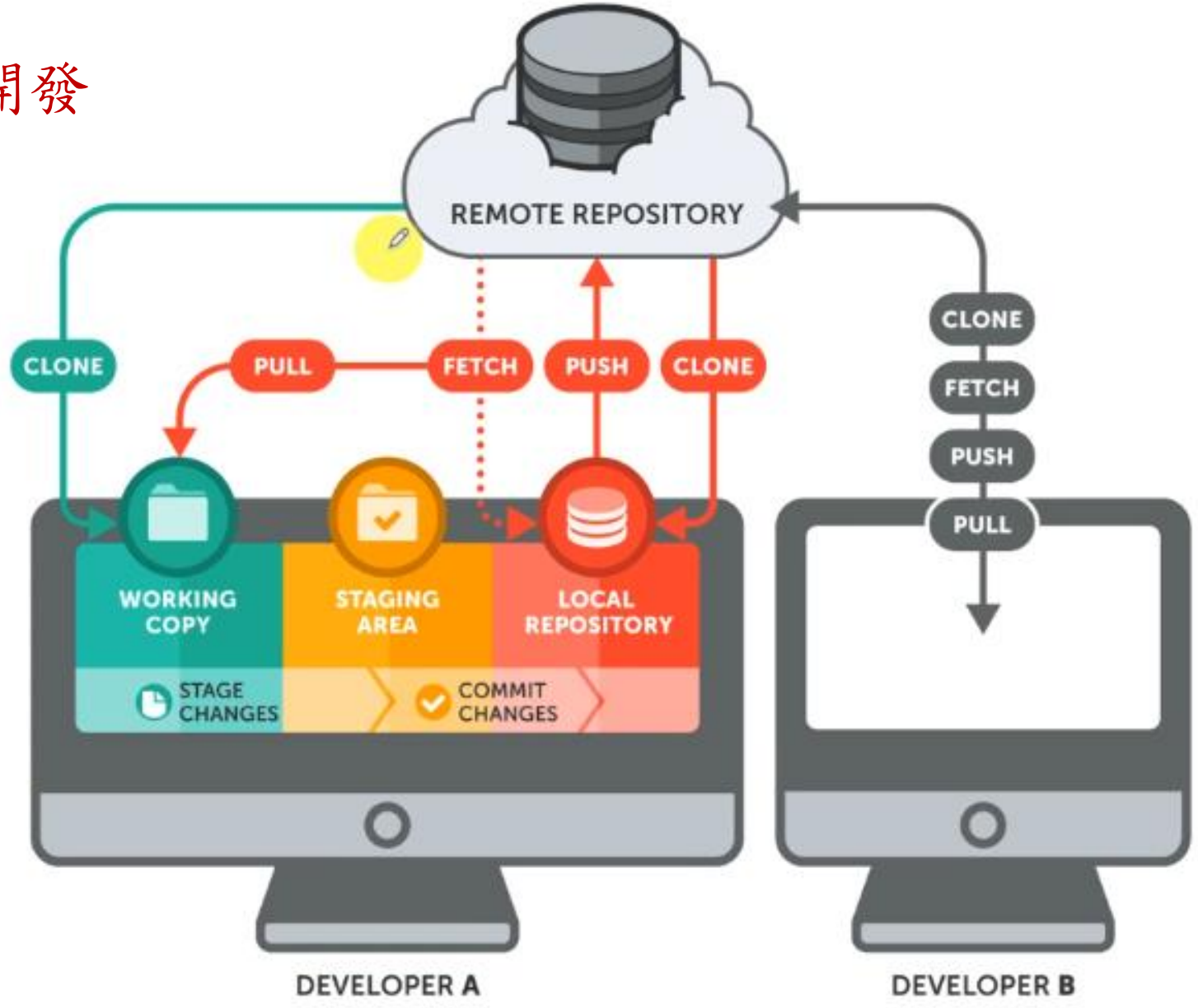
GIT chapter 3

- github
- git remote/push
- markdown/ .gitignore

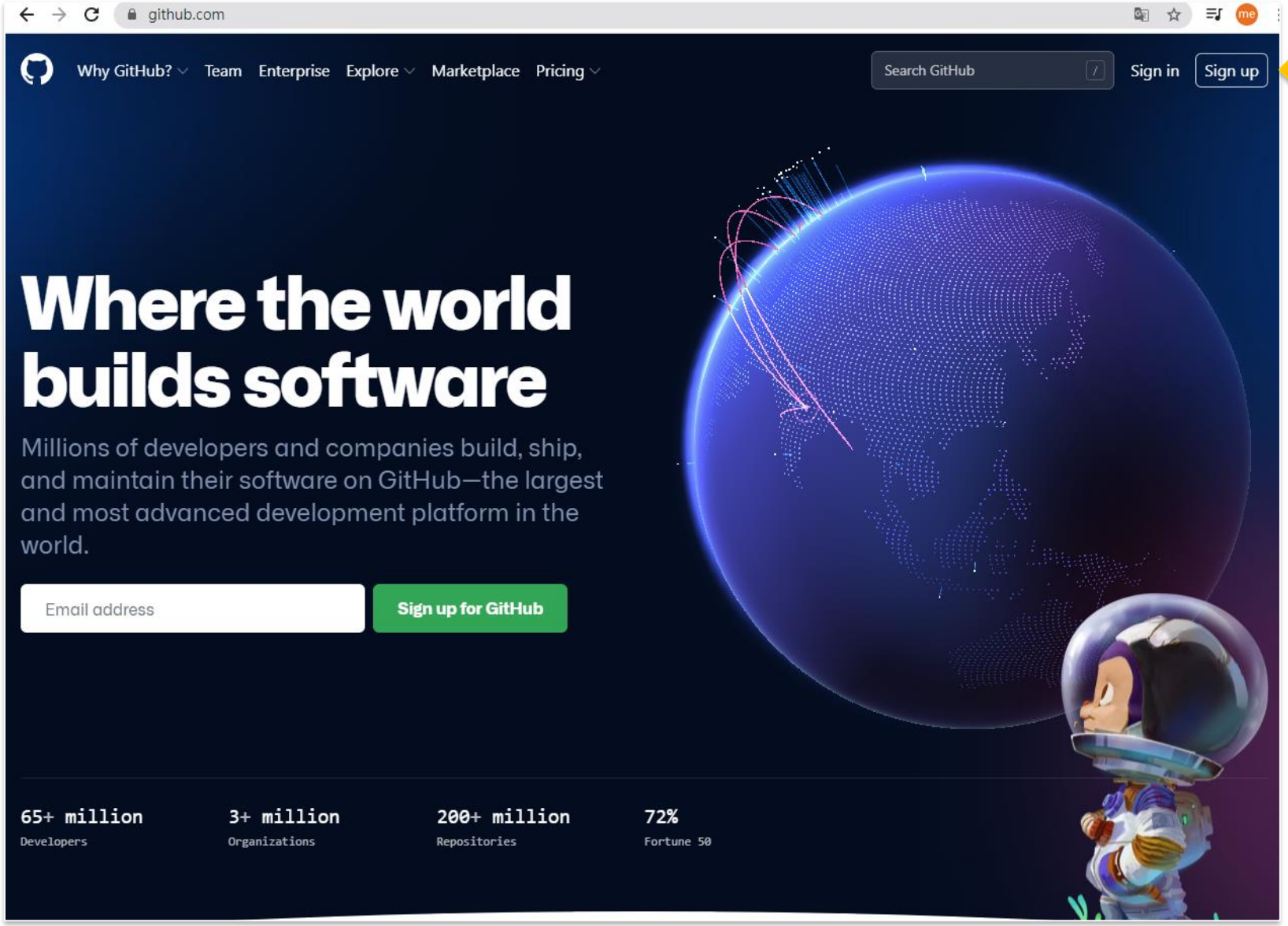
GIT remote

- 遠端版本控管服務器
- 建立遠端倉庫
- 進行同步(push/pull)

- 遠端版本控管
  - 進行多人協同開發

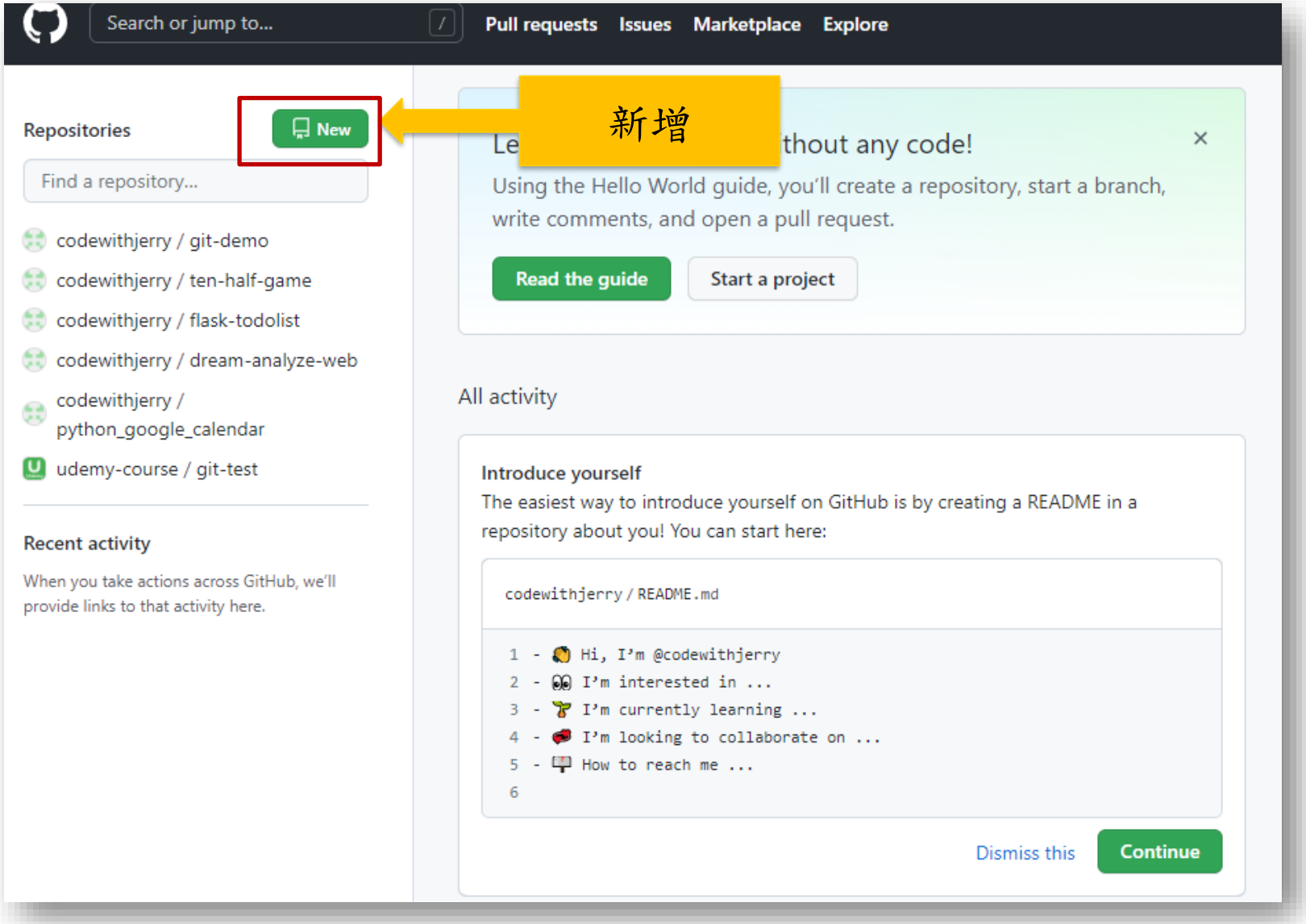


- 申請網址 https://github.com/



建立帳號

建立遠端倉庫位置

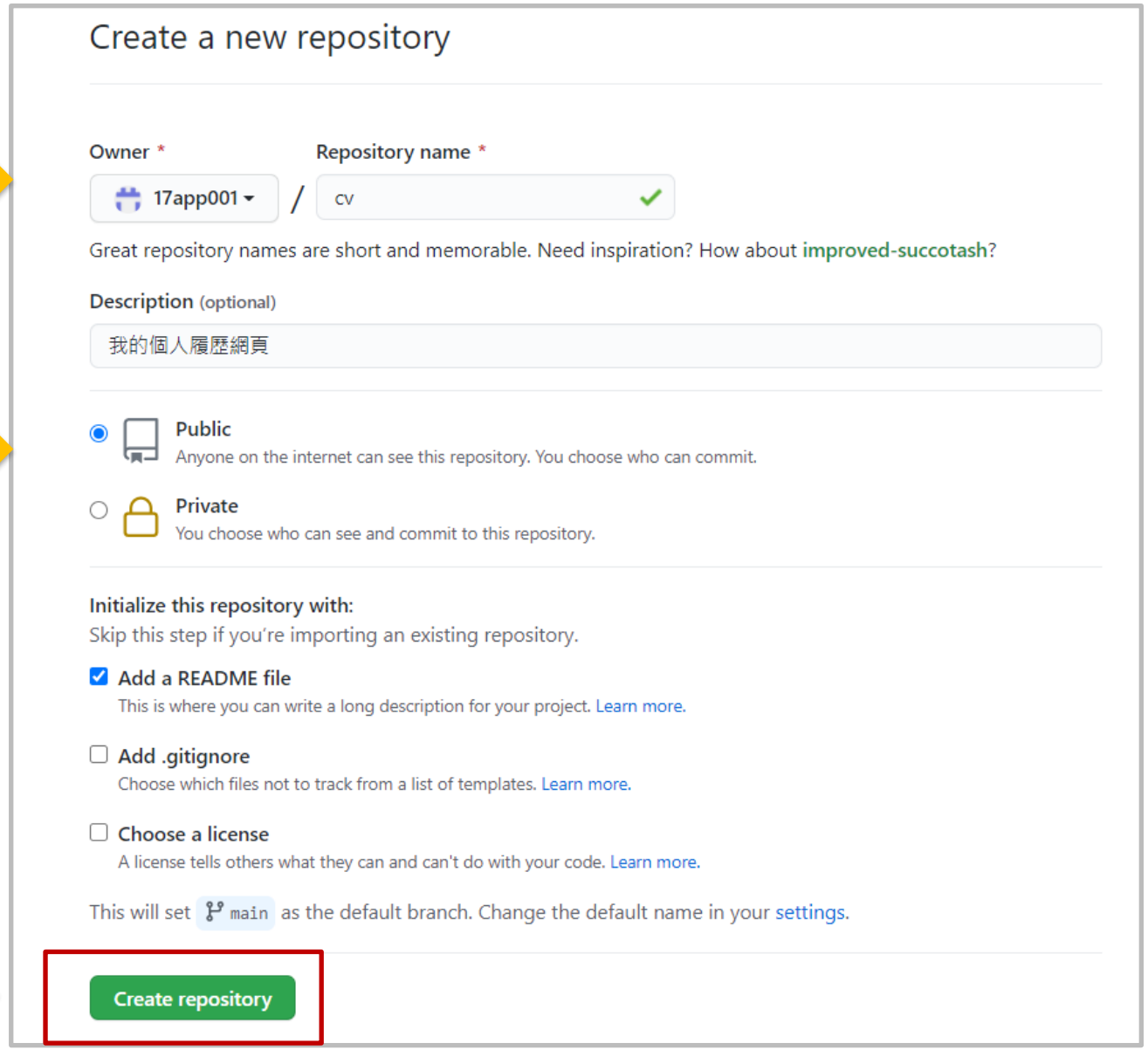

Search or jump to...
Pull requests
Issues
Marketplace
Explore
Repositories
New
新增
Find a repository...
codewithjerry / git-demo
codewithjerry / ten-half-game
codewithjerry / flask-todolist
codewithjerry / dream-analyze-web
codewithjerry / python_google_calendar
udemy-course / git-test
Recent activity
When you take actions across GitHub, we'll provide links to that activity here.
thout any code!
Using the Hello World guide, you'll create a repository, start a branch, write comments, and open a pull request.
Read the guide
Start a project
All activity
Introduce yourself
The easiest way to introduce yourself on GitHub is by creating a README in a repository about you! You can start here:
codewithjerry / README.md
1 - Hi, I'm @codewithjerry
2 - I'm interested in ...
3 - I'm currently learning ...
4 - I'm looking to collaborate on ...
5 - How to reach me ...
6
Dismiss this
Continue

create a new repository

respository

選擇公開或私有

建立倉庫



上傳用等資訊

remote url
遠端倉庫位址

Quick setup — if you've done this kind of thing before

Set up in Desktop or HTTPS SSH https://github.com/codewithjerry/git-test1.git

Get started by creating a new file or uploading an existing file. We recommend every repository include a README, LICENSE, and .gitignore.

...or create a new repository on the command line

```
echo "# git-test1" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin https://github.com/codewithjerry/git-test1.git
git push -u origin main
```

...or push an existing repository from the command line

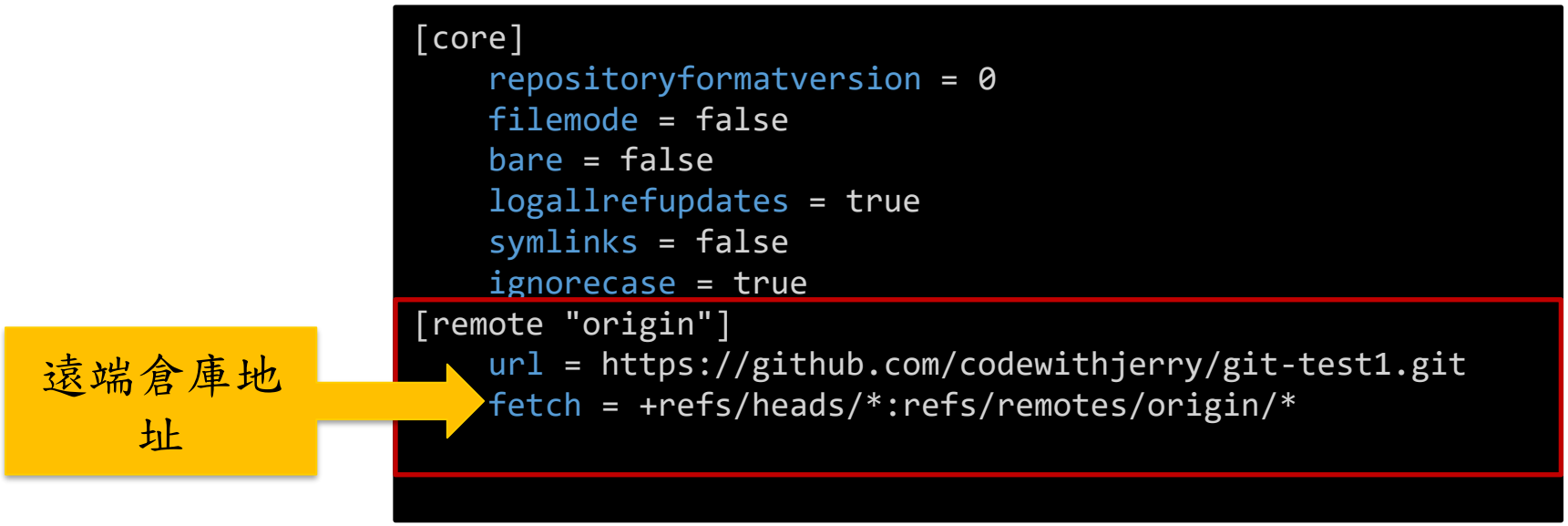
```
git remote add origin https://github.com/codewithjerry/git-test1.git
git branch -M main
git push -u origin main
```

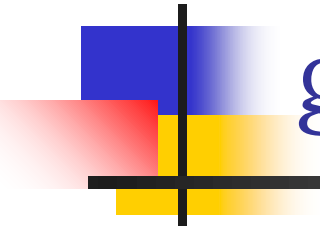
...or import code from another repository

You can initialize this repository with code from a Subversion, Mercurial, or TFS project.

Import code

- 加入遠端倉庫位置
- git remote add origin
  - https://github.com/你的帳號名稱/xxxx.git





git push

- push之前
  - 新增README.md
  - 說明文件檔案

README.md > # 繪製表格 > ### 繪製表格 Tables

```
# GIT DEMO
擺放學習GIT用得各項資源檔案，熟係使用指令。

![GIT圖片](https://encrypted-tbn0.gstatic.com/images?
q=tbn:ANd9GcRrRPMBBBa3Z3VH00Bx6aCk8aOKzpOTmfjOmBG2jf1mOW5mG4Ri_AVZA1JybkrjXyE1HBc&
usqp=CAU )


### 創建日期
- 2021/12/8


### 使用工具
- [visual code](https://code.visualstudio.com/)
- [GIT](https://git-scm.com/)


### Markdown
- 參考資料
```

- git push遠端推送
  - git push –u origin master
    - origin（起源）倉儲
    - master 主分支

推送到origin的master分支

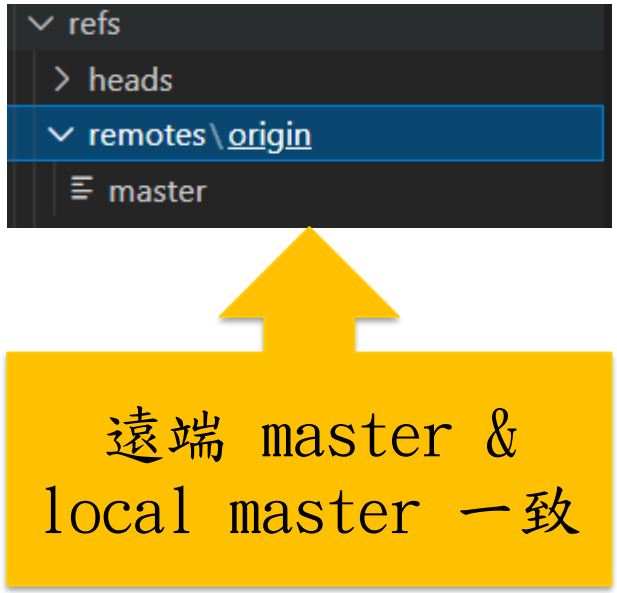
第二次後可以使用git push即可

本地端master跟遠端同步

```
PS D:\GoogleDrive\教學文件\Git\chapter4\sourcecode\merge> git log
commit 24ad0acc90686f058cfd91ad3f8e40d4913485f6 (HEAD -> master, origin/master)
Author: codewithjerry <codewithjerry1@gmail.com>
Date:   Fri Sep 17 13:28:16 2021 +0800

    modify test1

commit db216df3bd15aaf90aa2fb8c39dd645e07f1bc1e
Author: Jerry Chen <codewithjerry1@gmail.com>
Date:   Fri Sep 17 09:17:01 2021 +0800

    add test2.txt

commit fe07ba776a4690aceec031a3ec09afeec0849575
Author: Jerry Chen <codewithjerry1@gmail.com>
Date:   Fri Sep 17 09:17:28 2021 +0800

    add test3.txt
```

- push成功後
  - 新增remote相關訊息

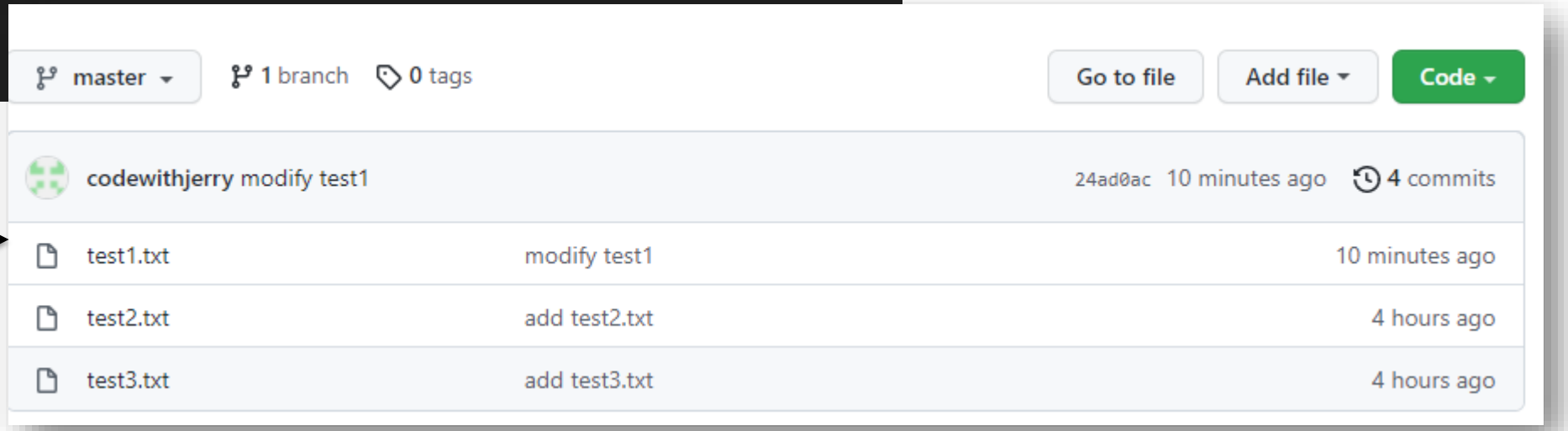
```
config
[core]
    repositoryformatversion = 0
    filemode = false
    bare = false
    logallrefupdates = true
    symlinks = false
    ignorecase = true
[gui]
    wmstate = normal
    geometry = 1053x539+96+96 228 244
[remote "origin"]
    url = https://github.com/codewithjerry/git-test1.git
    fetch = +refs/heads/*:refs/remotes/origin/*
[branch "master"]
    remote = origin
    merge = refs/heads/master
```



- 同步指向最新的commit

```
PS D:\GoogleDrive\教學文件\Git\chapter4\sourcecode\merge> git log
commit 24ad0acc90686f058cfd91ad3f8e40d4913485f6 (HEAD -> master, origin/master)
Author: codewithjerry <codewithjerry1@gmail.com>
Date:   Fri Sep 17 13:28:16 2021 +0800

    modify test1

commit db216df3bd15aaf90aa2fb8c39dd645e07f1bc1e
Author: Jerry Chen <codewithjerry1@gmail.com>
Date:   Fri Sep 17 09:17:01 2021 +0800

    add test2.txt

commit fe07ba776a4690aceec031a3ec09afeec0849575
Author: Jerry Chen <codewithjerry1@gmail.com>
Date:   Fri Sep 17 09:17:28 2021 +0800

    add test3.txt
```

本地端master跟遠端同步完成



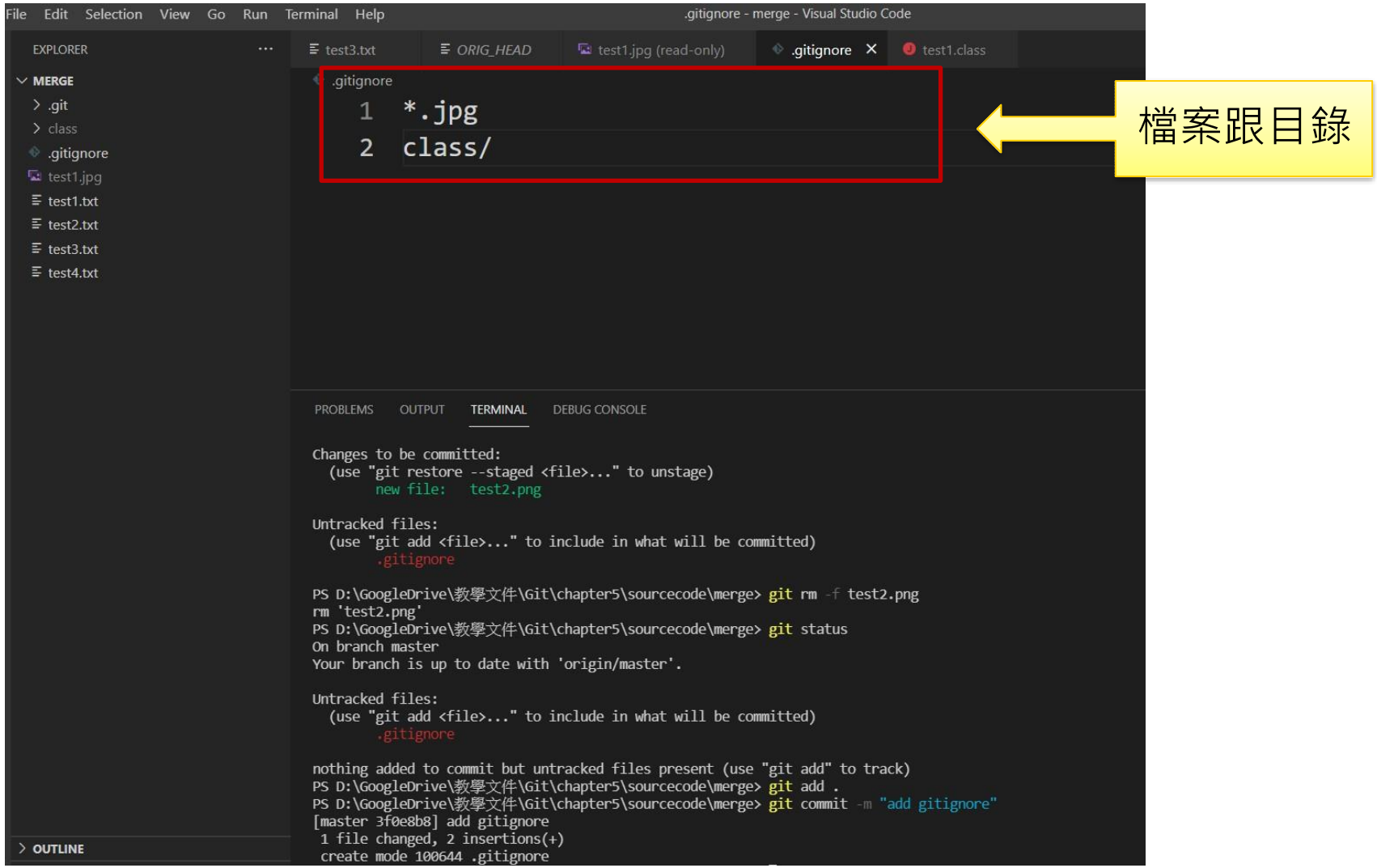
使用.gitignore

加入不需要控管的檔案

新增.gitignore

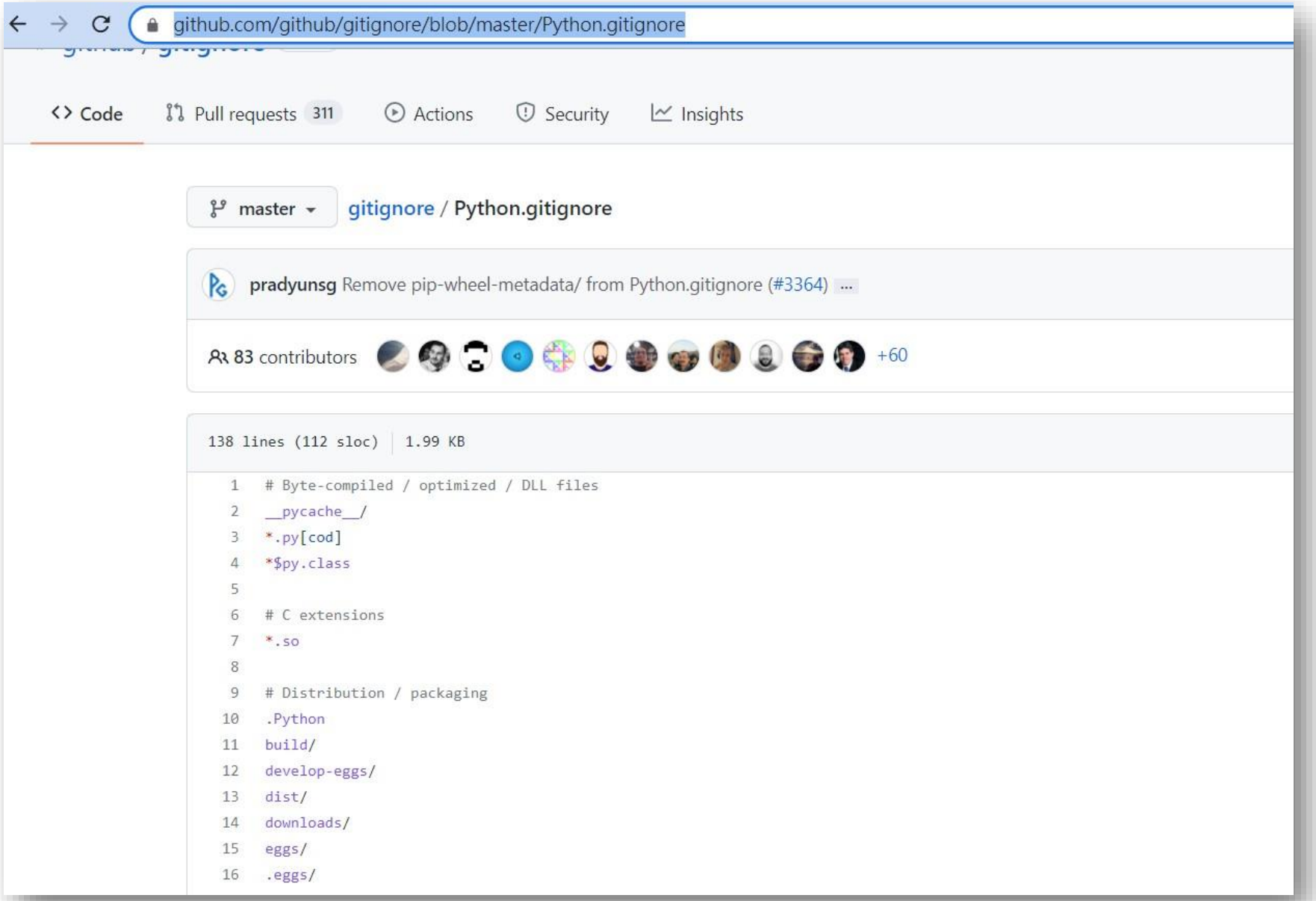
使用.gitignore

- 排除不要加入控管的檔案(*.jpg , *.png images/..)

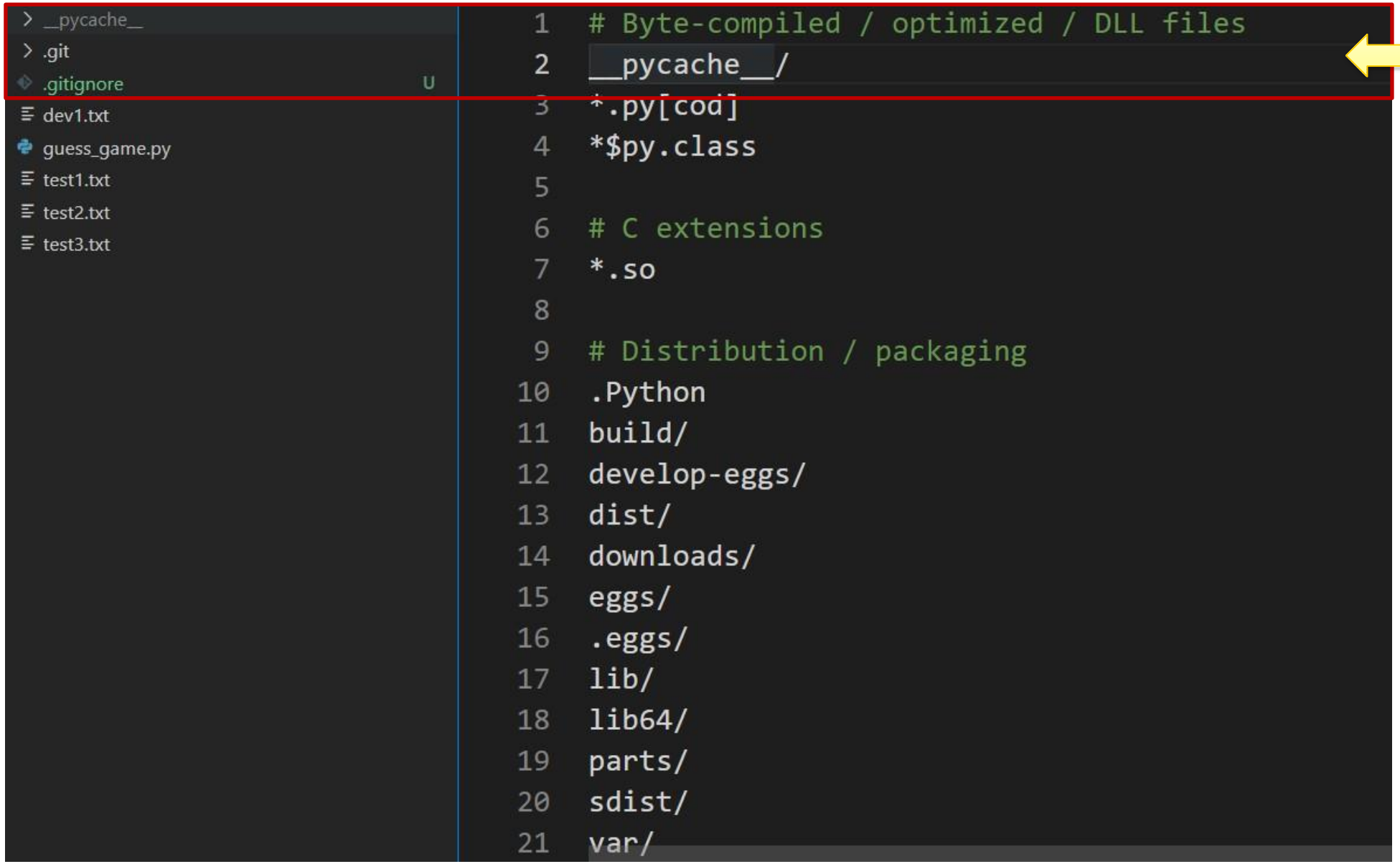


檔案跟目錄

- github搜尋gitignore



- 使用python-gitignore



將被忽略

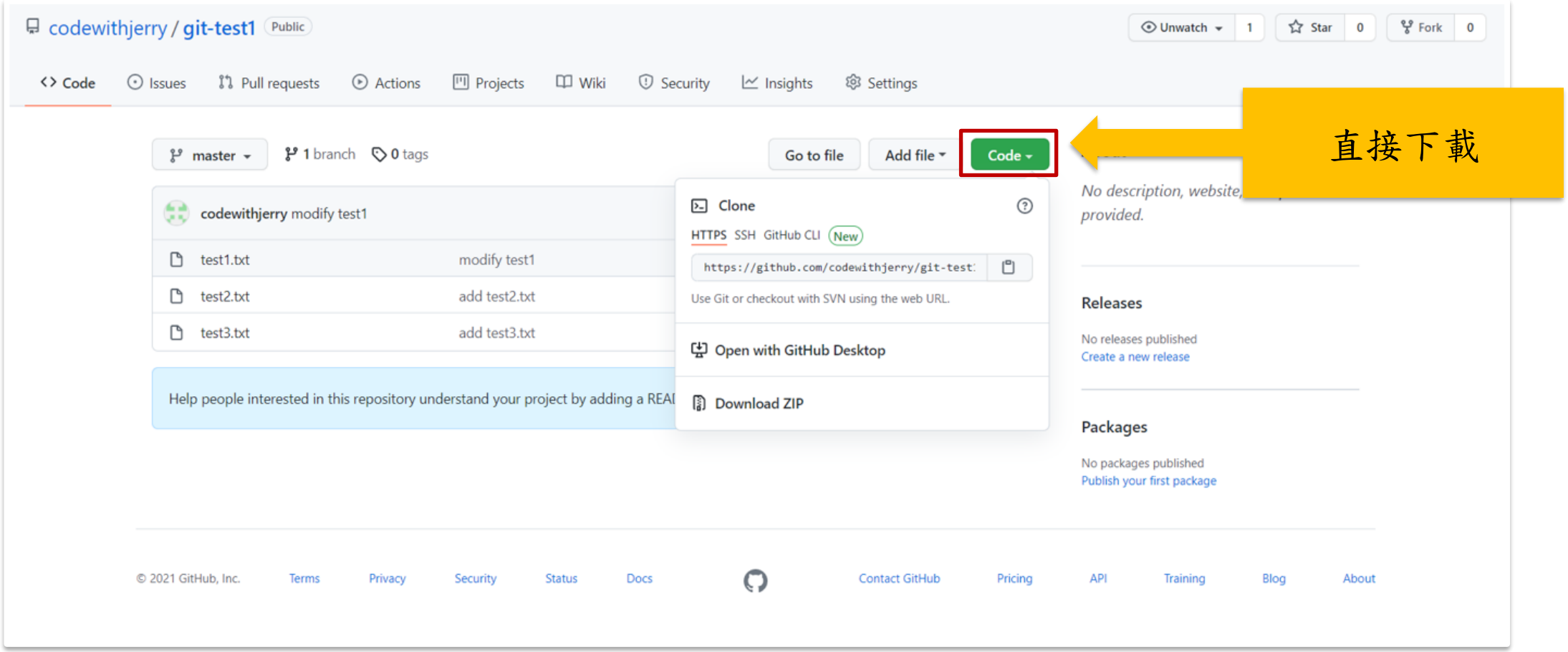
- 如果使用git commit --amend
  - 推送時需要使用git push [origin master] -f
  - -f(force)強制更新遠端

```
 ! [rejected]        master -> master (non-fast-forward)
error: failed to push some refs to 'https://github.com/17app001/git-demo.git'
hint: Updates were rejected because the tip of your current branch is behind
hint: its remote counterpart. Integrate the remote changes (e.g.
hint: 'git pull ...') before pushing again.
Writing objects: 100% (5/5), 4.06 KiB | 2.03 MiB/s, done.
Total 5 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/17app001/git-demo.git
 + 908efbd...38c2af6 master -> master (forced update)

C:\Users\Jerry\OneDrive\桌面\Django\git\demo>
```

git clone

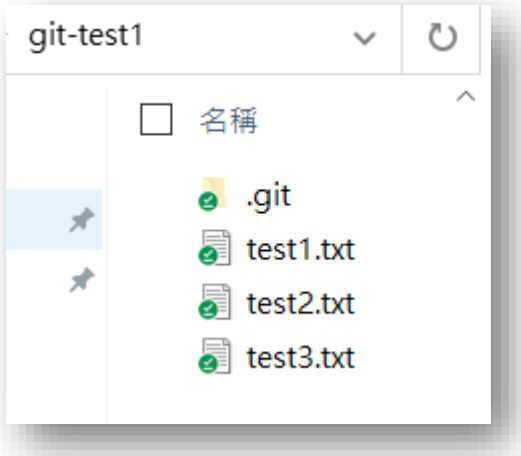
複製專案方法

- 直接從github檔案下載
  - clone沒有權限設定，只要專案是公開的都可以進行複製，唯獨寫(push)需要帳號跟密碼及.git資訊



- 使用git clone指令
  - https://github.com/你的帳號名稱/xxxxxx
  - 會在該路徑內新增專案名稱目錄

需要帳密

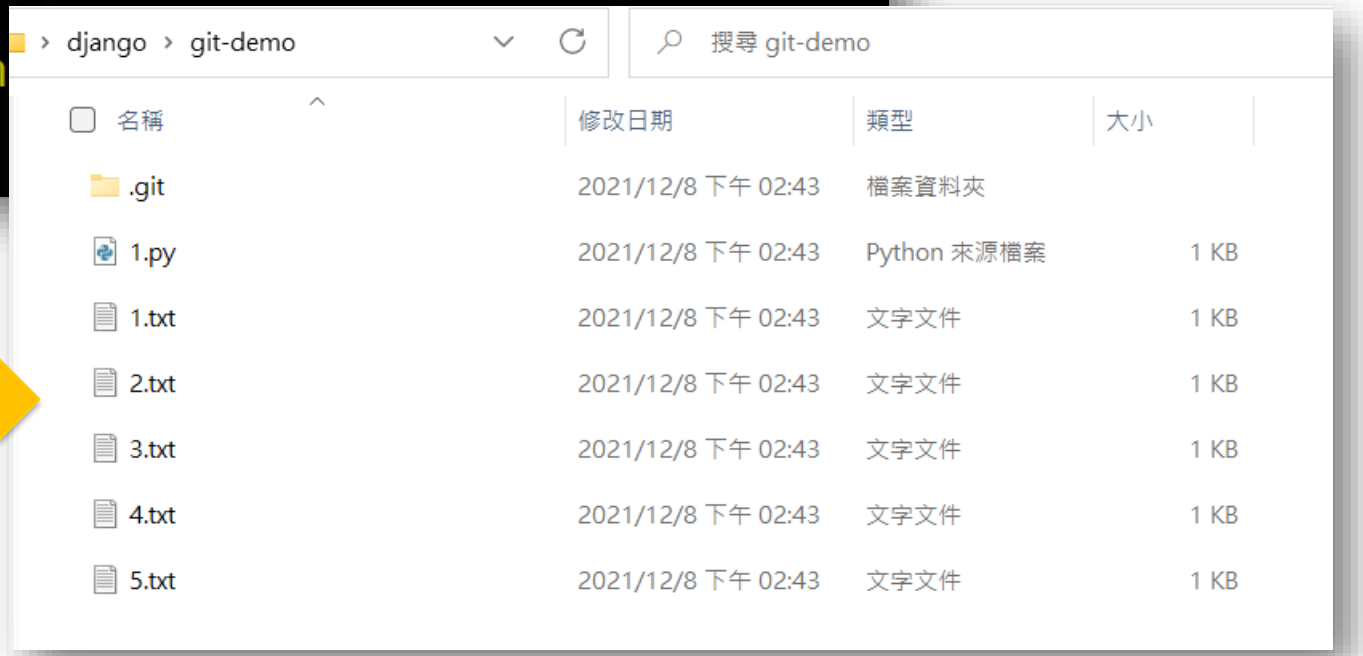



```
commit 24ad0acc90686f058cfd91ad3f8e40d4913485f6 (HEAD -> master, origin/master,
origin/HEAD)
Author: codewithjerry <codewithjerry1@gmail.com>
Date:   Fri Sep 17 13:28:16 2021 +0800

    modify test1

commit db216df3bd15aaf90aa2fb8c39dd645e07f1bc1e
Author: Jerry Chen <codewithjerry1@gmail.com>
Date:   Fri Sep 17 09:17:01 2021 +0800

    add test2.txt

commit fe07ba776a4690aceec031a3ec09afeec0849575
Author: Jerry Chen <codewithjerry1@gmail.com>
Date:   Fri Sep 17 09:17:28 2021 +0800

    add test3.txt

commit f0a4194001e5b9b937d82d4a44090ea4ff5c1684
Author: Jerry Chen <codewithjerry1@gmail.com>
Date:   Fri Sep 17 09:15:41 2021 +0800

    1st commit
```

MINGW64:/c/Users/Jerry/OneDrive/桌面/django

```
Jerry@DESKTOP-E7K1RS1 MINGW64 ~/OneDrive/桌面/django
$ git clone https://github.com/17app001/git-demo
Cloning into 'git-demo'...
remote: Enumerating objects: 73, done.
remote: Counting objects: 100% (73/73), done.
remote: Compressing objects: 100% (39/39), done.
remote: Total 73 (delta 13), reused 66 (delta 11), pack-reused 0
Receiving objects: 100% (73/73), 6.75 KiB | 531.00 KiB/s, done.
Resolving deltas: 100% (13/13), done.

Jerry@DESKTOP-E7K1RS1 MINGW64 ~/On
$
```

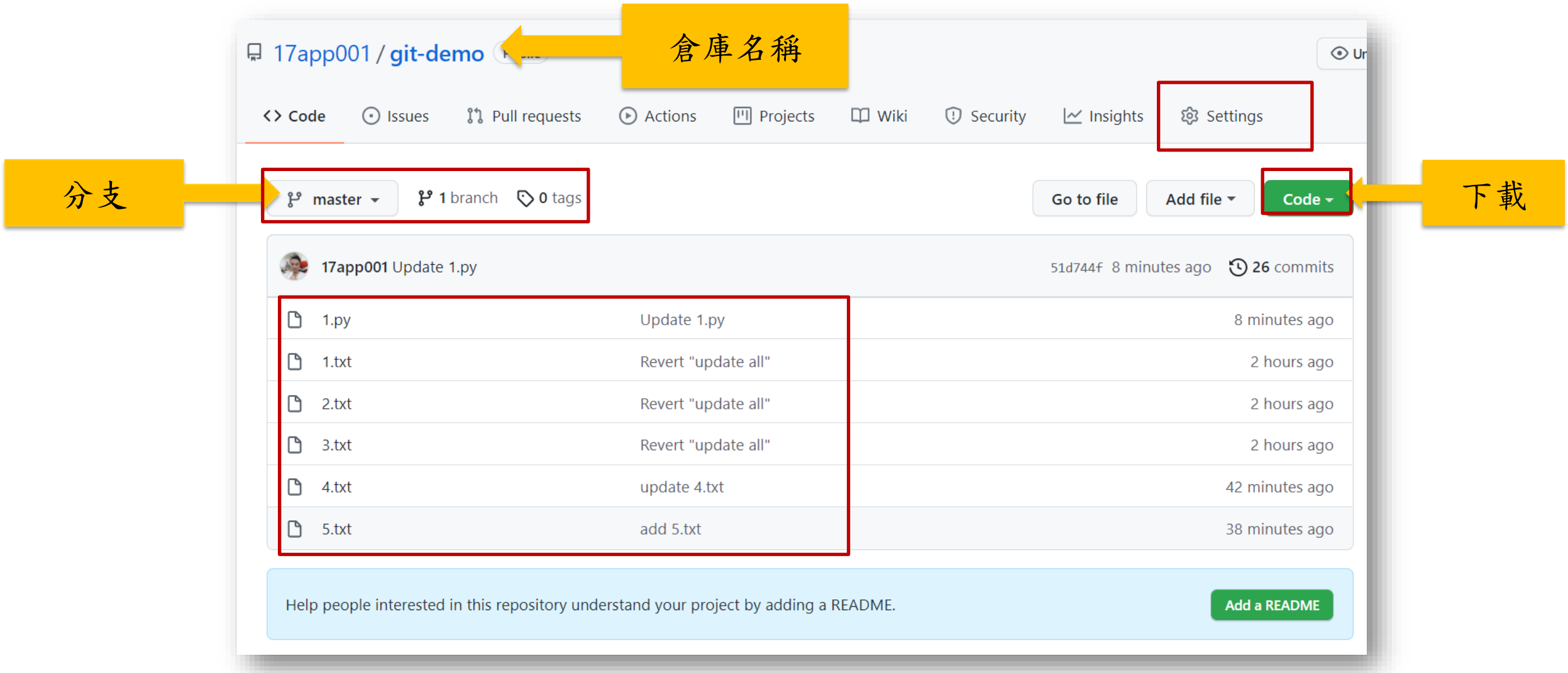
完整檔案結構(包含.git)



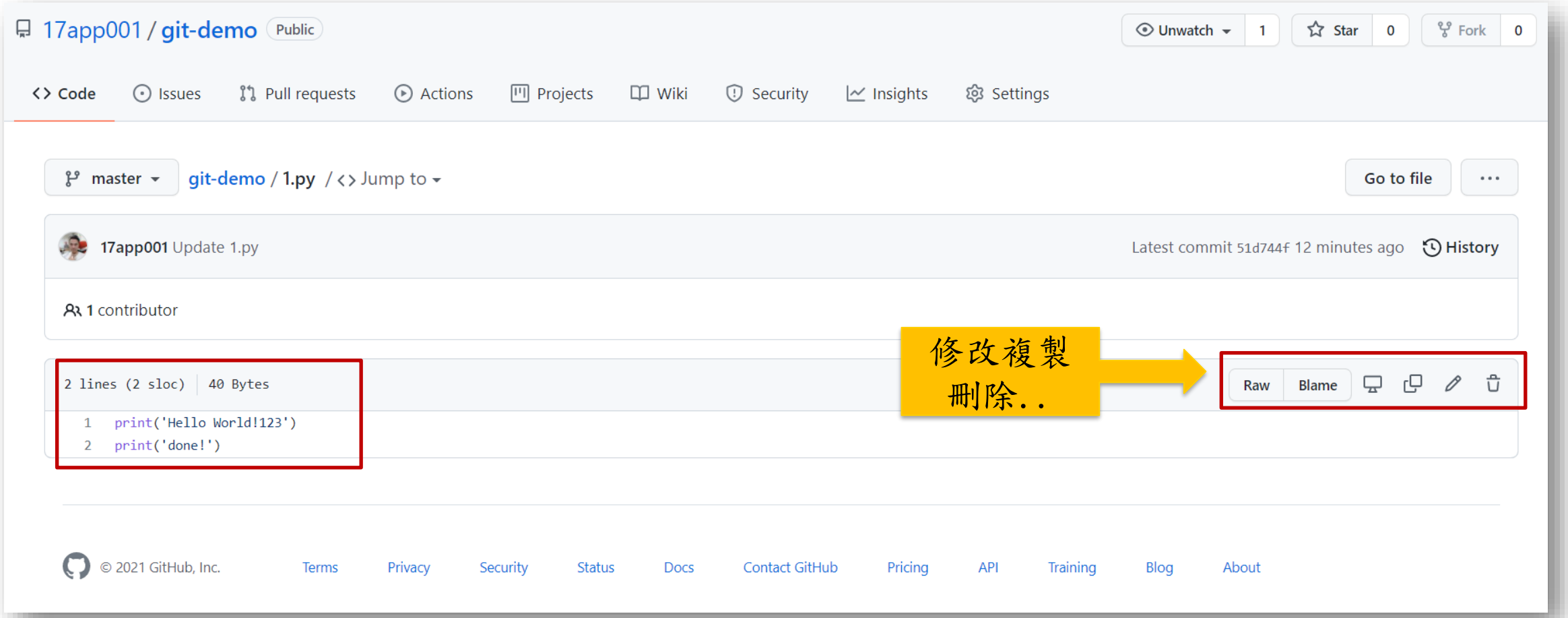
遠端更新檔案

使用github更新檔案

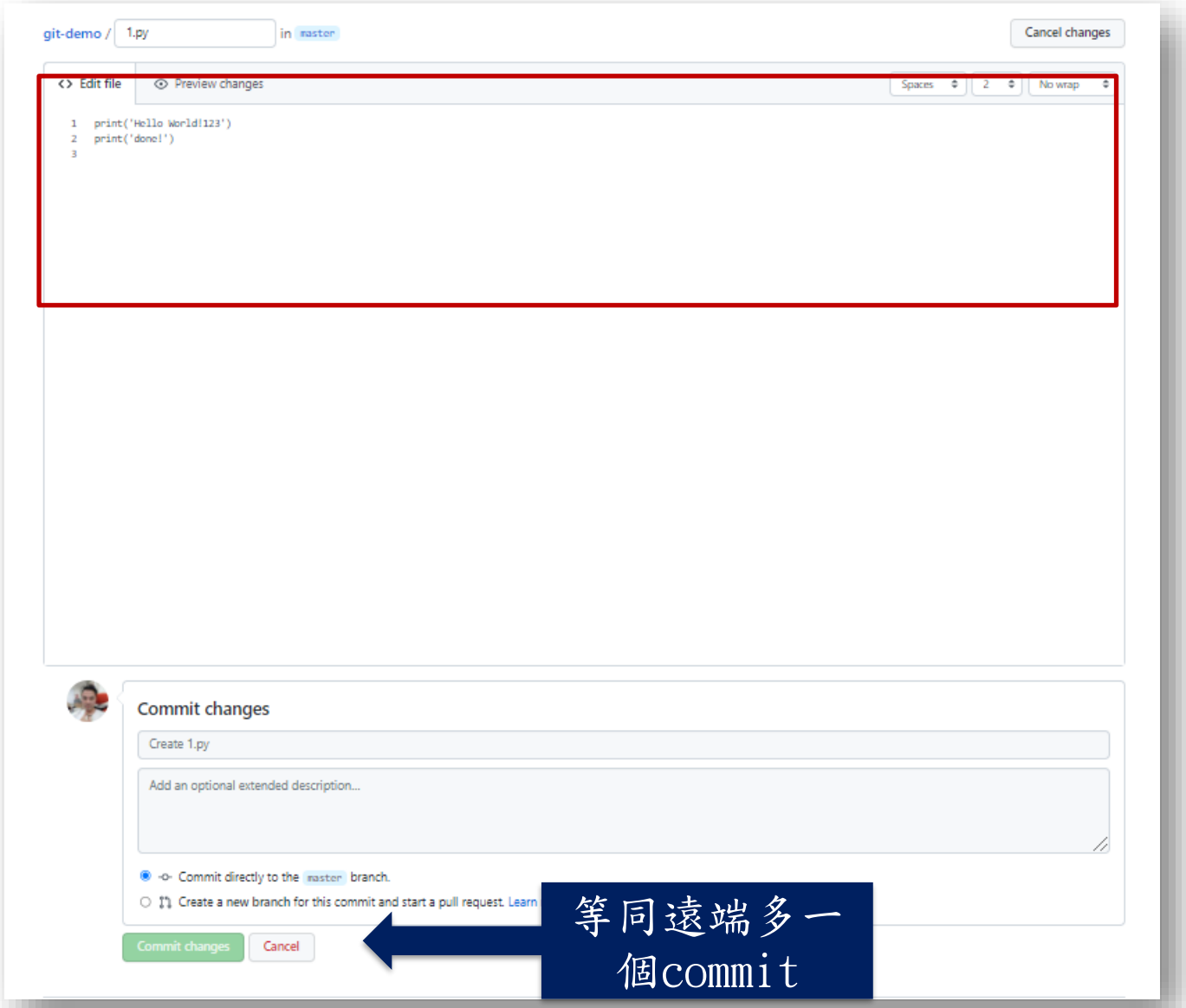
- https://github.com/17app001/git-demo



可線上編輯跟commit



編輯後commit


git-demo / 1.py in master
Cancel changes
Edit file
Preview changes
Spaces
2
No wrap
1 print('Hello World!123')
2 print('done!')
3
Commit changes
Create 1.py
Add an optional extended description...
Commit directly to the master branch.
Create a new branch for this commit and start a pull request. Learn
Commit changes
Cancel
等同遠端多一個commit

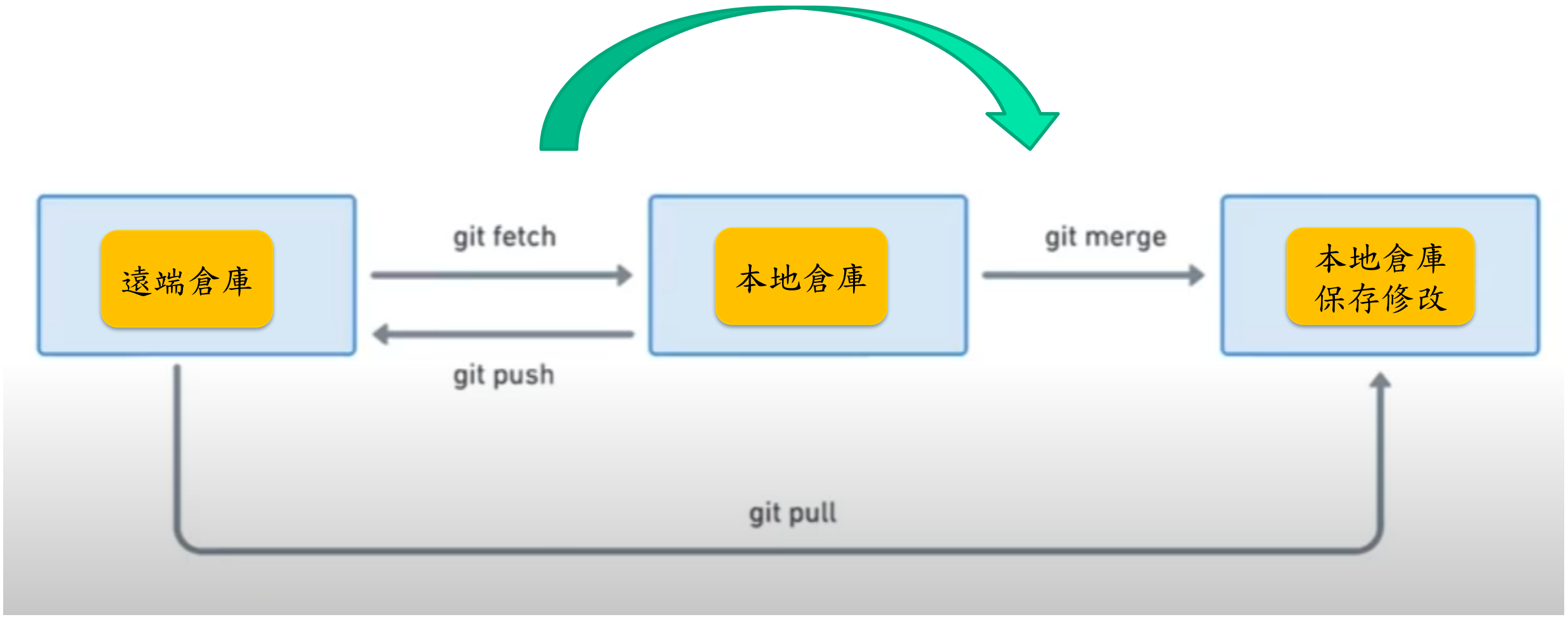
git pull

遠端拉取回本地端

（本地端跟遠端進行同步）

- 為何需要pull?
  - 遠端/其他使用者 有更新資料需要先進行拉取，否則無法push
  - 一般pull會進行同步跟自動合併(如有衝突需要先處理)

- Git pull



- 使用git pull
  - 遠端倉庫如新增/修改檔案
    - 本地端使用push會失敗
    - 需要先pull(同步)


```
PS C:\Users\Jerry\Google 雲端硬碟\教學文件\Git\git-demo> git pull
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 646 bytes | 43.00 KiB/s, done.
From https://github.com/codewithjerry/git-demo
   8bd6c1f..98c8145  master     -> origin/master
Updating 8bd6c1f..98c8145
Fast-forward
 6.txt | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 6.txt
```

Git Remote的一些操作

- git clone <repository URL> clone a remote repository to local disk
- git push origin <branch_name> push local branch <branch_name> to remote branch dev, if dev branch does not exist remotely, it would be created. (--delete to delete a remote branch)
- git branch -a list all branches both local and remote
- git fetch download objects and refs from remote repository
- git pull - Fetch from remote and integrate with local branch
- git push origin <tag_name> push local tag to github
- git push origin –delete <tag_name> to delete github tags

- git remote -v
  - 檢視目前所有遠端url

```
Jerry@DESKTOP-E7K1RS1 MINGW64 /d/GoogleDrive/教學文件/Git/chapter4/
ster)
$ git remote
origin

Jerry@DESKTOP-E7K1RS1 MINGW64 /d/GoogleDrive/教學文件/Git/chapter4/
ster)
$ git remote -v
origin  https://github.com/codewithjerry/git-test1.git (fetch)
origin  https://github.com/codewithjerry/git-test1.git (push)
```

- git push ➔本地推送到遠端
- git pull ➔遠端更新到本地(with merge)

- git remote remove origin
  - 移除遠端origin

- git remote add origin https://xx.xxxxx/xxx.git
  - 新增倉庫名稱

- 推送到其他分支
  - git push origin dev

- 遠端分支的刪除
  - git push --delete origin dev

- git push [origin master] -f
  - 強制更新遠端(不理衝突，譬如使用- -amend後)