o Beginners course
  o You don't need to know programming
  o You don't need to know C++ - I didn't!
  o But I'm sure there's something for advanced users, too!

o We will be using freely available software, with the exception of:
  o Reaper, which has a fully functional 2-month trial, and is ridiculously affordable after that and totally worth every penny, *but*:
  o You can use any DAW (free or not) that runs on Windows and can load vst3 plugins.

o Please remember to support all the creators of free software (especially iPlug2's Oli Larkin and Alex Harker), by donating if possible!

   o https://github.com/sponsors/iplug2

o My online presence:
   o Shameless Plugs website:
      ▪ http://shamelessplugs.net/
   o Shameless Plugs on YouTube:
      ▪ https://www.youtube.com/@Shameless-Plugs-TM

o Let's get started!

- Let's visit https://github.com/iPlug2/iPlug2
  - Github may seem daunting, but once you get used to it, it's not actually all that bad!

- How to handle this '.git' link?
- Git is an application that software developers and software development teams use to keep track of their work.
- It's a command line application though, and not everyone will want to deal with that!

- So, let's download and install:
  - https://tortoisegit.org/download/ which provides a nice graphical user interface for working with Git (we're not going to use much Git anyway – for now we'll just use it to get iPlug2!)

o While installing TortoiseGit (the easy shell), it searches for Git (the command line application).
Thankfully, it suggests:
  o https://gitforwindows.org/
    So let's get that and install it.

o Now that we have Git and TortoiseGit set up, let's revisit https://github.com/iPlug2/iPlug2, to copy that link to clone the software!

- Now go to your Documents folder, right-click somewhere where there's no files or folders, and select:
  - Git Clone
- In the dialog box, select:
  - Depth=1
    - this just means that we don't install all of iPlug2's history (going back years), only the *current* version that we want;
  - Recursive
    - In case there are any sub-modules (i.e. dependencies that iPlug2 needs), this means we'll get them too;
    - However, since iPlug2 doesn't have any sub-modules, in this case it's actually moot!
    - Still, it's good to know what it means!

o There should now be an 'iPlug2' folder in your 'Documents' folder!
o Navigate to 'Examples' in your Windows Explorer.
  One of the great things about iPlug2 is that it not just comes with examples for us to learn from, but we can actually very easily directly use them as starting points!

o In order to clone one of the example projects:
    o Hit Ctrl+D to enter the address bar in Windows Explorer;
    o Type 'cmd' and hit Enter;
    o This will open up a command prompt in the 'Examples' directory;
    o Type 'duplicate.py' and hit Enter.

- o doesn't work => https://ninite.com/
- o 8. Select on Ninite:
- o o Recommended:
- o □ SumatraPDF
- o □ Everything
- o □ WinMerge
- o o Needed:
- o □ Python x64 3
- o 9. duplicate.py IPlugEffect MyFirstPlugin ShPl
- o 10. Back to Explorer, navigate into MyFirstPlugin
- o 11. Notice .sln:

- o Go to: https://visualstudio.microsoft.com/vs/community/
- 12. Install Visual Studio
- 13. Select "Desktop Development with C++"
- 14. Finally, click "Install"
- o Ignore Azure
- o Close all when done
- 15. Double-click .sln
- 16. Make sure the 'app' is selected
- 17. Select 'Release' – we'll do Debugging later
- 18. F5
- 19. We'll want folder for out own projects:
- o Create a folder 'Projects' under ..\Documents\iPlug2
- o Cut & Paste MyFirstPlugin there
- 20. If that works fine,

- o right-click on the 'vst3', and
- o select 'Set as Startup Project' (key 'A' should work as well)
- 21. F5
- 22. 'There were build errors':
- o Check checkbox 'Do not show this again', and
- o select 'No' (no use running a previously successful build if the current one is failing)
- 23. Press 'F8' and see '1>/Dependencies/IPlug/VST3_SDK/base/source/fbuffer.cpp(1,1): error C1083: Cannot open source file: '..\..\..\Dependencies\IPlug\VST3_SDK\base\source\fbuffer.cpp': No such file or directory'
- 24. So, we'll need the VST3 SDK:

- o Navigate to C:\Users\User\Documents\iPlug2\Dependencies\IPlug
- o double-click 'download-iplug-sdks.sh'
- o Wait till done
- 25. Back to VS
- 26. F5
- 27. Reaper needed:
  - o https://www.reaper.fm/download.php
  - o Choose 64-bit if you can
- 28. Project load warning =>
  - o Ctrl+R, rescan
  - o plugin doesn't show up =>
  - Add a 'VST3' folder to C:\Program Files\Common Files\ if it doesn't yet exist;
  - Change permissions of C:\Program Files\Common Files\VST3 so you are allowed to write files there;

- o ☐ Rescan again (F5);
- o ☐ Plugin shows up!
- o 29.
- o 30.