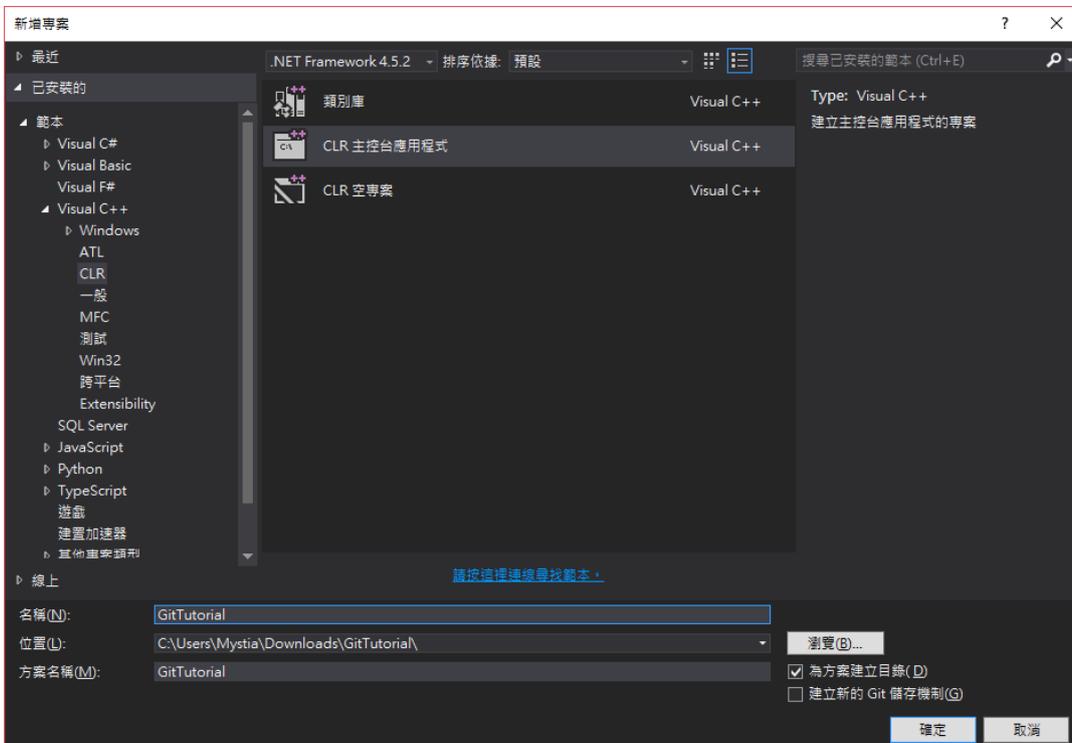


練習 5: Commit/Push 程式到伺服器

Commit 為提交已 stage 的檔案至 Git，Commit 僅提交到本機，Push 以後才會上傳到伺服器，Commit 建議每做一點修改就 Commit 一次，一口氣 Commit 大量檔案可能發生未預期的問題；本練習的目的是由某乙先寫一段程式，並將程式 Commit/Push 到 git 上，使得以後某甲可以從 git 上取得這段程式並且做修改。

1. 在練習 3 Clone 的目錄下，新增一個 Visual C++ CLR 應用程式



2. 在 GitTutorial.cpp 貼上下方程式碼：

```
#include "stdafx.h"
#include <string>
#include <iostream>

using namespace System;

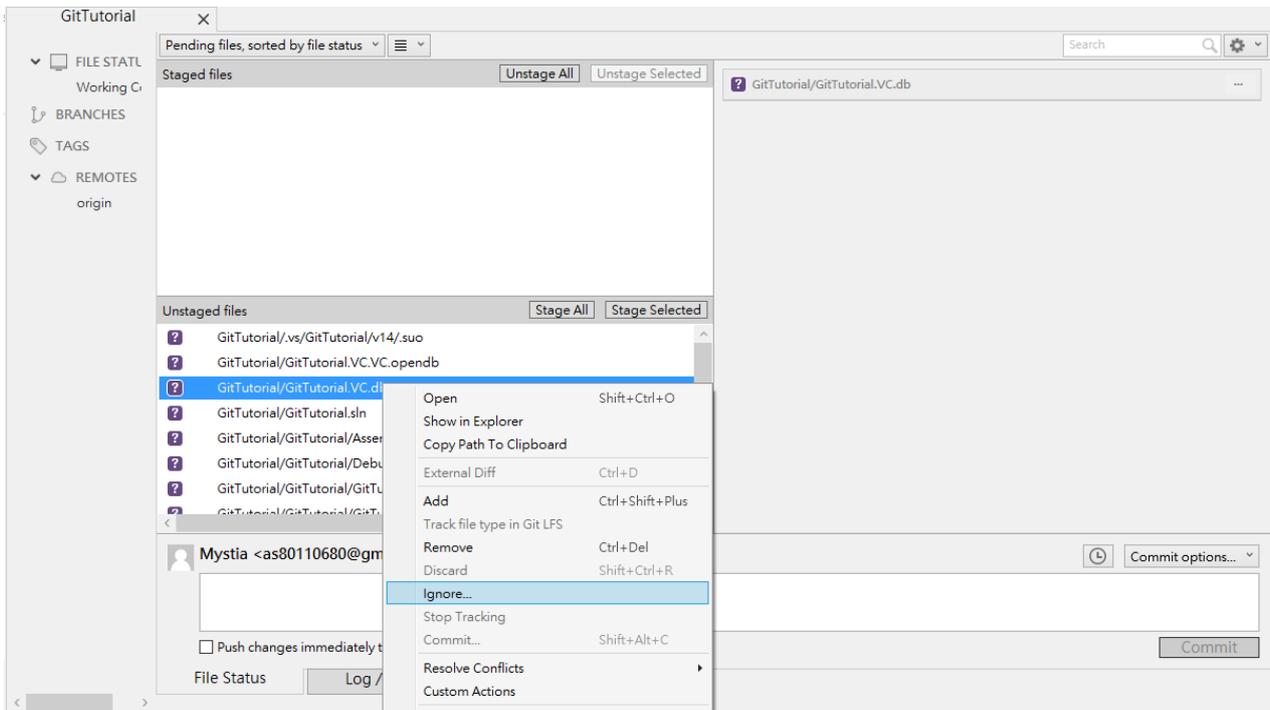
bool Guess(int number) {
}

int main(array<System::String ^> ^args)
{
}
```

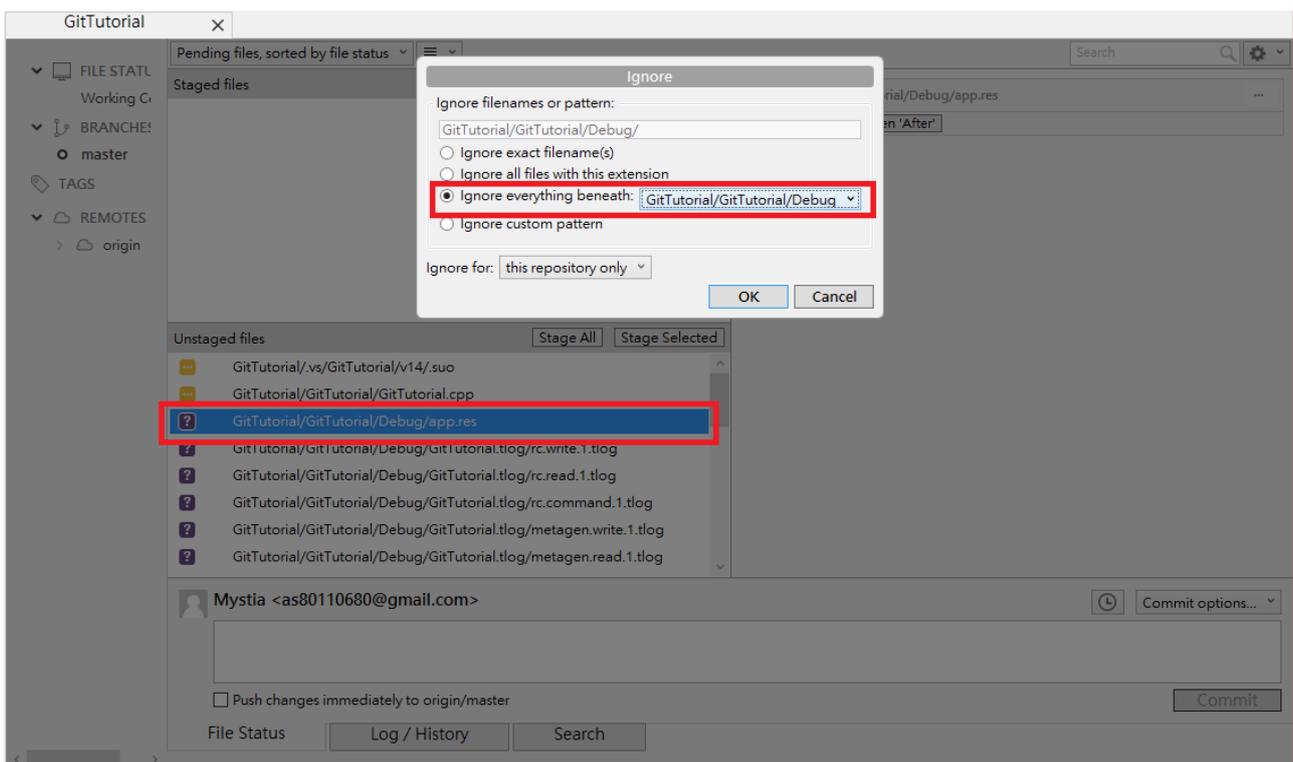
3. Gitignore :

(Gitignore 可以設定檔案或路徑使其不再被 Git 追蹤，詳細可以使用 <https://www.gitignore.io/>，輸入所使用的 IDE 及語言，會自動產生 ignore 檔，且在註解有說明該檔案或目錄用途為何)

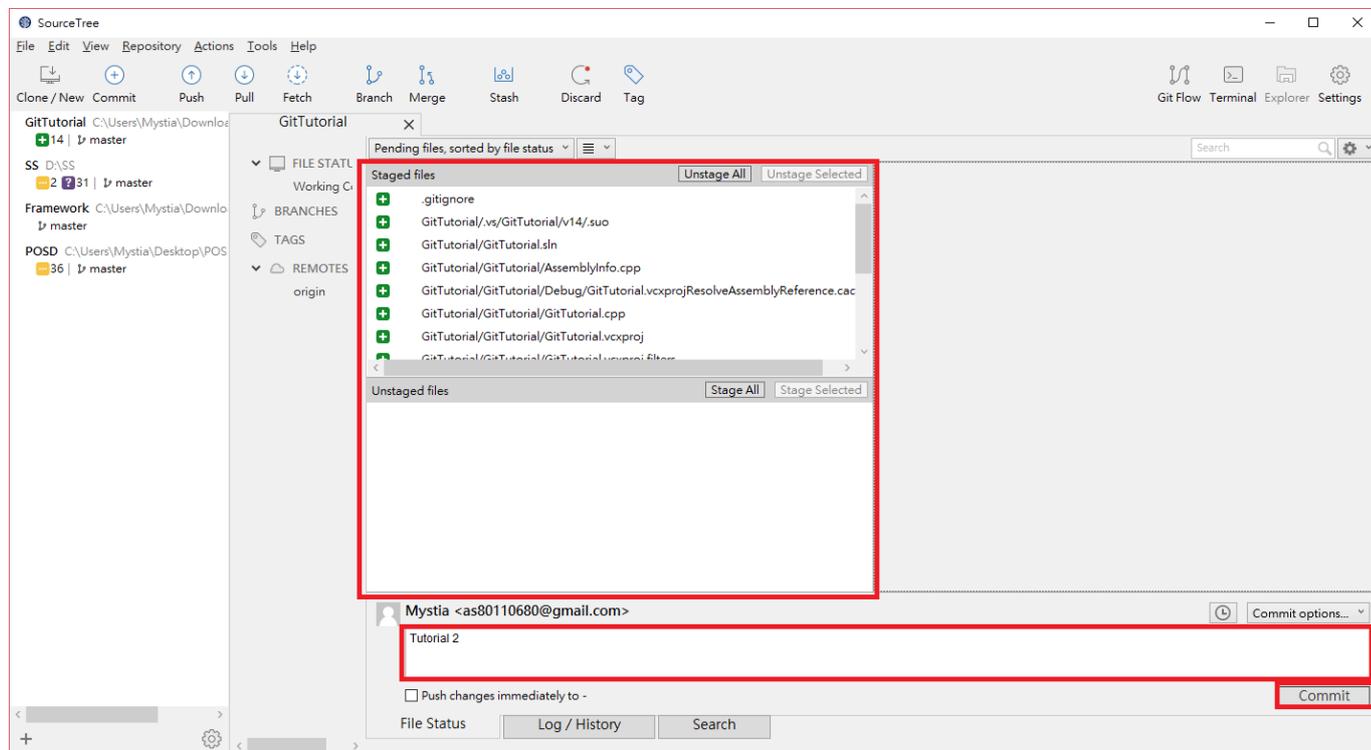
3-1. 在 unstaged file 點下右鍵，選擇 ignore



3-2. ignore 所有 debug 目錄下的所有檔案



4. 打勾你要的檔案，接著填上你的 commit log 接著按下 commit，commit log 請填寫有意義的 Message



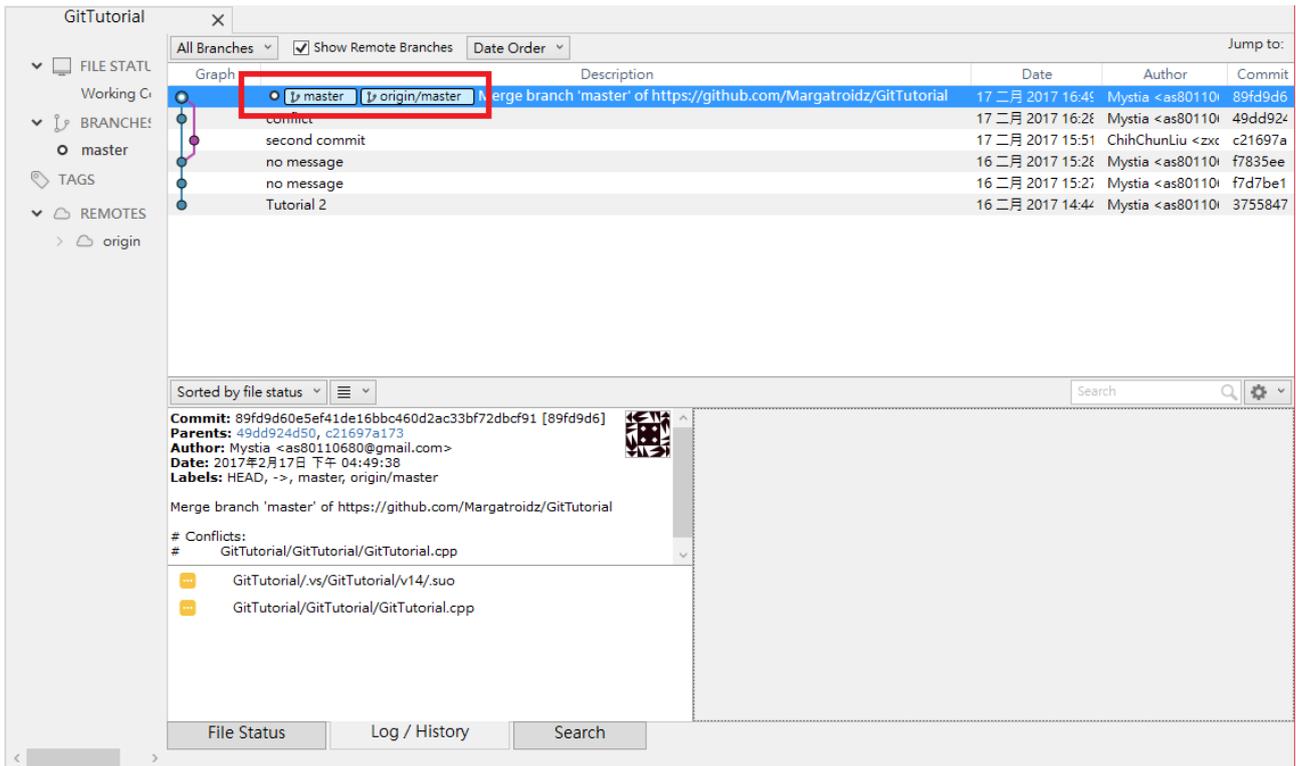
(填寫清楚的 log，可以讓你快速知道每個 commit 的版本差異)

5. Commit 完之後如果有伺服器上有新的工作副本，Push 按鈕會出現一則 commit 未 push，按下 push 之後可能需要再次輸入帳號密碼接著就成功的上傳到遠端伺服器上



6. 成功上傳至遠端伺服器

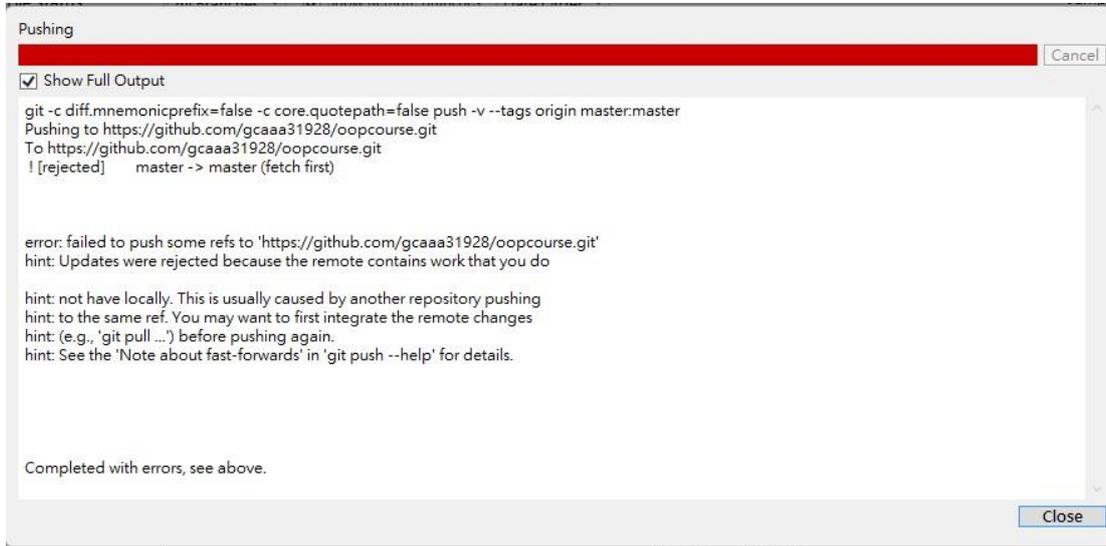
(master(本機檔案)與 origin/master(伺服器檔案)會在同一條 commit 上)



課程上使用 Git 時，請將檔案大小控制在 500MB 以內，否則伺服器容易發生問題，如果圖片過多，可以透過 <https://tinypng.com/> 壓縮圖片

Appendix :

如果無法成功 push 至伺服器，且出現以下的 error message



The screenshot shows a terminal window titled "Pushing" with a red header bar. A "Cancel" button is in the top right. Below the header is a checked checkbox labeled "Show Full Output". The terminal output shows the following text:

```
git -c diff.mnemonicprefix=false -c core.quotePath=false push -v --tags origin master:master
Pushing to https://github.com/gcaaa31928/oopcourse.git
To https://github.com/gcaaa31928/oopcourse.git
 ! [rejected]    master -> master (fetch first)

error: failed to push some refs to 'https://github.com/gcaaa31928/oopcourse.git'
hint: Updates were rejected because the remote contains work that you do
hint: not have locally. This is usually caused by another repository pushing
hint: to the same ref. You may want to first integrate the remote changes
hint: (e.g., 'git pull ...') before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.

Completed with errors, see above.
```

A "Close" button is located in the bottom right corner of the terminal window.

發生原因可能為練習時步驟有誤，可參考練習 8-乙解決