The following procedure is an expanded version of what can be found at https://www.applegamingwiki.com/wiki/Game Porting Toolkit

Make sure your Macbook is updated to the latest version of Sanoma.

Sections 1 - 4 are based on the above-linked documentation as well as <u>this video</u>. This video by Andrew Tsai's Tips walks you through the installation and preparation of the Game Porting Toolkit.

Section 1: initial downloads

- Go to the <u>Apple Developer Downloads site</u>, search for and download the dmg file for the latest version of Command Line Tools for Xcode. This can be done by clicking "more details" → then run the downloaded file.
- 2) From the same site, search for and download the latest version of the Game Porting Toolkit. Then run/mount the dmg file. You can usually tell it's mounted if a new window with the title "Game Porting Toolkit [version number]" pops up and a disk icon appears on your desktop. (certain commands require that the toolkit is mounted)

Section 2: Homebrew

- 1) Go into spotlight and open Terminal
- 2) Into the shell (terminal) enter the following to install rosetta (a translator for mac): softwareupdate --install-rosetta
- 3) Next, enter the x86_64 shell by entering:

arch -x86_64 zsh

4) Install x86 version of homebrew by entering:

/bin/bash -c "\$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"

You will be prompted for your computer's password. Type your password (it will be insivible, nothing will be changing on the screen). Press return, then press return again to confirm.

5) Set you path by inputing:

(echo; echo 'eval "\$(/usr/local/bin/brew shellenv)"') >> ~/.zprofile eval "\$(/usr/local/bin/brew shellenv)"

Or copy and paste the similar line, which should've generated after the completion of step 4 in your terminal.

6) Make sure the brew command is in your path:

which brew

- 7) If this command does not print /usr/local/bin/brew, you should use this command: export PATH=/usr/local/bin:\${PATH}
- 8) Tap source code from Apple for Homebrew:

 brew tap apple/apple http://github.com/apple/homebrew-apple
- 9) If you have an older version of Homebrew already on your computer, then update with:

brew update; brew -v install apple/apple/game-porting-toolkit

Else if Homebrew is new to your device:

brew -v install apple/apple/game-porting-toolkit

This installment process can take a very long time, depending on your device. It can take over 1 hr.

Section 3: Wine Prefix

- 1) You will install the toolkit and game (application) into the virtual C: drive contained in the Wine prefix. So, to create the prefix first, enter:
 - WINEPREFIX=~/my-game-prefix \$(brew --prefix game-porting-toolkit)/bin/wine64 winecfg
 - The folder of the prefix will be named 'my-game-prefix' and be located in the home directory.
- 2) A "Wine configuration" window should appear on your screen. Change the version of Windows 7 to Windows 10. Then choose Apply and then OK to exit winecfg.

Section 4: Preparing the Toolkit

- 1) With the Game Porting Toolkit dmg mounted from earlier, the following script will copy some library files from the Toolkit into the prefix's library files:
 - ditto /Volumes/Game\ Porting\ Toolkit-1.0/redist/lib/ `brew --prefix game-porting-toolkit`/lib/
- 2) The following command will put 3 scripts from Game Porting Toolkit dmg into /usr/local/bin
 - cp /Volumes/Game\ Porting\ Toolkit*/gameportingtoolkit* /usr/local/bin

Section 5: Downloading and starting the launcher (Steam will be used as an example here)

Replace the file name with that of your launcher if using another launcher. Some may require different instructions, these can be found in the original site linked at the top of this document. Part of step 3 and step 4 is based on this video.

- 1) Download the Windows version of your launcher to your mac. This should download a .exe file to your downloads folder unless you've redirected it to somewhere else.
- 2) To install Steam on your mac:
 - gameportingtoolkit ~/my-game-prefix ~/Downloads/SteamSetup.exe
- 3) To run Steam first try: gameportingtoolkit ~/my-game-prefix 'C:\Program Files (x86)\Steam\steam.exe'

If you see an error regarding the steamwebhelper or other issue try (note: please update the red version number of the Game Porting Toolkit to the version you are using; that section is highlighted in red):

MTL_HUD_ENABLED=1 WINEESYNC=1 WINEPREFIX=~/my-game-prefix /usr/local/Cellar/game-porting-toolkit/1.1/bin/wine64 'C:\Program Files (x86)/Steam/steam.exe'

If that still doesn't work, try:

WINEPREFIX="/Users/\$USER/Library/Application Support/CrossOver/Bottles/Steam/"/usr/local/Cellar/game-porting-toolkit/1.1/bin/wine64 'C:\Program Files (x86)/Steam/steam.exe'

4) To launch without the HUD (which you will see once you start a game), try the following if the first command from step 3 worked for you:

gameportingtoolkit-no-hud ~/my-game-prefix 'C:\Program Files (x86)\Steam\steam.exe'

Try the following if the second or third command was the one you ended up using from step 3:

MTL_HUD_ENABLED=0 WINEESYNC=0 WINEPREFIX=~/my-game-prefix /usr/local/Cellar/game-porting-toolkit/1.1/bin/wine64 'C:\Program Files (x86)\Steam\steam.exe'

Section 6: Installing your game (Hogwarts Legacy will be used as an example here):

- 1) After launching the Windows version of Steam, download your game from your library.
- 2) Once it's done downloading, you may run the game from Steam as you usually would.
- 3) Every time you reopen the game you must delete the folder which has shares the name of your game (ex. Hogwarts Legacy) from the following sequence of folders:

 /Users/yourname/my-game-prefix/drive_c/ProgramData/
 Replace yourname with the name of your user file.
 - The folder named identically to your game must be deleted every time you reopen the game in order for it to start.
- 4) Repeat steps 3 or 4 from section five in the Terminal whenever you want to launch Steam again.

Section 7 (optional): Setting proper retina resolution

You may notice that the game launcher and/or game is pixelated to some degree after following the previous sections. This section will walk through how to turn on Retina support to remedy this issue. The original Reddit post which this section was based is this post.

1) Open terminal and input:

WINEPREFIX=~/my-game-prefix `brew --prefix game-porting-toolkit`/bin/wine64 regedit

Note: if you changed the name of my-game-prefix, just replace that portion with the name for your renamed file.

This will open a window titled 'Registry Editor', and an icon named 'wine64-preloader' will appear in your dock.

- 2) Go through the following sequence of folders: HKEY_CURRENT_USER → Software → Wine
- 3) Then right-click the Wine folder then create a new Key and name the new folder inside of Wine Mac Driver
- 4) Inside of Mac Driver, in the righthand panel of the window, right-click empty space to create a new string value
- 5) Name the string value to RetinaMode
- 6) Right-click RetinaMode and click Modify... to input Y to the bar under value data
- 7) Click OK then close out of the window
- 8) Now, you will want to change the DPI settings in WineConfig to the desired value for your device (I use 240 on a 16" macbook pro). To do this, enter the following into the terminal:
 - WINEPREFIX=~/my-game-prefix `brew --prefix game-porting-toolkit`/bin/wine64 winecfg
- 9) A new window will open titled 'Wine configuration', and an icon named 'wine64-preloader' will appear in your dock
- 10) Go to the Grpahics tab and adjust the screen resolution to your desired dpi value.
- 11) Click Apply, then OK to exit the window.
- 12) Now, you may launch your game launcher as described in section 5.

Footnote: Additional Performance mod for Hogwarts legacy installation guide can be found in <u>this video</u> by MacProTips.