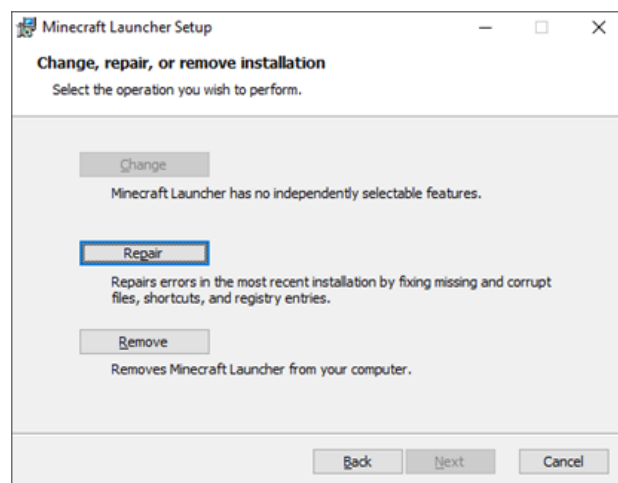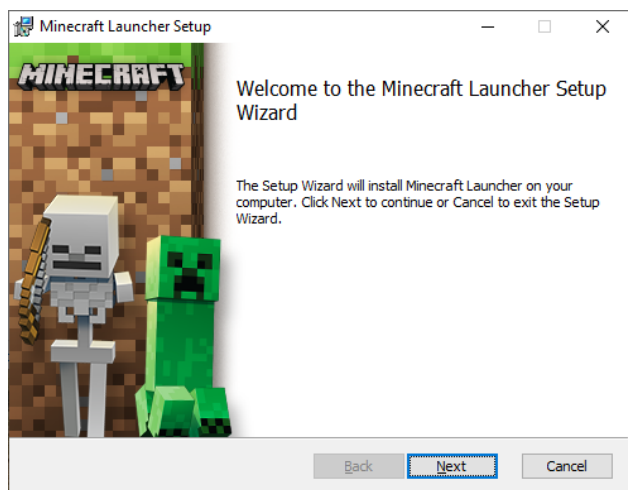
Step 2: Download the Minecraft installer

Go to https://minecraft.net/en-us/download/alternative/ and get `MinecraftInstaller.msi`

Place it in `C:\Users\Public\PortableApps\MinecraftPortable\Minecraft` as shown above and run it.

Click 'Next'   If you have already installed Minecraft, you will get this:
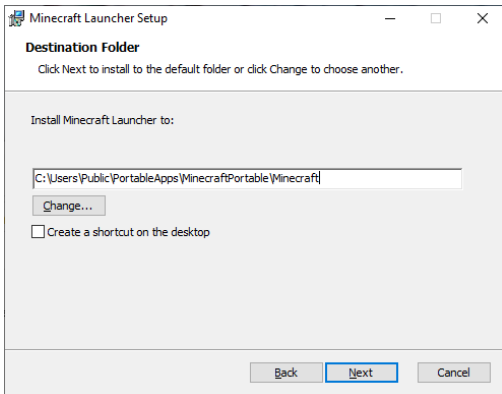
If you see the above dialog, click 'Cancel'

If you have already installed Minecraft, make a backup copy of your original Minecraft install. You will find it in 2 places:

1. `C:\Users\<your account>\AppData\Roaming\.minecraft` rename it to `.minecraftOLD`

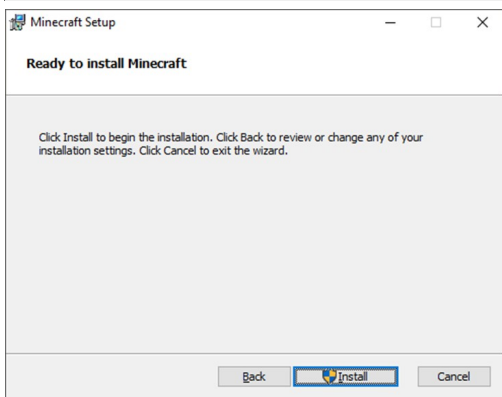2. `C:\Program Files (x86)\Minecraft` rename it to `MinecraftOLD`

Run the installer again

Change the install folder to

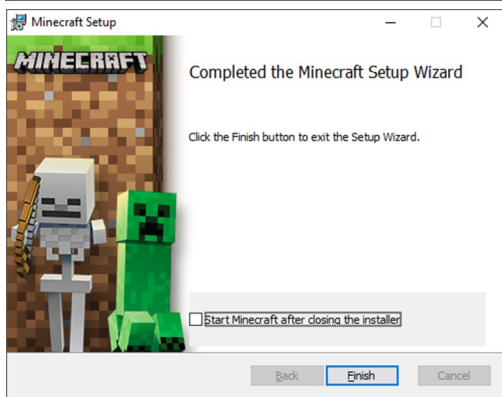`C:\Users\Public\PortableApps\MinecraftPortable\Minecraft`

De-Select 'Create a shortcut on the desktop'

Click 'Next'

Click 'Install'

When completed, **de-select** 'Start Minecraft after closing the installer'
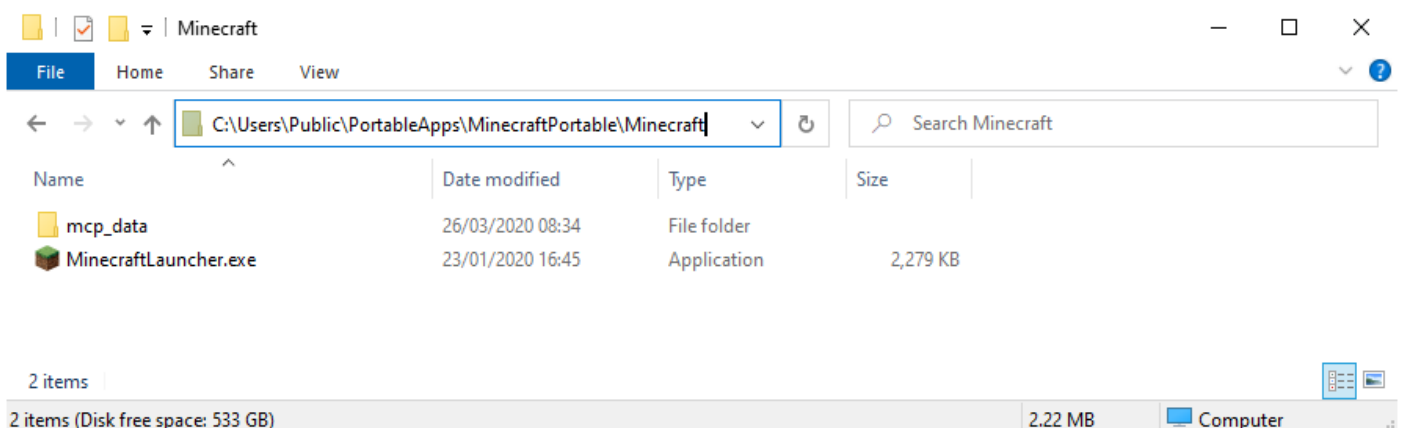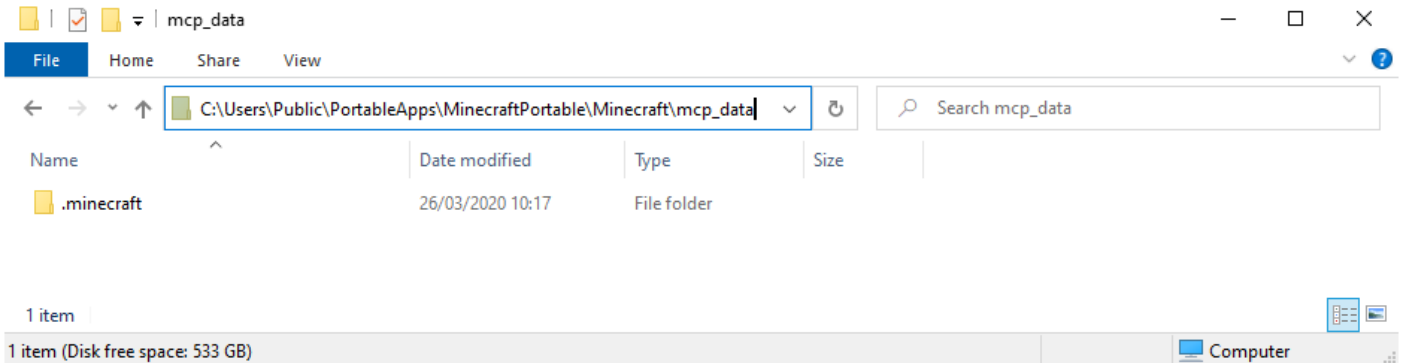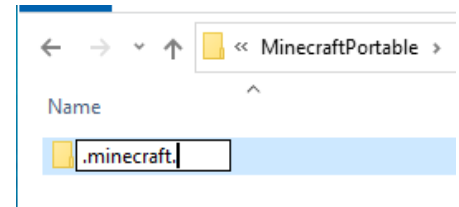
Click 'Finish'

There is now a second file in the folder: MinecraftLauncher.exe

Delete (or move) the file MinecraftInstaller.msi. It is no longer required.
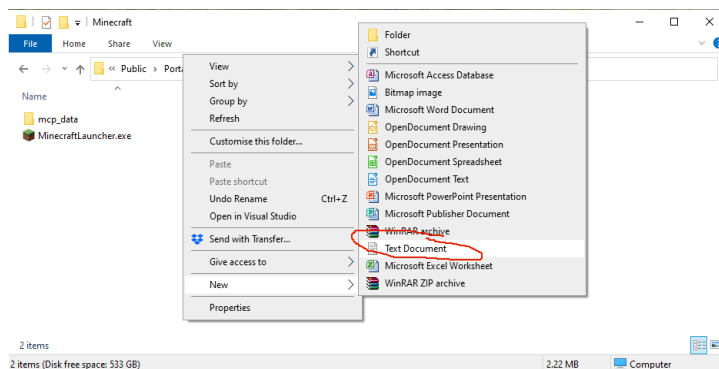
Make a new Directory called 'mcp_data'

Double-Click this directory and create a new sub-directory inside it called **.minecraft.**
NOTE the dots at the **beginning and end** of the name. Windows will rename this
as .minecraft

Go back to `C:\Users\Public\PortableApps\MinecraftPortable\Minecraft`

Make a new text file called 'Launcher.txt' and rename it to Launcher.vbs

Edit Launcher.vbs with your favourite text editor

Add the following lines and save the file:

```
scriptdir = CreateObject("Scripting.FileSystemObject").GetParentFolderName(WScript.ScriptFullName)

set oShell = CreateObject("Shell.Application")

oShell.ShellExecute scriptdir & "\MinecraftLauncher.exe", " --workDir " & scriptdir & "\mcp_data\.minecraft", , , 1
```

Available from https://pastebin.com/S6kS5CAZ

This script is designed to start MinecraftLauncher.exe from any location with the command line arguments to use the lo-
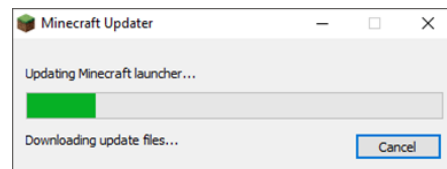cal .minecraft directory instead of the usual one found in %appdata%

It will be replaced later with a C# executable which does the same thing, but with .exe extension as used in PortableApps
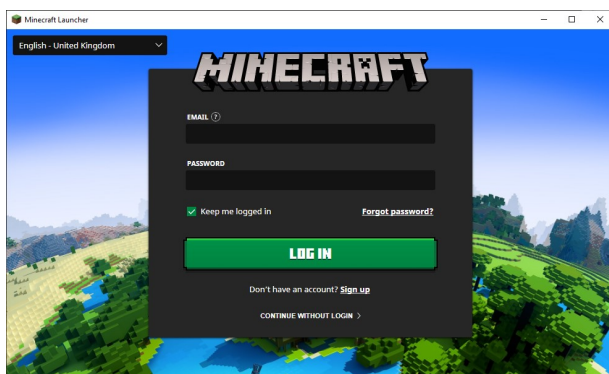
3
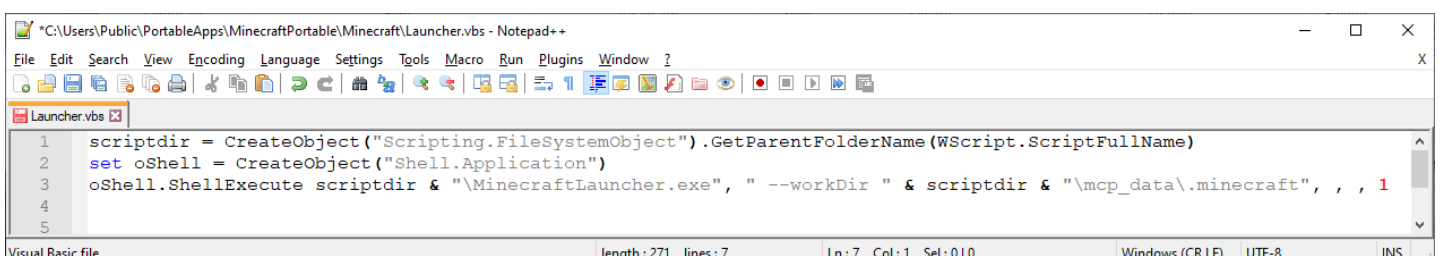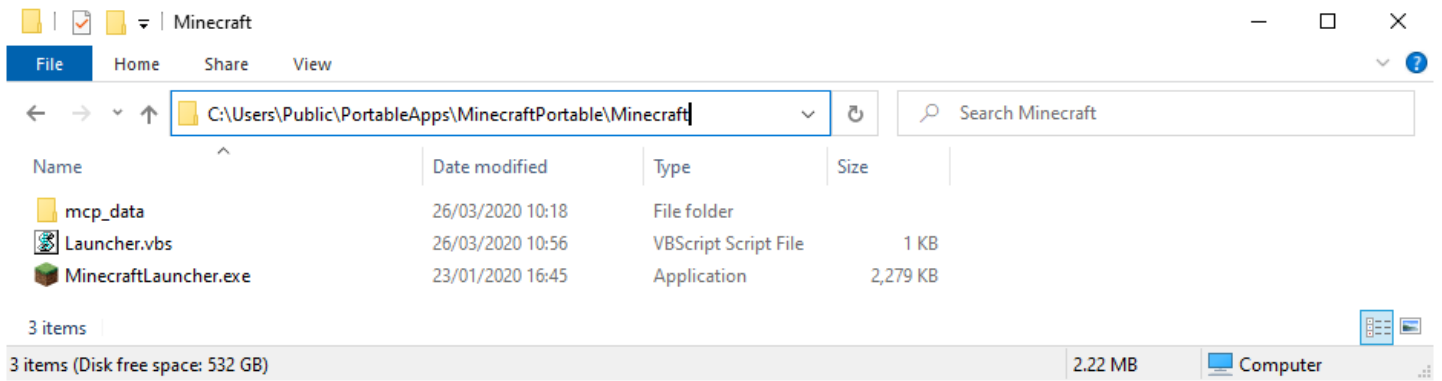
Double-click Launcher.vbs

The following dialog appears:

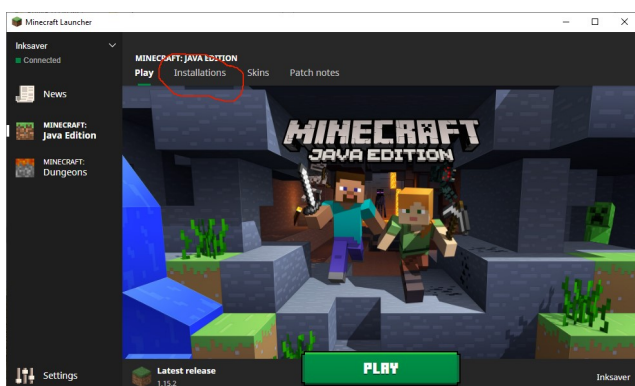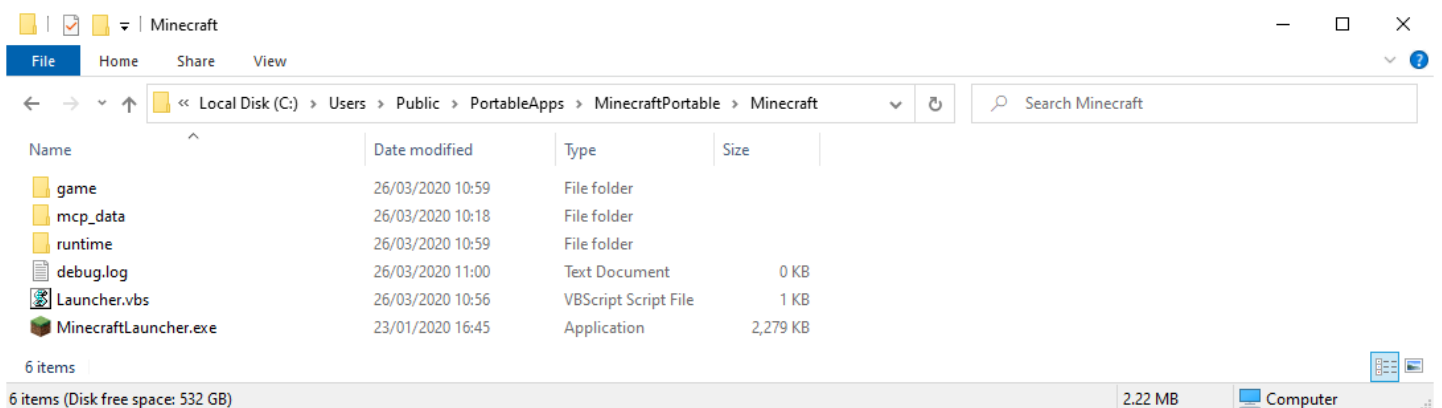When complete the Minecraft Launcher is displayed:

Enable 'Keep me logged in'

Log-in with your Mojang Account
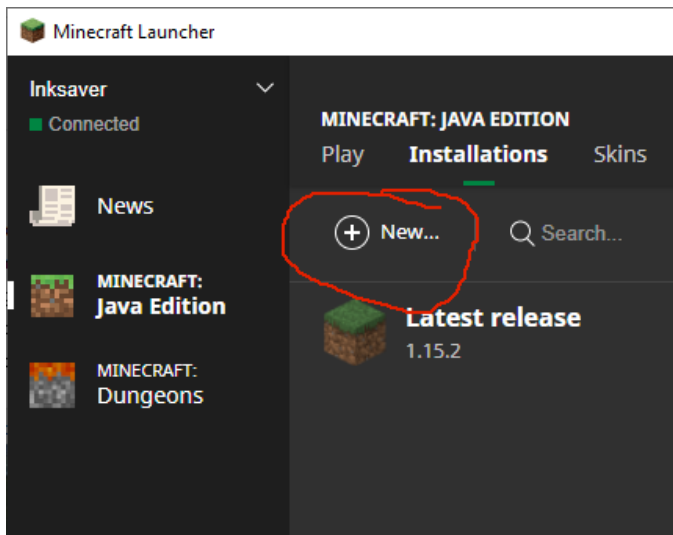
The launcher window changes.

DO NOT CLICK 'Play'

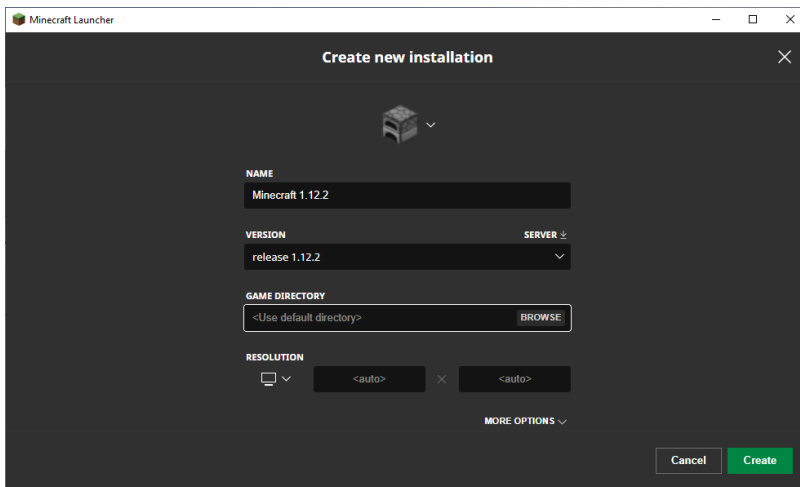The install directory now looks like this:

Do NOT click 'Play'
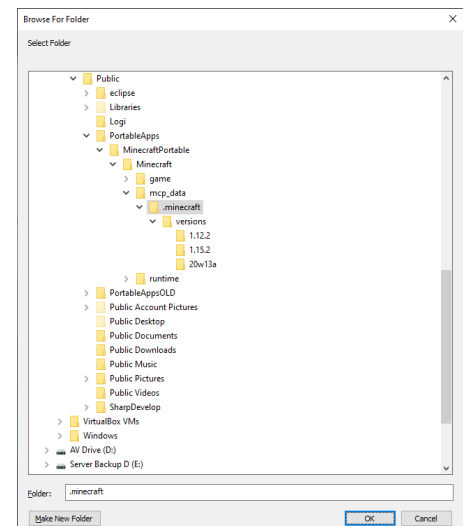
Click the 'Installations' menu

Click 'New'

Complete the fields as shown on this screen-shot and text below

Check the Game Directory is at the correct place by clicking the 'Browse' button. It should default to your custom .minecraft folder:
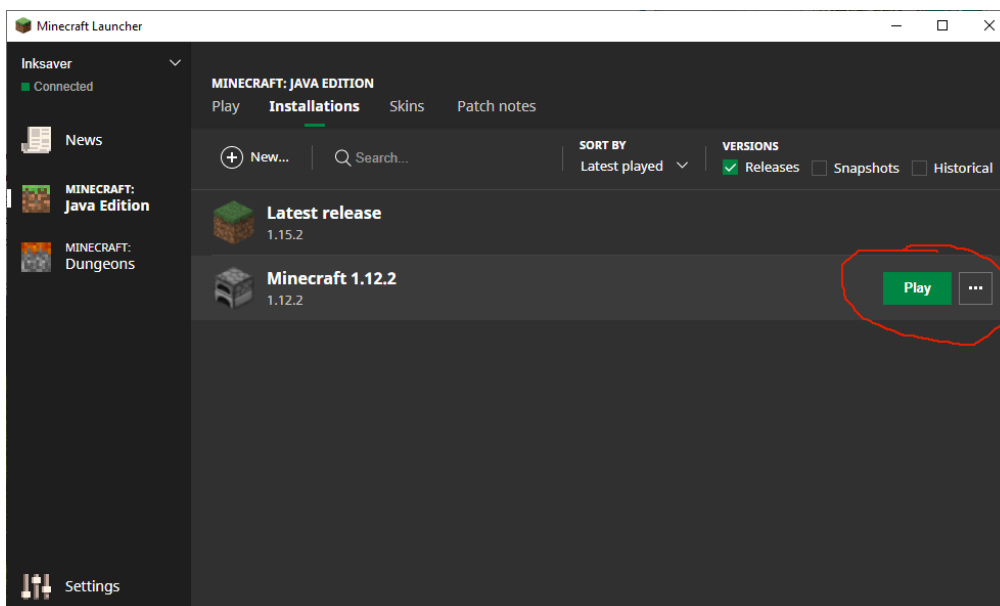
Name: Minecraft 1.12.2

Version: release 1.12.2

Game directory:

Leave as default or manually add this:

C:\Users\Public\PortableApps\MinecraftPortable\Minecraft\mcp_data\.minecraft
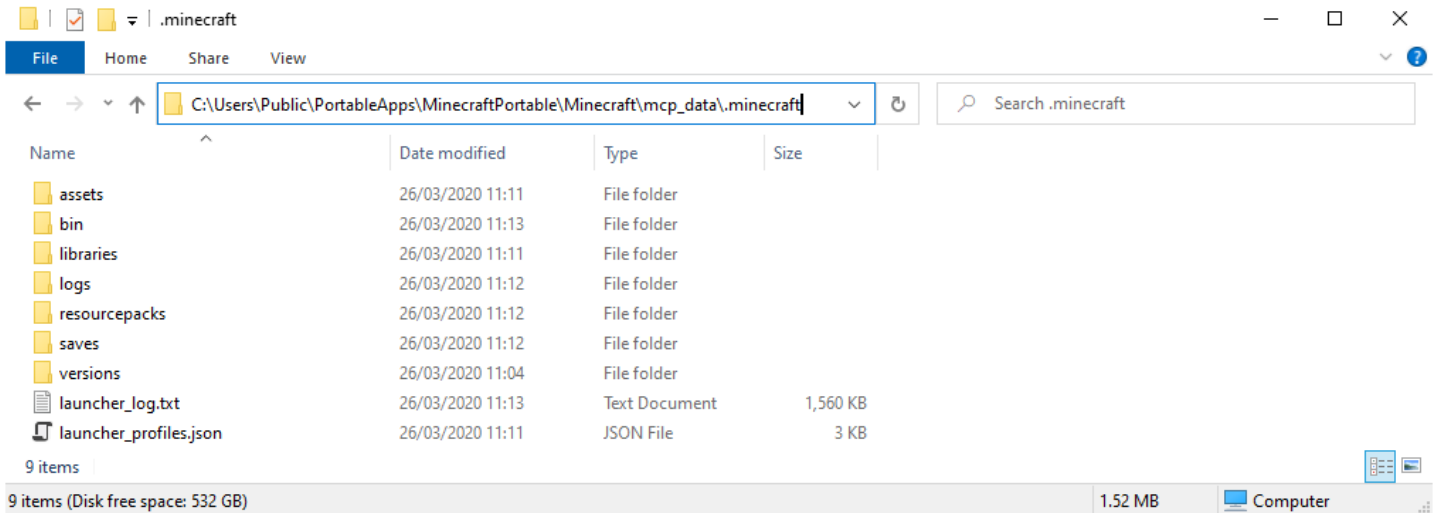
Click Create

Click 'Play' on

Minecraft 1.12.2

173MB of files will download

Success!

Check the folder:

C:\Users\Public\PortableApps\MinecraftPortable\mcp_data\.minecraft

So far, so good. If this folder is empty, something has gone wrong, and more than likely your %APPDATA%Roaming folder now contains .minecraft. If this is the case close the game and start over again.

Install forge

Forge is a framework to enable modding Minecraft.

Go to http://files.minecraftforge.net/maven/net/minecraftforge/forge/index_1.12.2.html

Download the Java installer and put it in your MinecraftPortable\Minecraft folder:
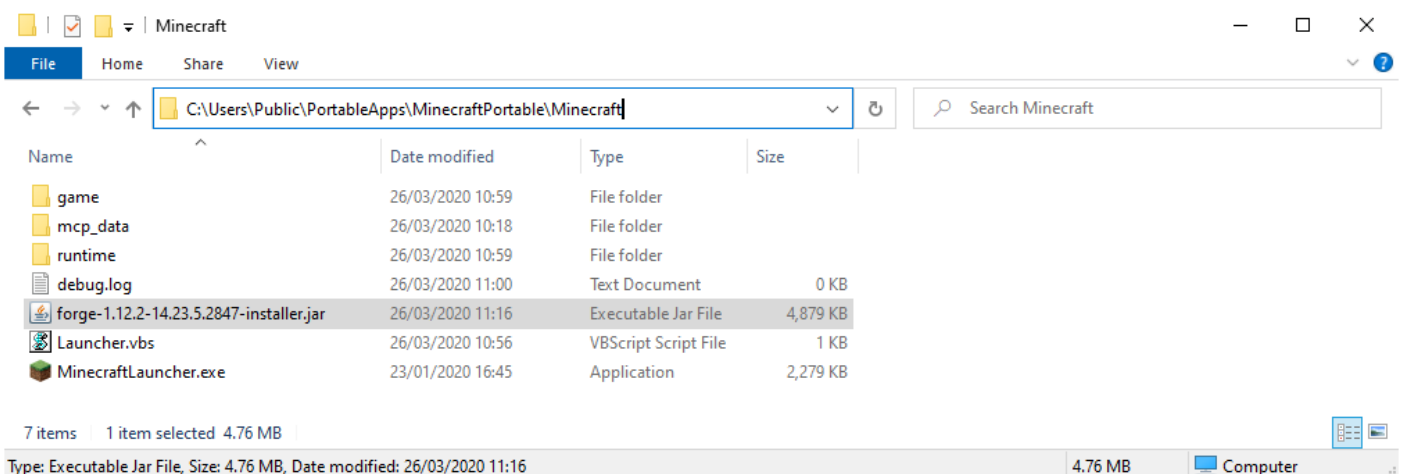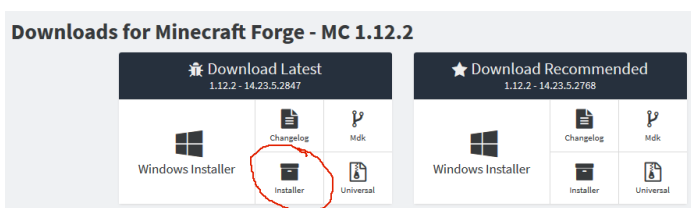
Assuming you have Java installed double-click the .jar file.

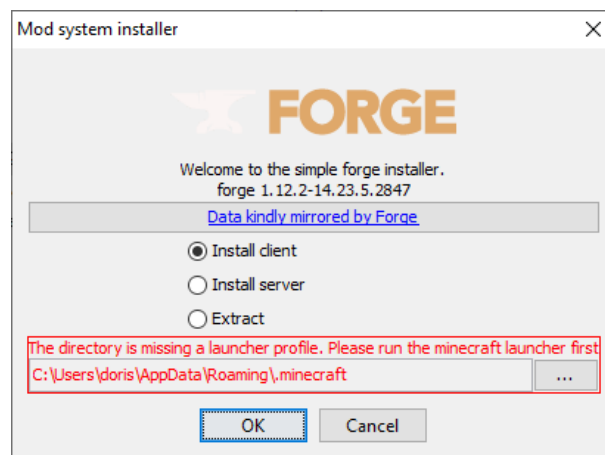If you do not have Java installed, hold shift and right click to open a Powershell (or Cmd) window here

You can then use the newly downloaded version of Java which is stored in `runtime\jre-x64\bin\java.exe`

The command line is:

`.\runtime\jre-x64\bin\java.exe -jar forge-1.12.2-14.23.5.2847-installer.jar`

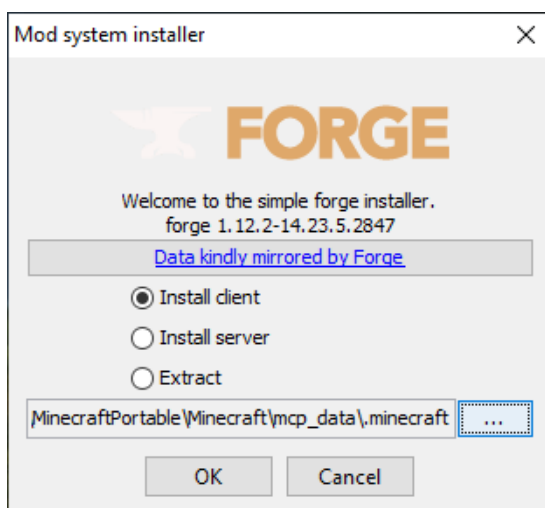If using a Cmd prompt instead of Powershell, remove the .\ at the start
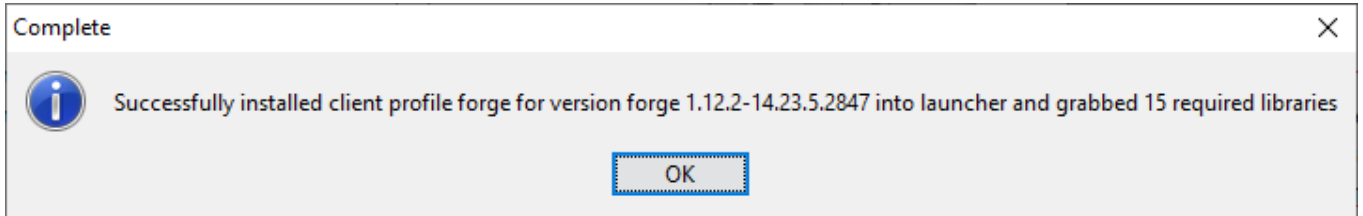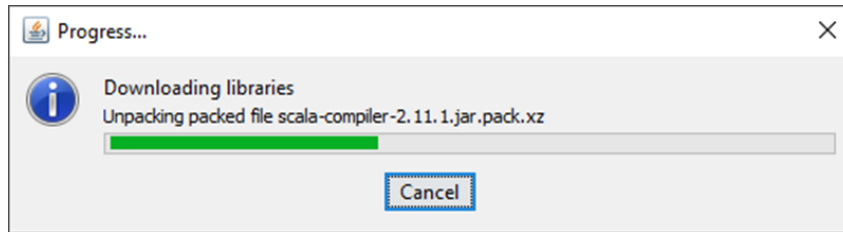

Don't Panic!

Use the browse button to find your local installation in

`C:\Users\Public\PortableApps\MinecraftPortable\Minecraft\mcp_data\.minecraft`

Select Install Client

Click OK

If you used Powershell instead of double-clicking you get this logfile. It is of interest but no consequence.

Start Minecraft USING THE Launcher.vbs FILE!

If you do not use the .vbs file, which forces the launcher to download the game files to
`C:\Users\Public\PortableApps\MinecraftPortable\Minecraft\mcp_data\.minecraft`,
they will instead be placed in `User%APPDATA%Roaming\.minecraft` which is no use for a portable install.

There should be a new option in the Installations menu:
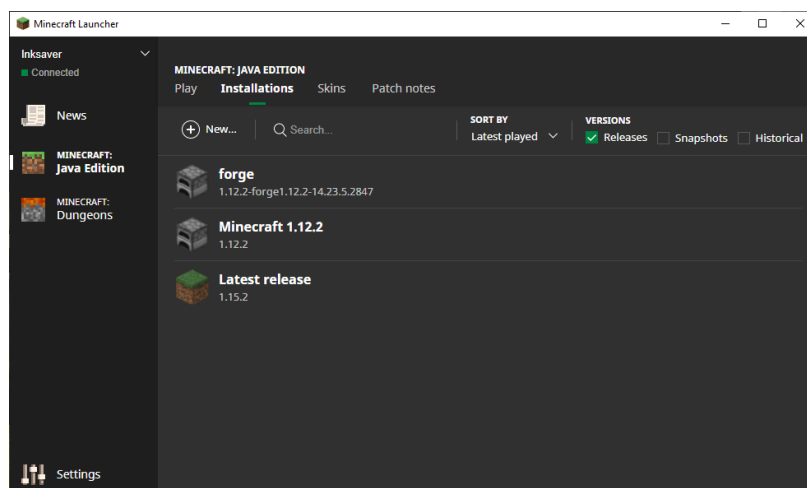
Select Forge and click Play

Success!
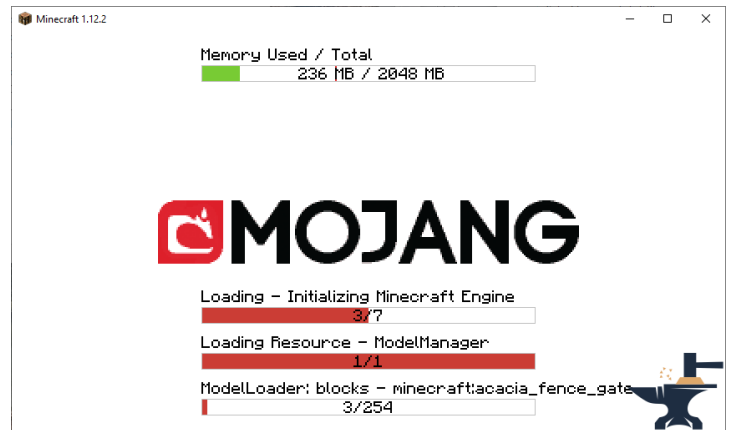
Close the game and open the mcp_data\.minecraft folder:

The folder called 'mods' is where a number of Java files will be dropped
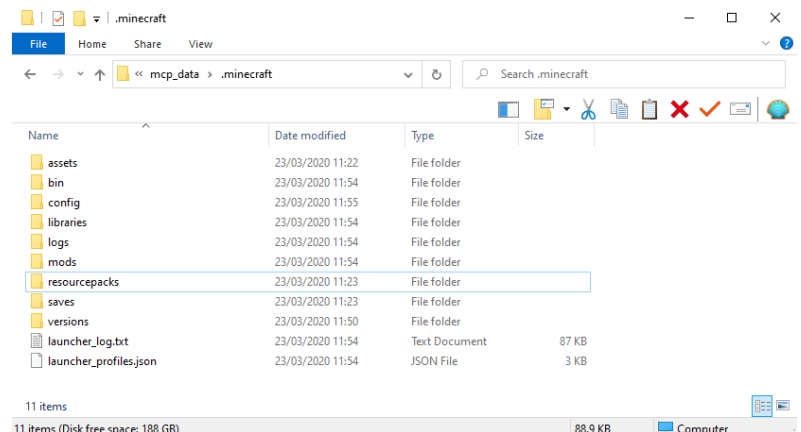
The most important mod is Computercraft.

http://www.dl6.9minecraft.net/index.php?act=dl&id=1562916490

File name: **ComputerCraft-Mod-1.12.2.jar** - File Size: **1.57 MB**

Download this .jar file and drop it in the mods folder:
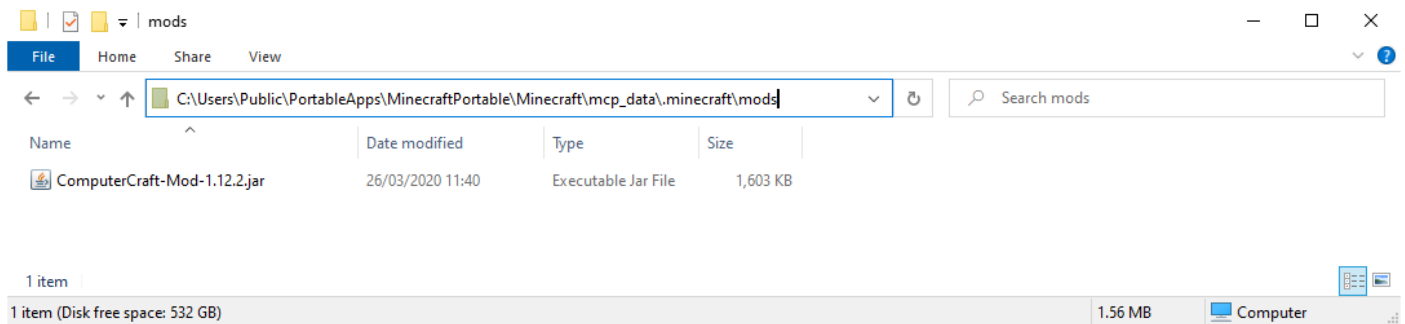
Restart Minecraft with Launcher.vbs

Click 'Installations'

Click the '...' button in the forge entry to edit

Rename the Forge profile to Computercraft

Click 'Save'

Click 'Play'
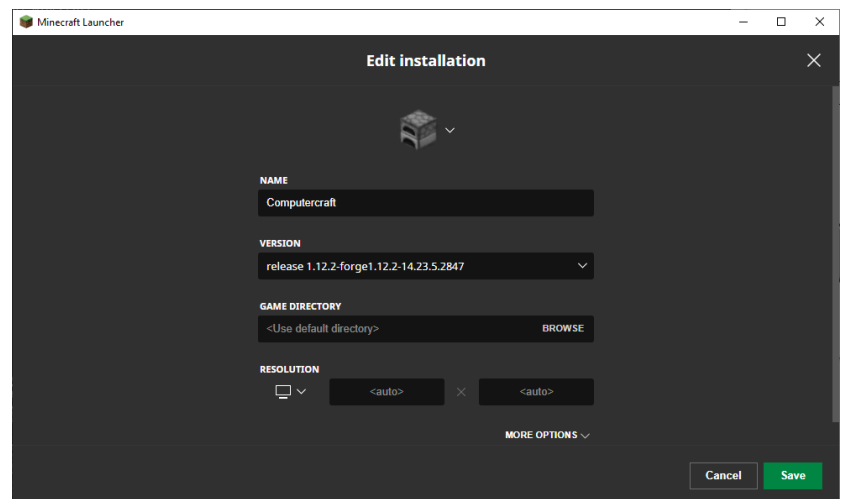
Click the 'Mods' button:

This confirms Computercraft is loaded and ready to run.

Close the game ready to add more mods.

For the best experience of linking Computercraft with wiring to lamps, pistons, logic gates and other devices, use Project Red. Before you add Project red, add the following dependencies:

Forge Multipart: https://www.curseforge.com/minecraft/mc-mods/forge-multipart-cbe/files

CodeChickenLib https://www.curseforge.com/minecraft/mc-mods/codechicken-lib-1-8/files/all

Project Red: http://www.9minecraft.net/project-red-mod/

Use all the links below

Make sure you get the 1.12.2 version of each mod.

For Minecraft 1.12.2

ProjectRed Base: Download from Server 1 – Download from Server 2

ProjectRed Integration: Download from Server 1 – Download from Server 2

ProjectRed Fabrication: Download from Server 1 – Download from Server 2
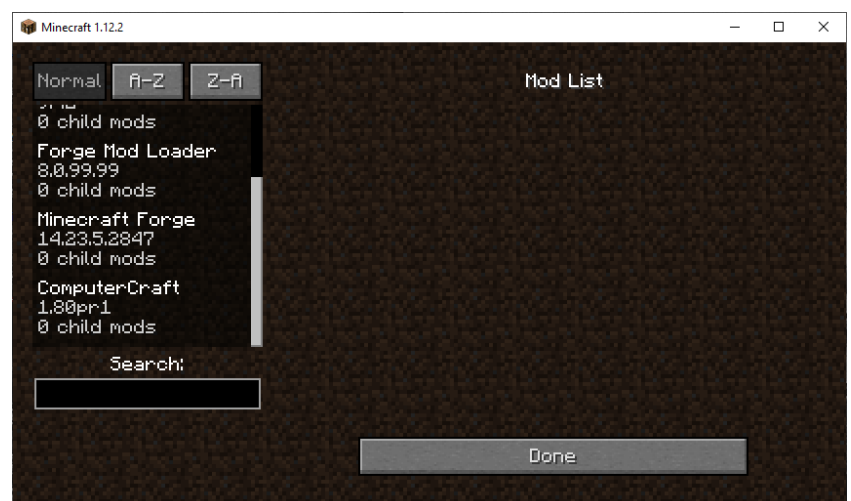
ProjectRed Lighting: Download from Server 1 – Download from Server 2

ProjectRed Mechanical: Download from Server 1 – Download from Server 2

ProjectRed World: Download from Server 1 – Download from Server 2

ProjectRed Compat: Download from Server 1 – Download from Server 2

Optionally get Optifine from https://optifine.net/downloads

This helps performance on slower systems, and when running off a USB stick

Minecraft 1.12.2

OptiFine HD Ultra

|				
OptiFine 1.12.2 HD U F5	Download	(mirror)	changelog	04.12.2019
OptiFine 1.12.2 HD U F4	Download	(mirror)	changelog	23.10.2019
OptiFine 1.12.2 HD U E3	Download	(mirror)	changelog	10.12.2018
OptiFine 1.12.2 HD U E2	Download	(mirror)	changelog	28.07.2018
OptiFine 1.12.2 HD U E1	Download	(mirror)	changelog	28.06.2018
OptiFine 1.12.2 HD U D3	Download	(mirror)	changelog	15.05.2018
OptiFine 1.12.2 HD U D2	Download	(mirror)	changelog	30.04.2018
OptiFine 1.12.2 HD U D1	Download	(mirror)	changelog	23.03.2018
OptiFine 1.12.2 HD U C9	Download	(mirror)	changelog	14.02.2018
OptiFine 1.12.2 HD U C8	Download	(mirror)	changelog	10.01.2018
OptiFine 1.12.2 HD U C7	Download	(mirror)	changelog	13.12.2017
OptiFine 1.12.2 HD U C6	Download	(mirror)	changelog	03.10.2017
OptiFine 1.12.2 HD U C5	Download	(mirror)	changelog	22.09.2017

Finally Open Computers from

https://www.curseforge.com/minecraft/mc-mods/opencomputers

There are similarities with Computercraft, but they are much more expensive to make in Survival Mode

You should now have all the following files in your mods folder. The folder 1.12.2 is created when you run the game for the first time with these mods present:
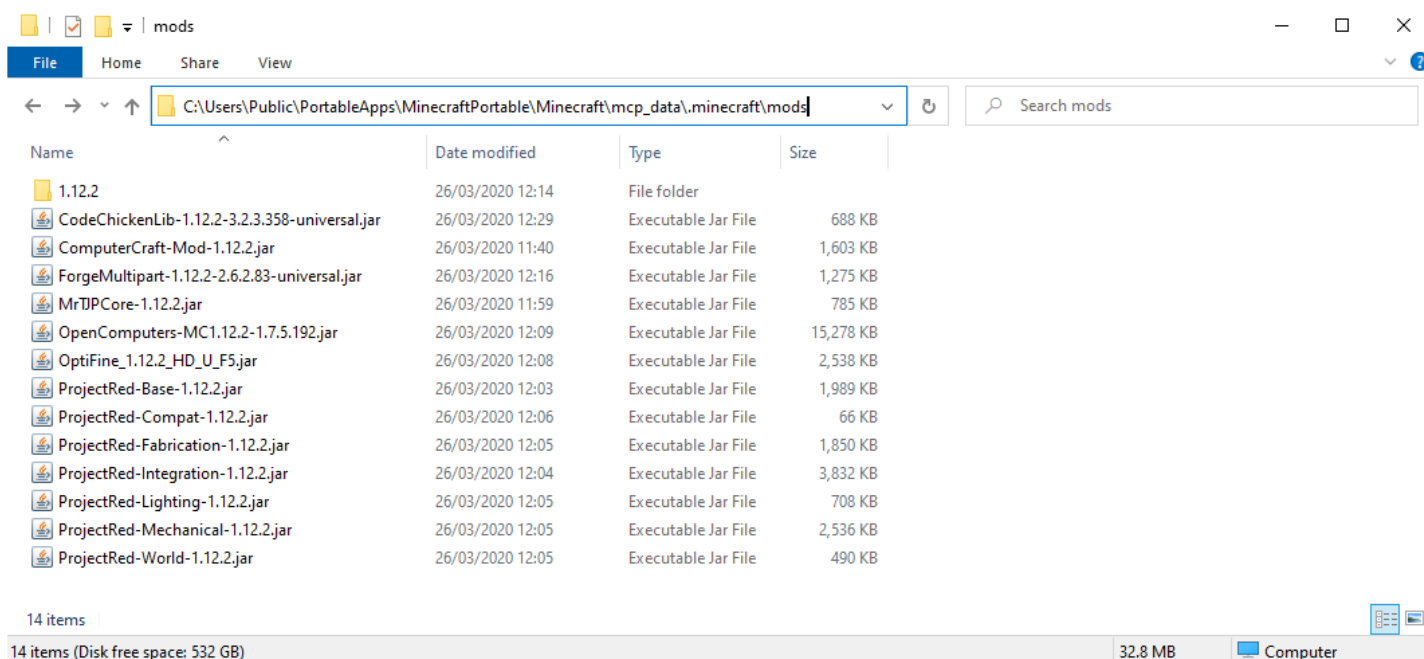
You can now run this version of Minecraft independently of your main installation in the default locations by using the Launcher.vbs file.

You can move the entire 'Minecraft' folder anywhere you want and it will still run via Launcher.vbs

To replace a renamed install:

1. C:\Users\<your account>\AppData\Roaming\.minecraftOLD rename it to .minecraft (There may be an empty .minecraft folder here: delete it first)

2. C:\Program Files (x86)\Minecraft OLD rename it to Minecraft

The installation is now ready to be made fully portable, and to be included as part of a PortableApps setup

Next you need to make an alternative to the .vbs file to start the launcher, as the PortableApps installation only recognises .exe files.

Using C# with either Visual Studio or SharpDevelop is the easiest way to create the file.

Creating MinecraftLauncher.exe using C#

Download SharpDevelop from https://sourceforge.net/projects/sharpdevelop/
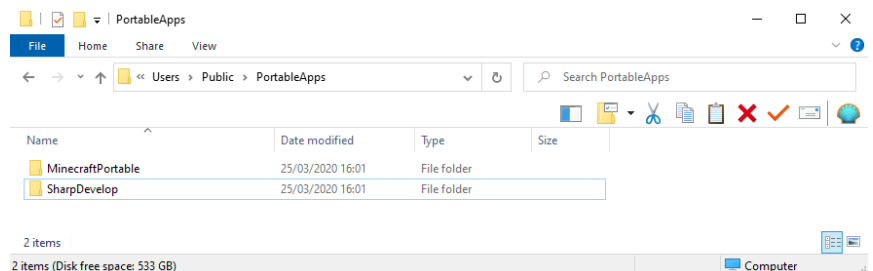
You can try using the .msi installer, but if it errors out you need an old version of the C++ redistributable file, so it is easier to download the .zip

Unpack SharpDevelop_5.1.0.5216_Xcopyable.zip

to the PortableApps folder you already created in C:\Users\Public

This can also be made into a true PortableApp later.

Open the 'SharpDevelop' folder

Open the 'bin' folder and double-click

SharpDevelop.exe

(You can add a shortcut on the desktop if you want)
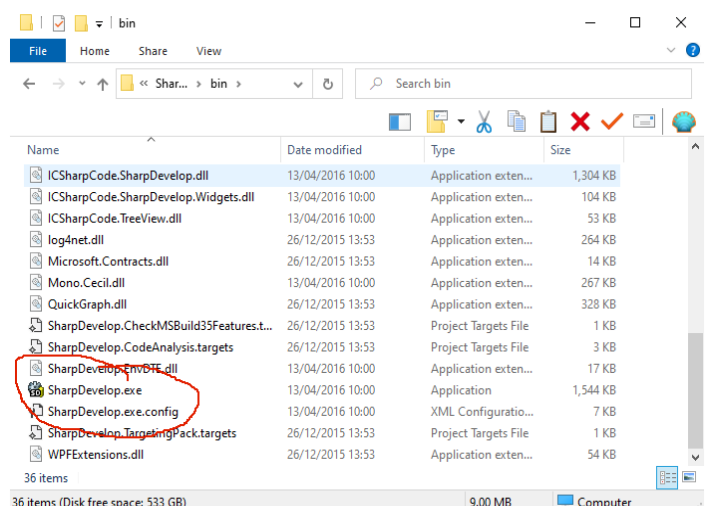
Select 'I do not want to participate' and save (It Is no longer supported so no point)

Click 'New Solution'

1.   Choose C# Windows Application

2.   Choose Console Application

3.   Choose a save folder. Suggested C:\Users\Public\SharpDevelop, but can be anywhere

4.   Name: MinecraftLauncher

5.   Click "Create"

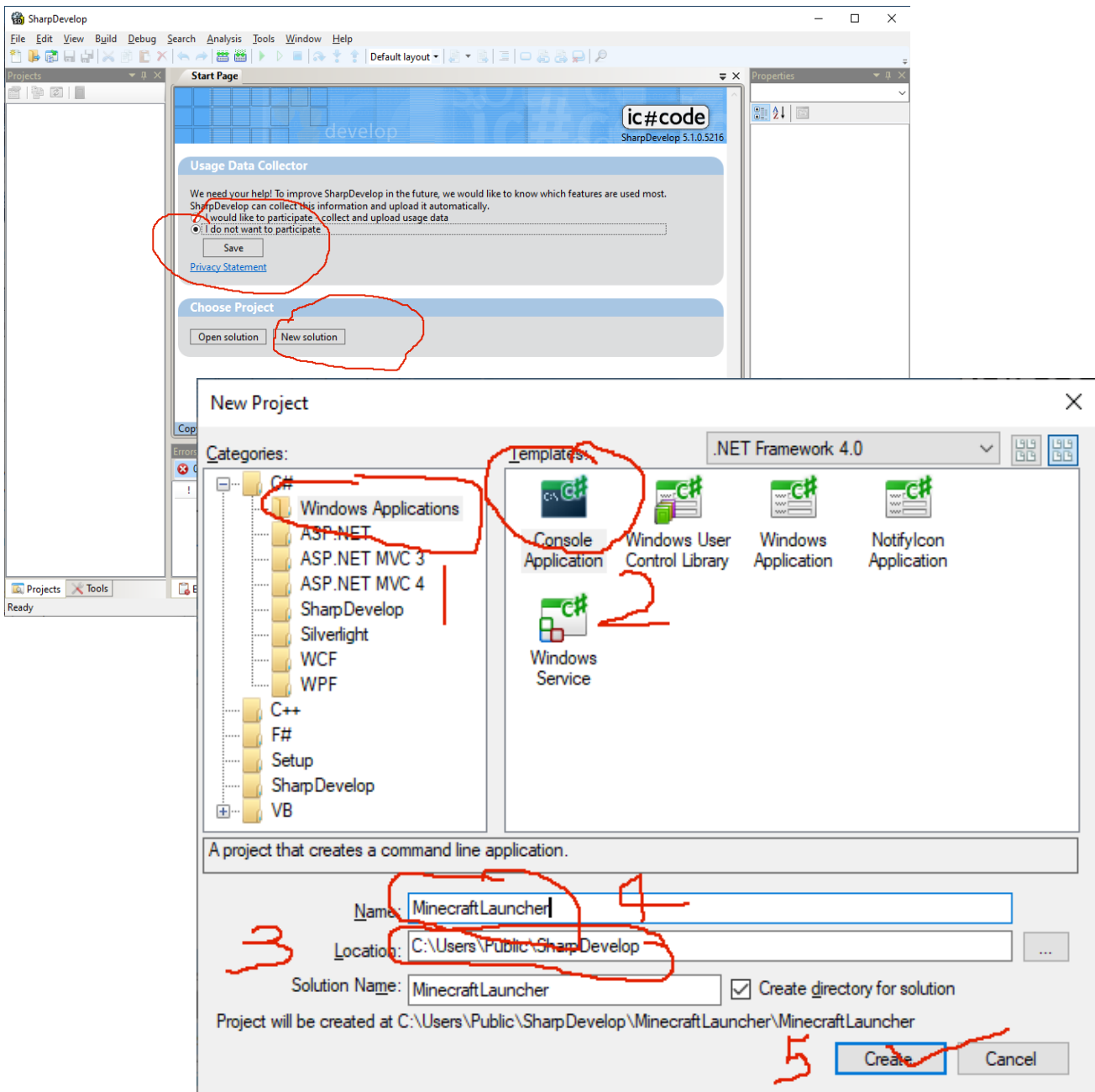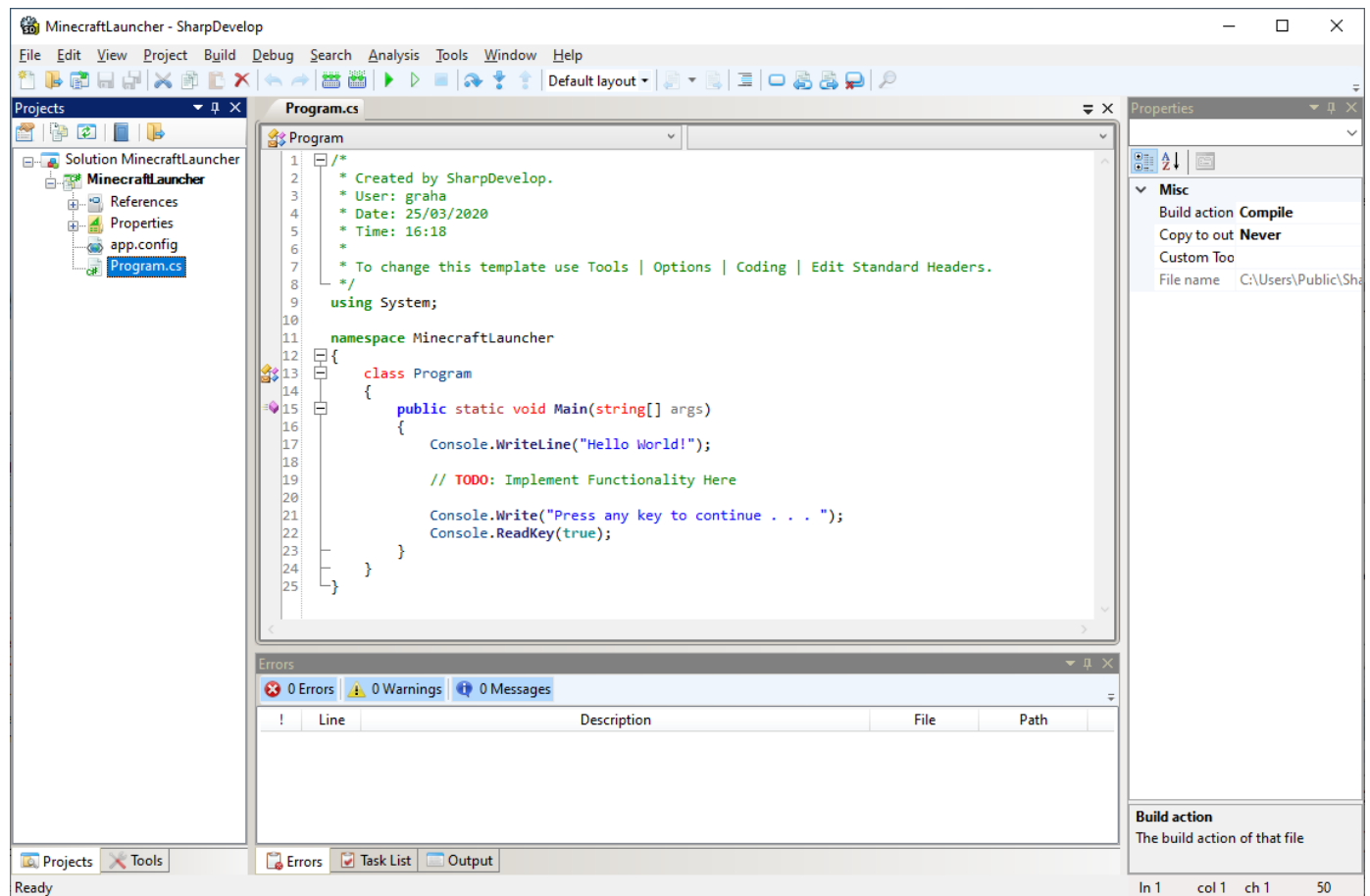The default project opens up. You can run it if you like:

Click the green triangle just below the Analysis menu

Delete all the above code and paste in the following: (Also available from [https://pastebin.com/ypd3N9gp)](https://pastebin.com/ypd3N9gp)

```
using System;
using System.IO;
using System.Diagnostics;
namespace MinecraftLauncher
{
    class Program
    {
        static void Main(string[] args)
        {
            string appPath = Path.GetDirectoryName(System.Reflection.Assembly.GetExecutingAssembly().Location);
            string startFile = Path.Combine(appPath, "Minecraft", "MinecraftLauncher.exe");
            ProcessStartInfo start = new ProcessStartInfo();
            start.FileName = startFile;
            start.Arguments = " --workDir " + Path.Combine(appPath, "Minecraft", "mcp_data",".minecraft");
            Process.Start(start);
        }
    }
}
```
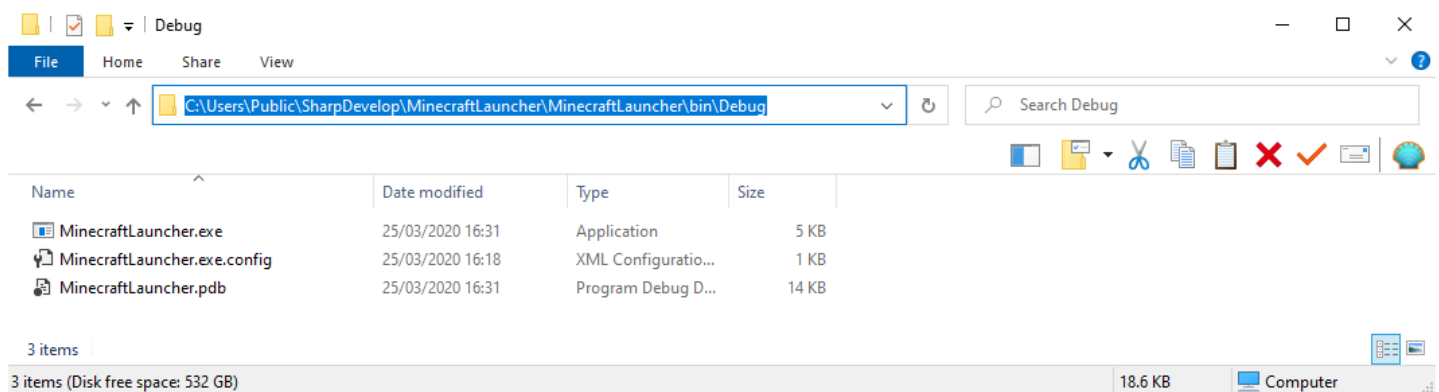
Click the green triangle. It will save, compile and run, but because the files referred to in the code do not exist it will error:
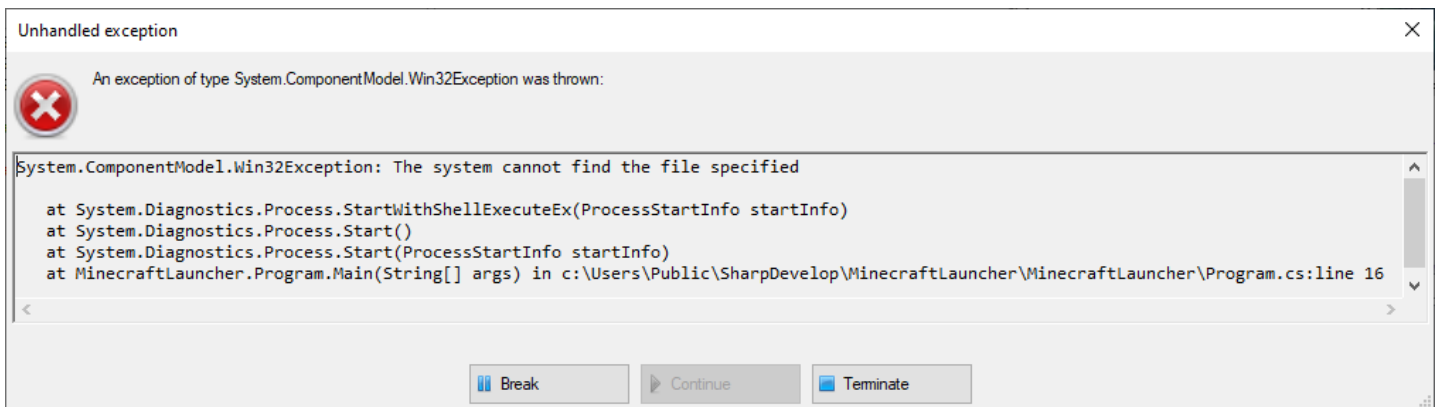
Click Terminate and go to the location of your project folder

Go through the folder structure as indicated below. The file MinecraftLauncher.exe is your finished product
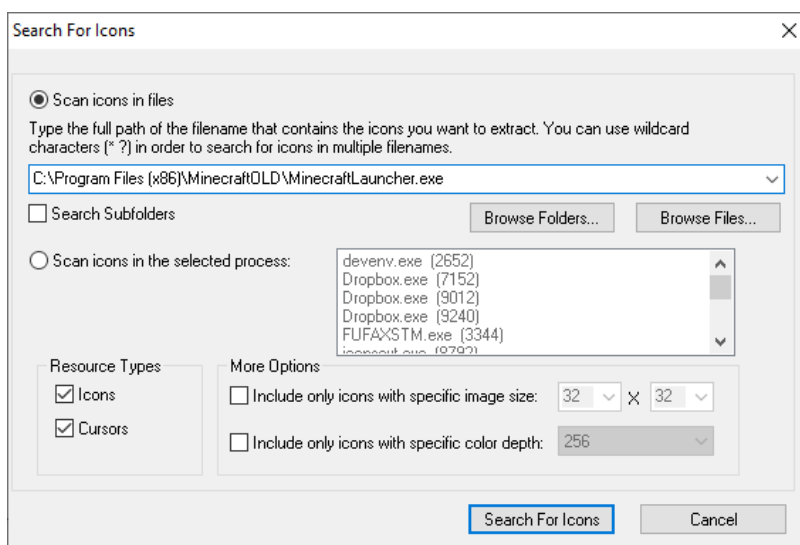

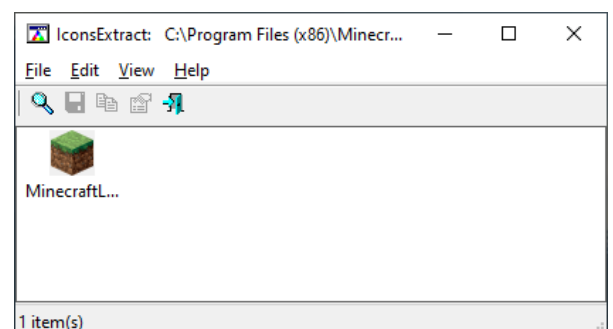All you need now is to 'borrow' the MinecraftLauncher.exe icon from the real version to use in yours

Download IconsExtract from https://www.nirsoft.net/utils/iconsext.html

It does not need installing, so is ideal for a PortableApp. Put it in PortableApps\IconsExtract

Browse to the original Mojang MinecraftLauncher you used earlier

Click Search for Icons

Right-Click and save selected icons.
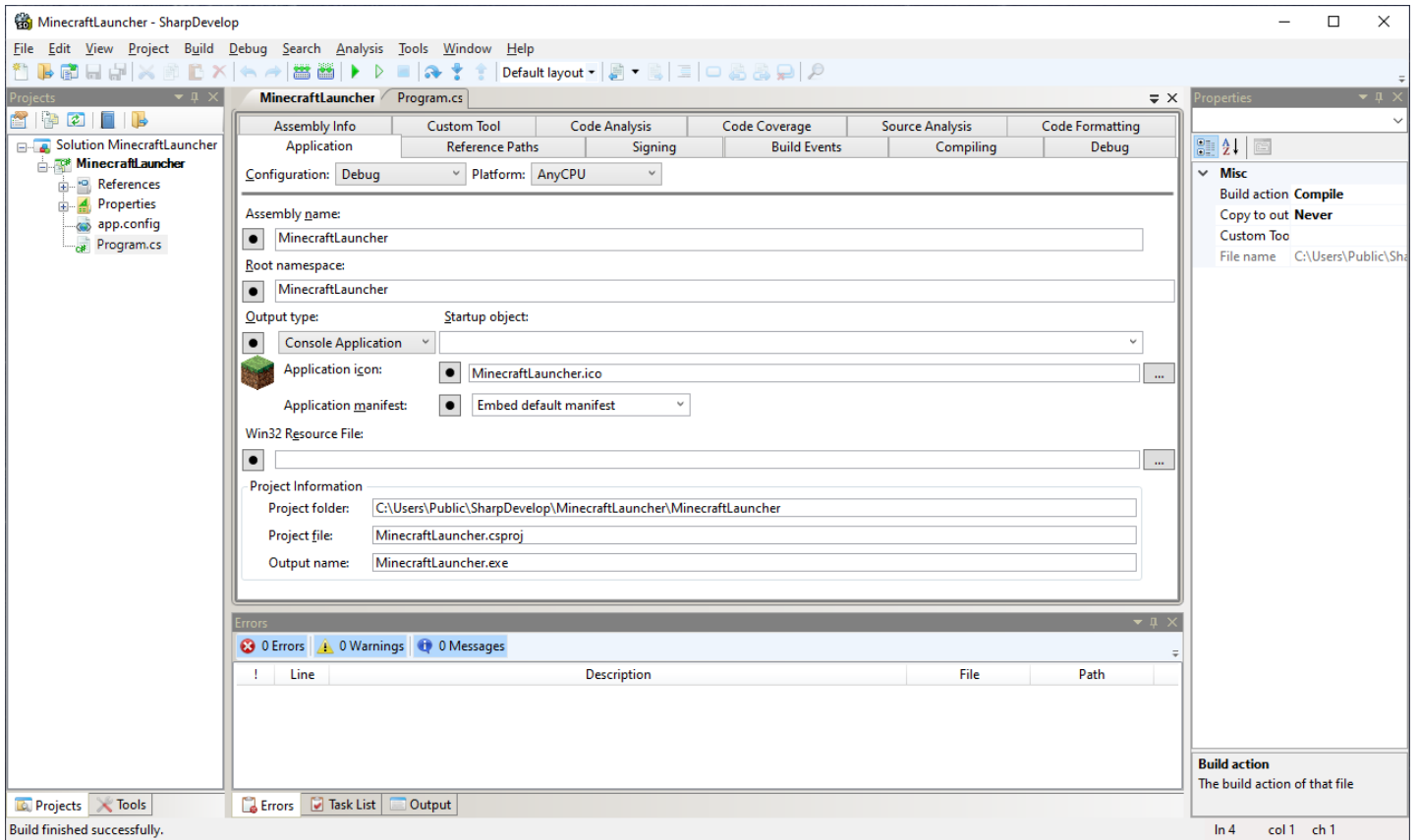
Put it in your project folder
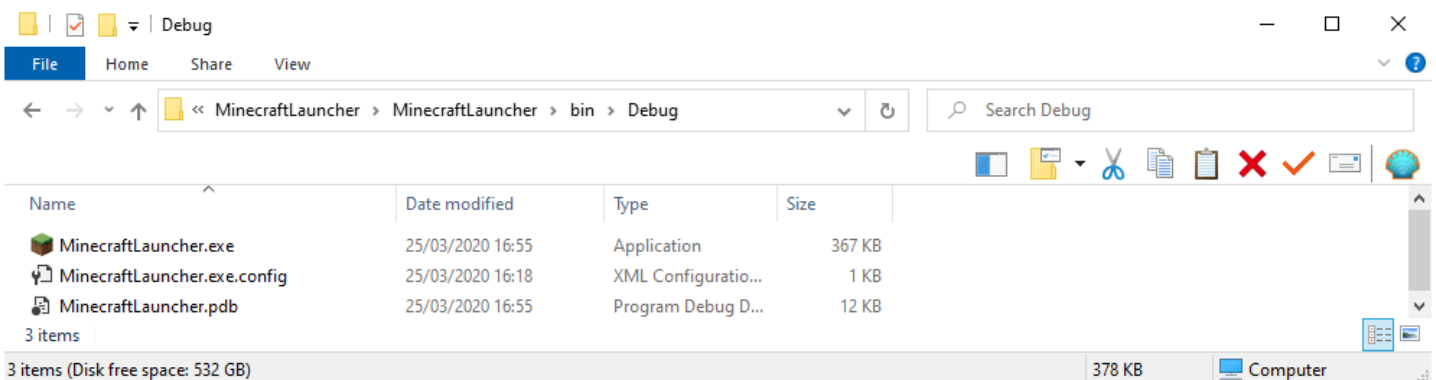
Return to your SharpDevelop project

Menu —> Project —> Project Options

Browse for the icon you just 'borrowed' in the ApplicationIcon field

Save and re-compile (run or Menu —> build —> Build solution

Return to the debug folder: That's better! It has an icon.

This can now be used to start Minecraft in your setup in C:\Users\Public.
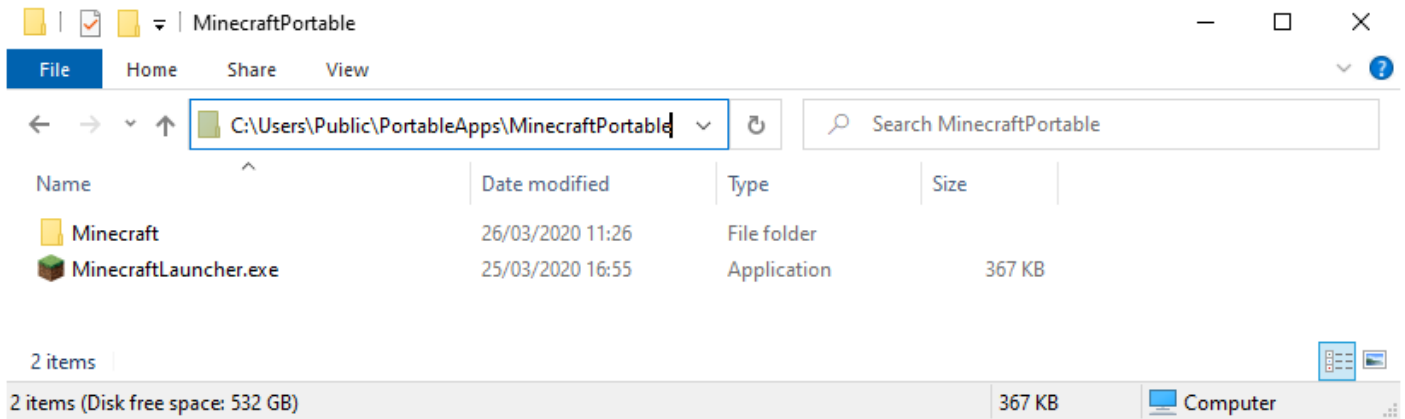
If you look at the code the line:

```
start.Arguments = " --workDir " + Path.Combine(appPath, "Minecraft", "mcp_data",".minecraft");
```

This is looking for the path beginning where the application was started from, eg
`C:\Users\Public\PortableApps\MinecraftPortable` with the addition of `\Minecraft\mcp_data\.minecraft` making the full path:

`C:\Users\Public\PortableApps\MinecraftPortable\Minecraft\mcp_data\.minecraft`
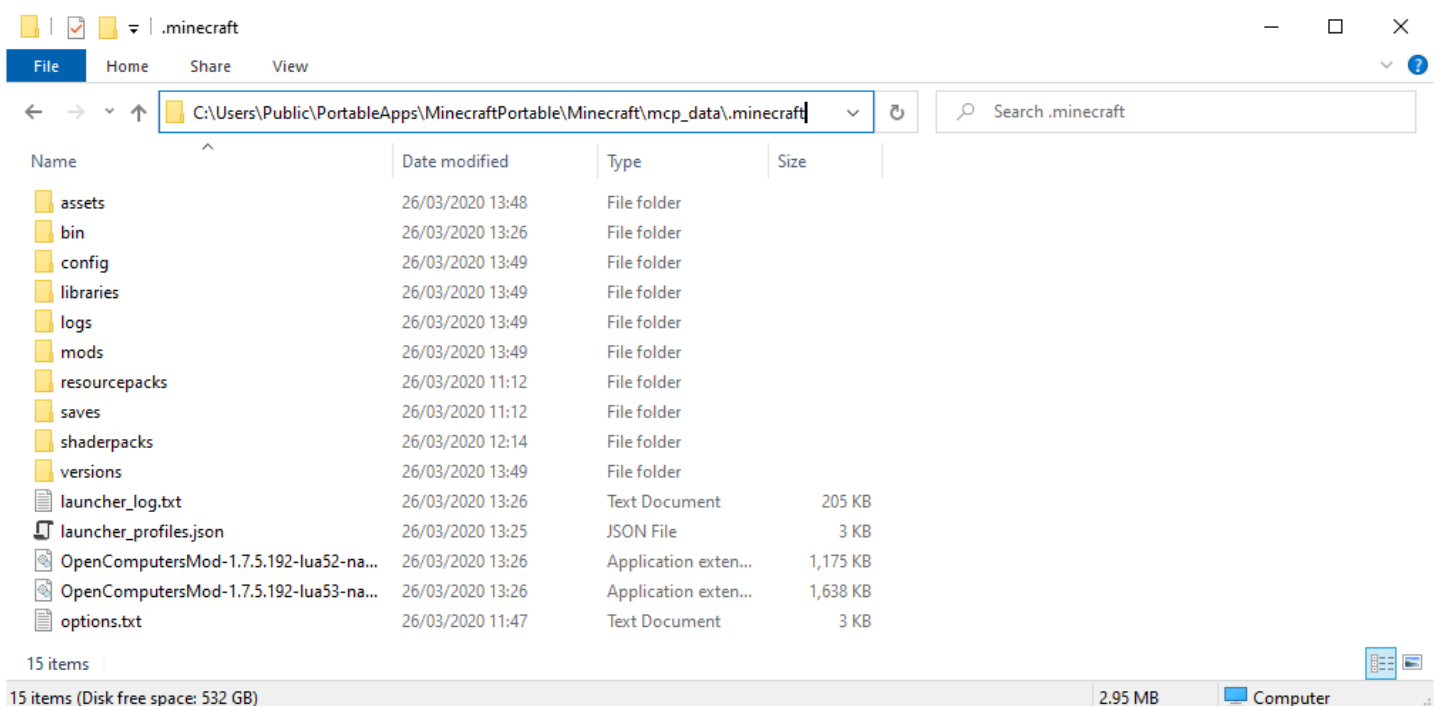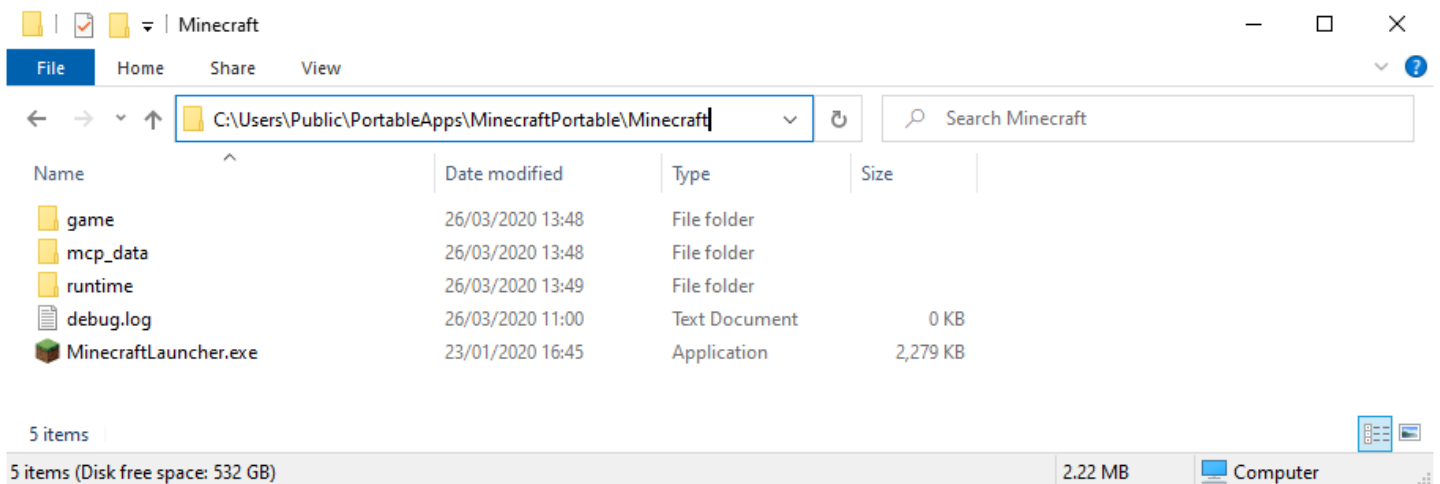
Copy your version of MinecraftLauncher to `C:\Users\Public\PortableApps\MinecraftPortable\` so it is OUTSIDE the Minecraft folder

Double-Click to test whether it works

The files Launcher.vbs, forge-1.12.2-14.23.5.2847-installer.jar and forge-1.12.2-14.23.5.2847-installer.jar.log can all be deleted.
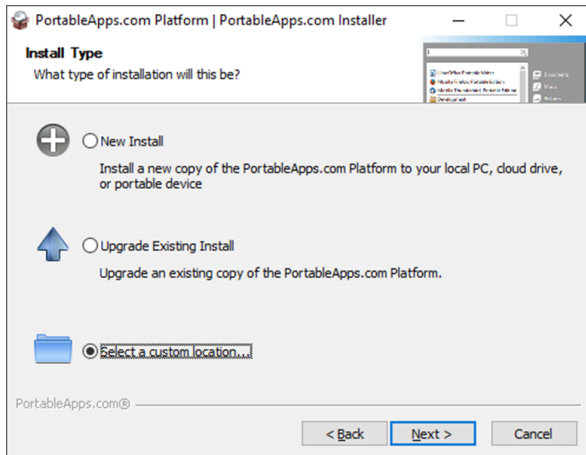
Do NOT delete MinecraftLauncher.exe, as this file is called by the C# version you have just created in the folder above
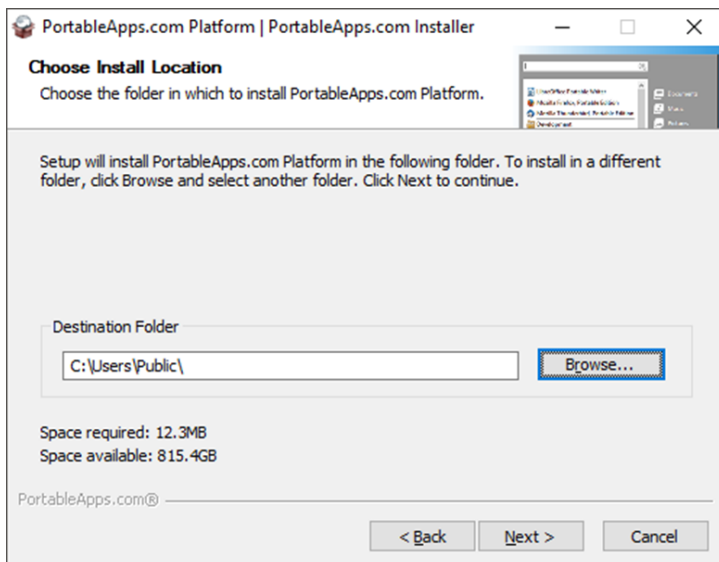
To make this a part of a true PortableApps install:

Go to https://portableapps.com/ and download the free installer

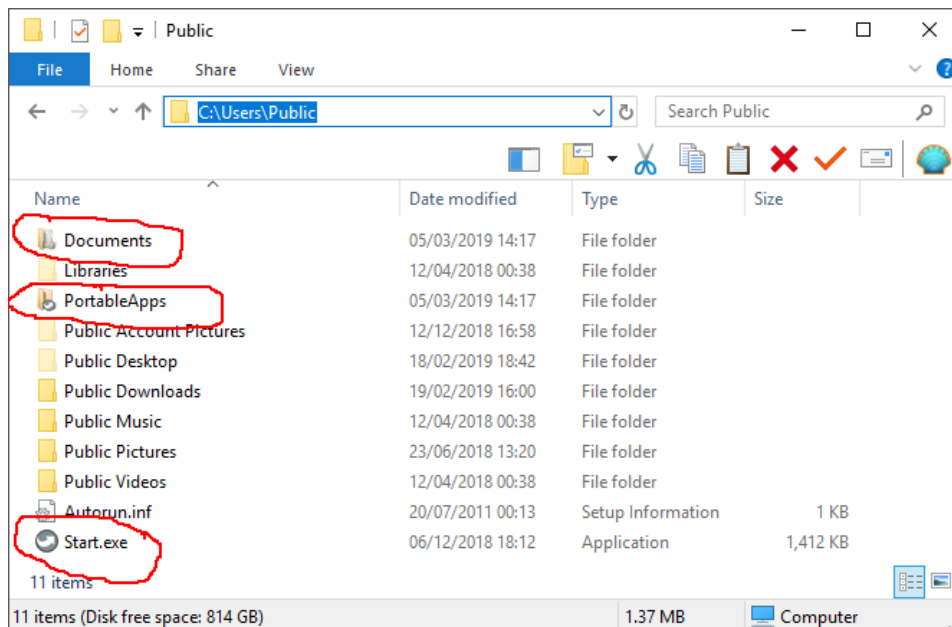Run it and click-through to here:

Choose custom location and 'Next'

Choose C:\Users\Public

When prompted run the installation:

As you had already created a 'PortableApps' folder, all that is added is the file 'Start.exe' and the folder 'Documents'
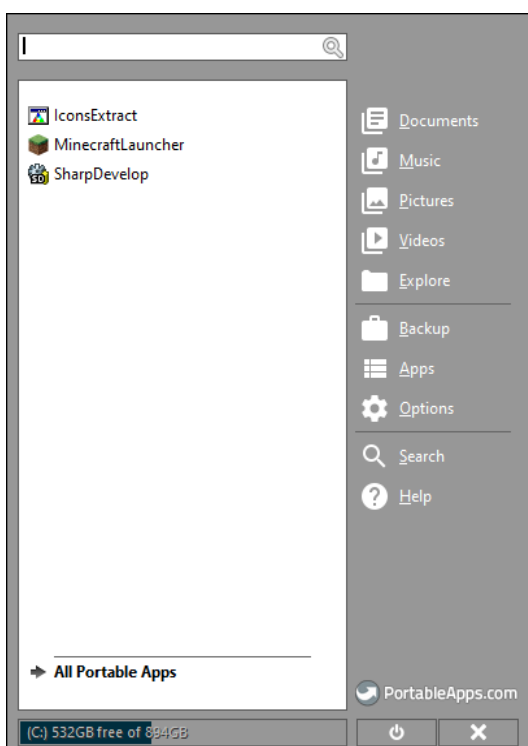
The folders and files indicated are the ones you copy across to a USB drive for full PortableApps compatability.

If it is only Portable Minecraft required, then the 'Documents' folder can be ignored.

The 'PortableApps folder now contains:
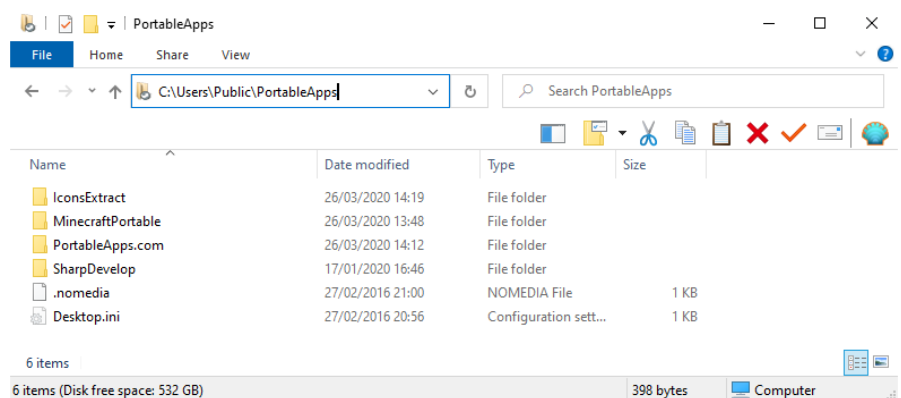
Double-Clicking 'Start.exe' starts the PortableApps interface:

Single-Click on MinecraftLauncher will start Minecraft via the Mojang Launcher with injected workDir path to .minecraft

IconsExtract used earlier to get the icon is available already.

SharpDevelop will NOT appear on your install, as it also requires a custom launcher to start it because the SharpDevelop.exe file is in the 'bin' folder. You should be able to adapt the C# launcher code you made for Minecraft in a new project called 'SharpDevelop'

This is out of the scope of this tutorial, so will not be pursued here.

Enjoy Minecraft Portable