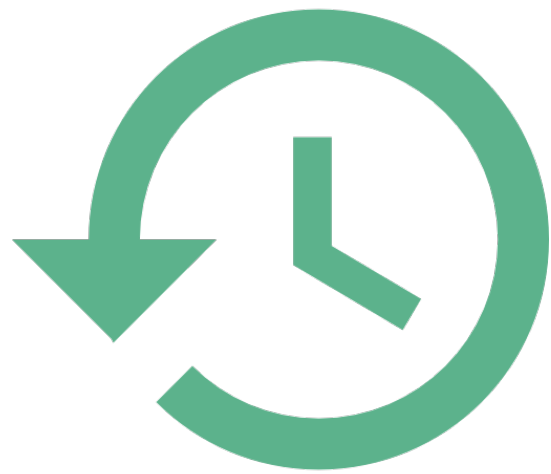# OS Lab @NCKU

$ Intro to git and gitlab_

What is Git?

『git是用於Linux核心開發的版本控制工具。它採用了分散式版本庫的作法，不需要伺服器端軟體，就可以運作版本控制，使得原始碼的釋出和交流極其方便。』

—維基百科

What is Git?
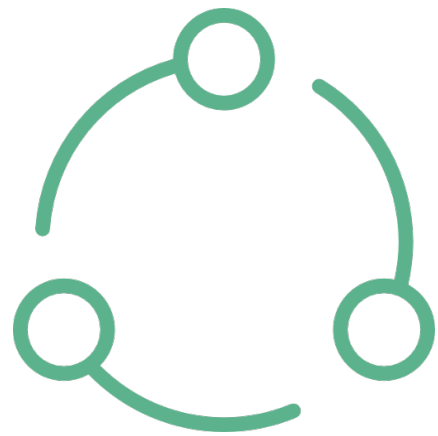
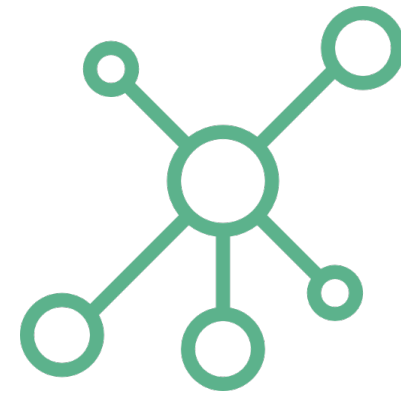版本管理？　　　檔案庫？

What is Git?
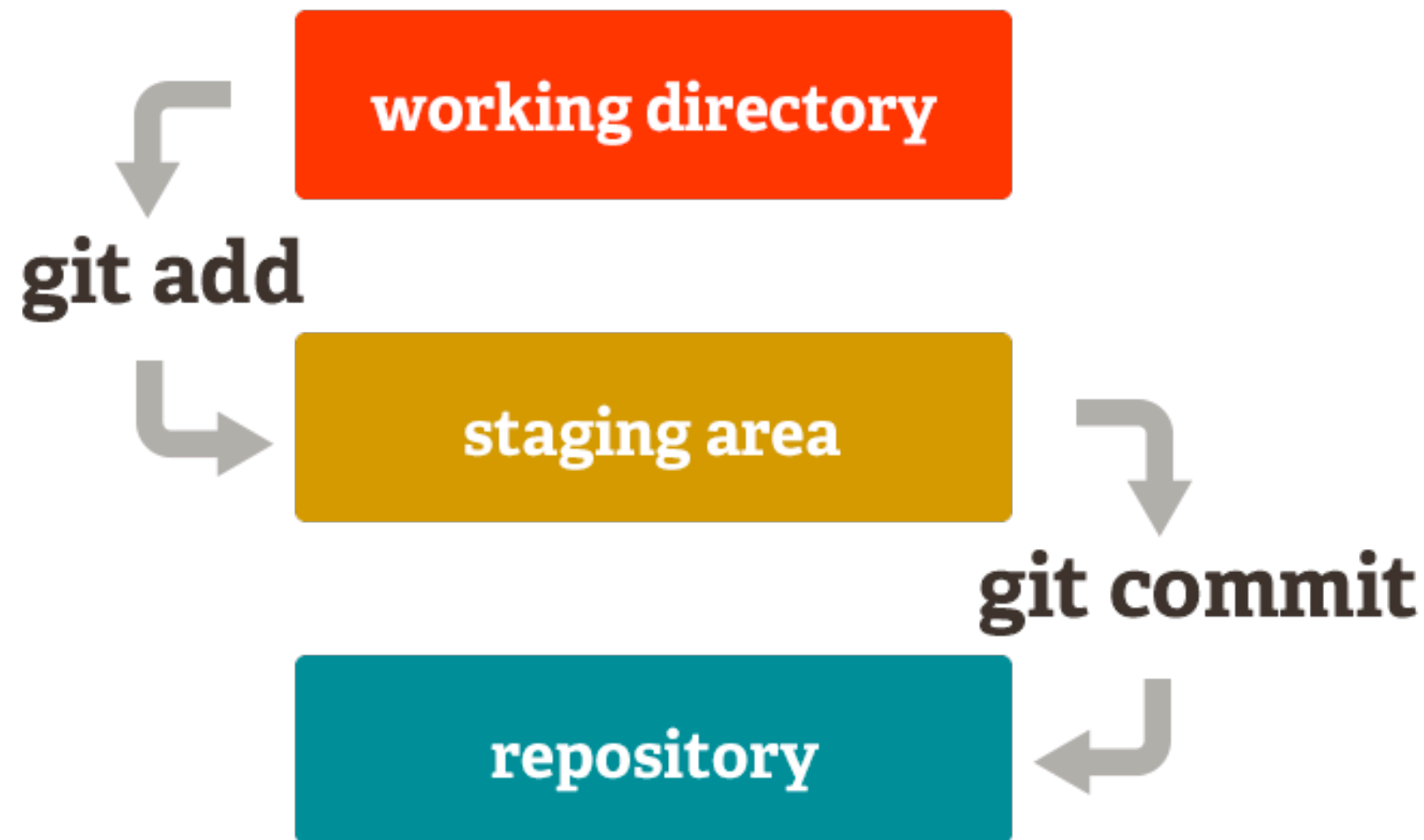
散分式？

集中式？

OS

Staging Area

Branch and Merge

Distributed
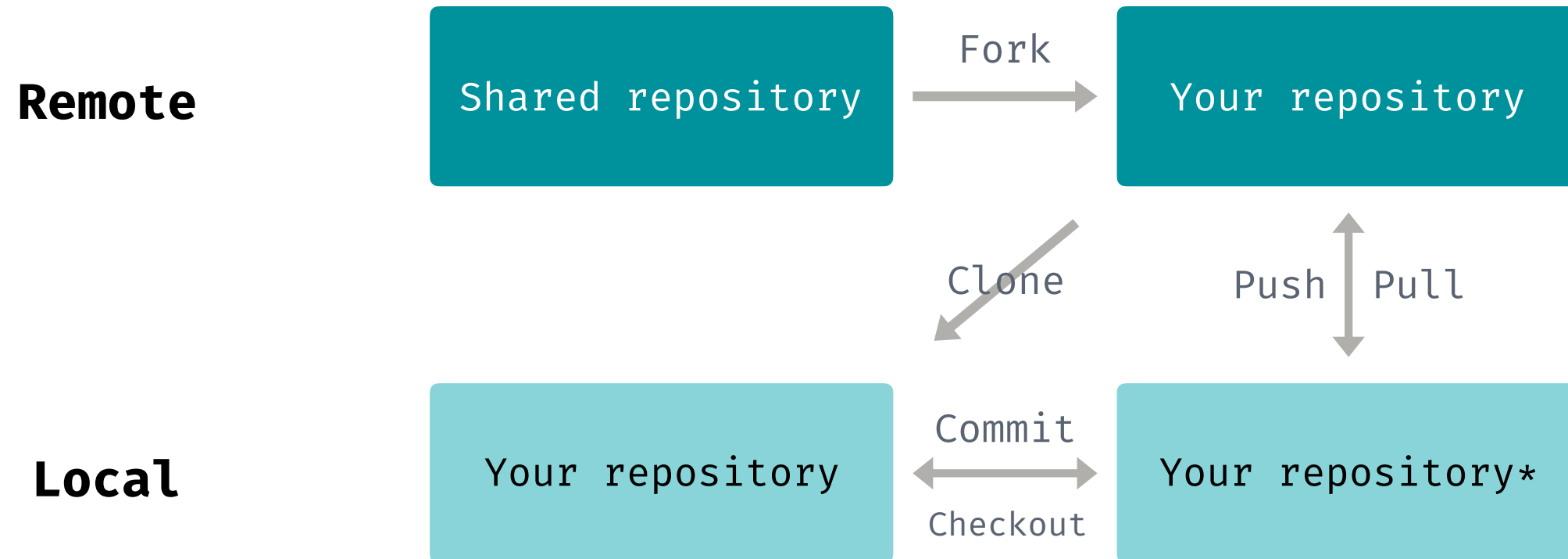
Gitlab!

- http://os.csie.ncku.edu.tw:59487/users/sign_in

- 帳號：學號

- 密碼：00000000

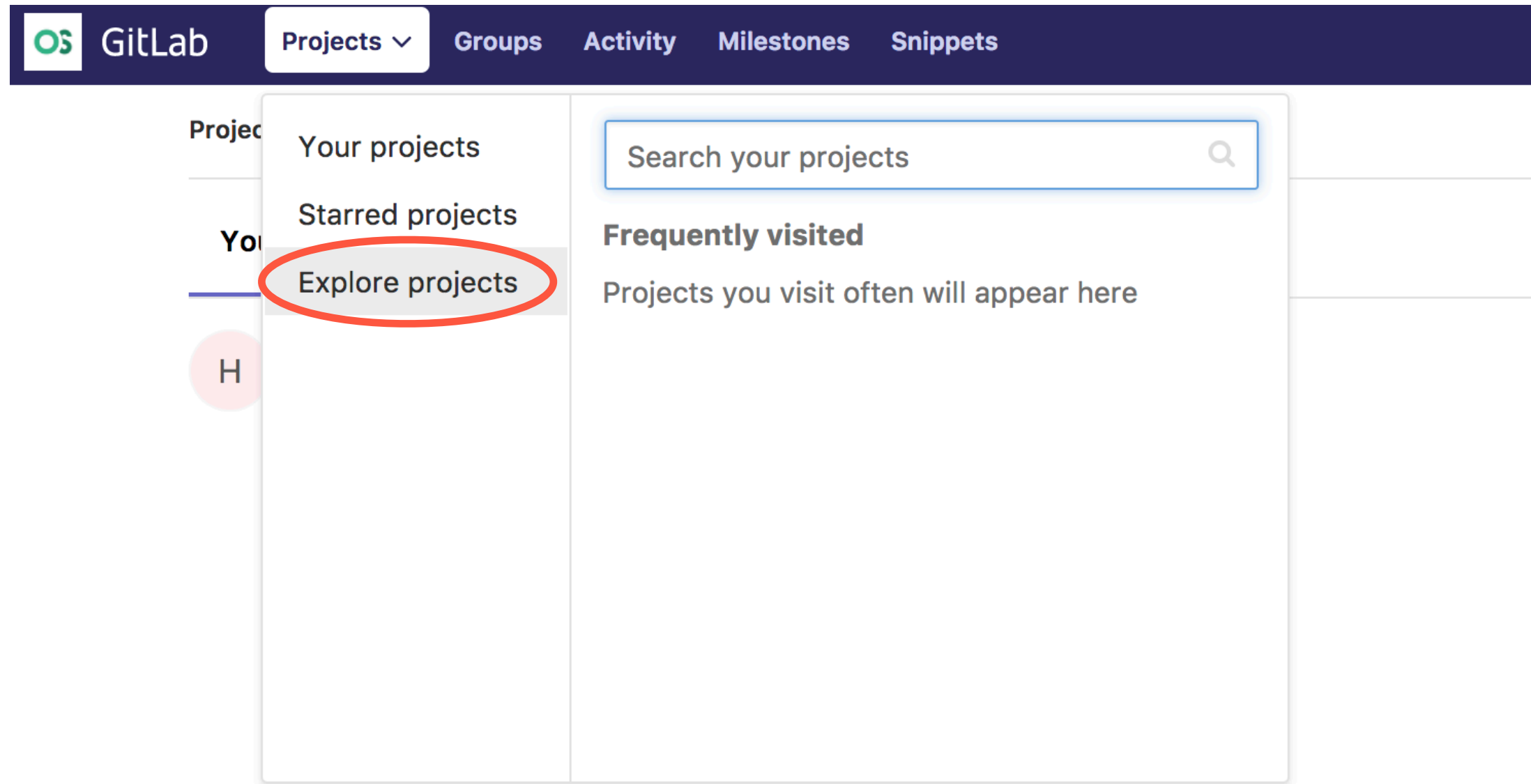**Username or email**
F4606XXXX

Password
00000000

☐ Remember me   Forgot your password?

Sign in

Fork Project

Fork Project

Projects

Your projects   Starred projects   **Explore projects**

Trending   Most stars   **All**

H   **OSLab / Homework_test**

Fork Project

H

Homework_test ✿

| ☆ Star | ⑂ Fork | 0 | HTTP ▾ | http://os.csie.ncku.edu.tw:59 | 📋 | ⬇ ▾ | ✛ ▾ | 🔔 Global ▾ |

Fork Project

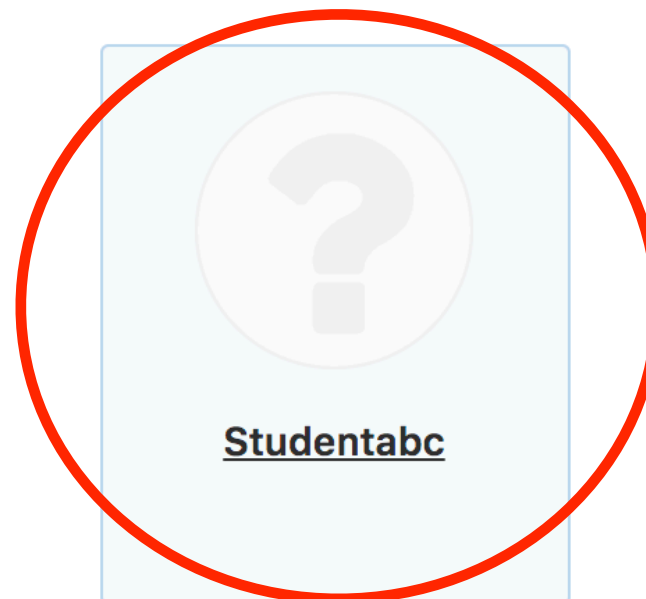OSLab > Homework_test > **Fork project**

Fork project

A fork is a copy of a project.
Forking a repository allows you to make changes without affecting the original project.

Click to fork the project to a user or group

Studentabc

Fork Project

The project was successfully forked.

H

Homework_test 🛡

Forked from root

☆ Star 0 ⑂ Fork 0 HTTP http://os.csie.ncku.edu.tw:59 ⧉ ⬇ ⌄ + ⌄ 🔔 Global ⌄

Clone remote repository

$ git clone http://os.ncku.csie.edu.tw:59487/anc/Homework_test.git

$ cd Homework_test

```
pohaosu@oslab-pohaosu:~$ git clone http://os.csie.ncku.edu.tw:59487/anc/Homework_test.git
Cloning into 'Homework_test'...
Username for 'http://os.csie.ncku.edu.tw:59487': anc
Password for 'http://anc@os.csie.ncku.edu.tw:59487':
remote: Counting objects: 3, done.
remote: Total 3 (delta 0), reused 0 (delta 0)
Unpacking objects: 100% (3/3), done.
pohaosu@oslab-pohaosu:~$ ls
Desktop   Documents   Downloads   examples.desktop   HelloWorld   Homework_test   IODD   linux   M
```

Check status

```
$ vim README.md

$ git status
```

```
pohaosu@oslab-pohaosu:~$ cd Homework_test/
pohaosu@oslab-pohaosu:~/Homework_test$ ls
README.md
pohaosu@oslab-pohaosu:~/Homework_test$ vim README.md
pohaosu@oslab-pohaosu:~/Homework_test$ git status
On branch master
Your branch is up-to-date with 'origin/master'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

        modified:    README.md

no changes added to commit (use "git add" and/or "git commit -a")
```

How to Commit

$ git add README.md //modified to staged

$ git commit -m "Modify README.md" //staged to unmodified

```
pohaosu@oslab-pohaosu:~/Homework_test$ git add README.md
pohaosu@oslab-pohaosu:~/Homework_test$ git commit -m 'Modify README.md'
[master f2de884] Modify README.md
 1 file changed, 2 insertions(+), 1 deletion(-)
```

Push

$ git push //From Local to Remote

```
pohaosu@oslab-pohaosu:~/Homework_test$ git push
Username for 'http://os.csie.ncku.edu.tw:59487': anc
Password for 'http://anc@os.csie.ncku.edu.tw:59487':
Counting objects: 3, done.
Writing objects: 100% (3/3), 272 bytes | 272.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To http://os.csie.ncku.edu.tw:59487/anc/Homework_test.git
   5f64772..f2de884  master -> master
```

Log

```
$ git log //Show commit log
```

Studentabc > Homework_test > **Commits**

master ⌄	Homework_test

Filter by commit message

01 Oct, 2017 2 commits

Po-h **Modify README.md**
Po-Hao Su committed about a minute ago
f2de884c 📋 Browse Files

OSLa **Add new file**
OSLab committed 44 minutes ago
5f647721 📋 Browse Files

Reference

- Git達人教你搞懂GitHub基礎觀念

- 連猴子都能懂的Git入門指南

- Pro Git