

Lab 01

How to Survive & Introduction to Git

Web Programming
DataLab, CS, NTHU

Notice

- These slides will focus on how to submit you code by using Git command line
- You can also use other Git GUI tool or built-in Git tool in other IDE/editor

Outline

- General Rule
- Introduction to Git
 - Version control
 - Git Basics
 - Try Git!
 - Remote Repositories
- How to Submit Your Code to Gitlab
- Tools & References

Outline

- General Rule
- Introduction to Git
 - Version control
 - Git Basics
 - Try Git!
 - Remote Repositories
- How to Submit Your Code to Gitlab
- Tools & References

Teaching Assistants



Cheng-Hong Lin
*林振弘



I-Luh Wu
吳義路



Yan-Ting Lee
李彥霆



Bing-Han Chiang
江秉翰

How to Find Us?

- Office Hour (TAs)
 - Wed. 3:30-5:20pm at Delta 723/724
- Email (**Personal question only**)
 - Cheng-Hong Lin : chlin@datalab.cs.nthu.edu.tw
 - I-Luh Wu : ilwu@datalab.cs.nthu.edu.tw
 - Yan-Ting Lee : ytlee@datalab.cs.nthu.edu.tw
 - Bing-Han Chiang: bhchiang@datalab.cs.nthu.edu.tw
- Online Forum
 - iLms



If I have Question?

- Always Google first !
 - Learn how to google is important.
- If you try your best but still can't catch it.
 - Feel free to ask us on iLMS or office hour.



The Policy of Labs

- **All labs need to be submitted to GitLab.**
- Late submission will **not** be accepted.
- Plagiarism will not be tolerated.
 - If we find you copy someone's code, you will get **0 point** for that lab.
- Grading
 - Submission before lab ends gets 100% score
 - Submission before **11:59pm** gets 60% score

Team Up

- 2~4 people each team
 - 2 people is accepted if you can do as well as others.
- Please register your team here before **3/4 23:59**
 - Register form : <https://goo.gl/KVeKNE>
 - After that day we will match the rest student.

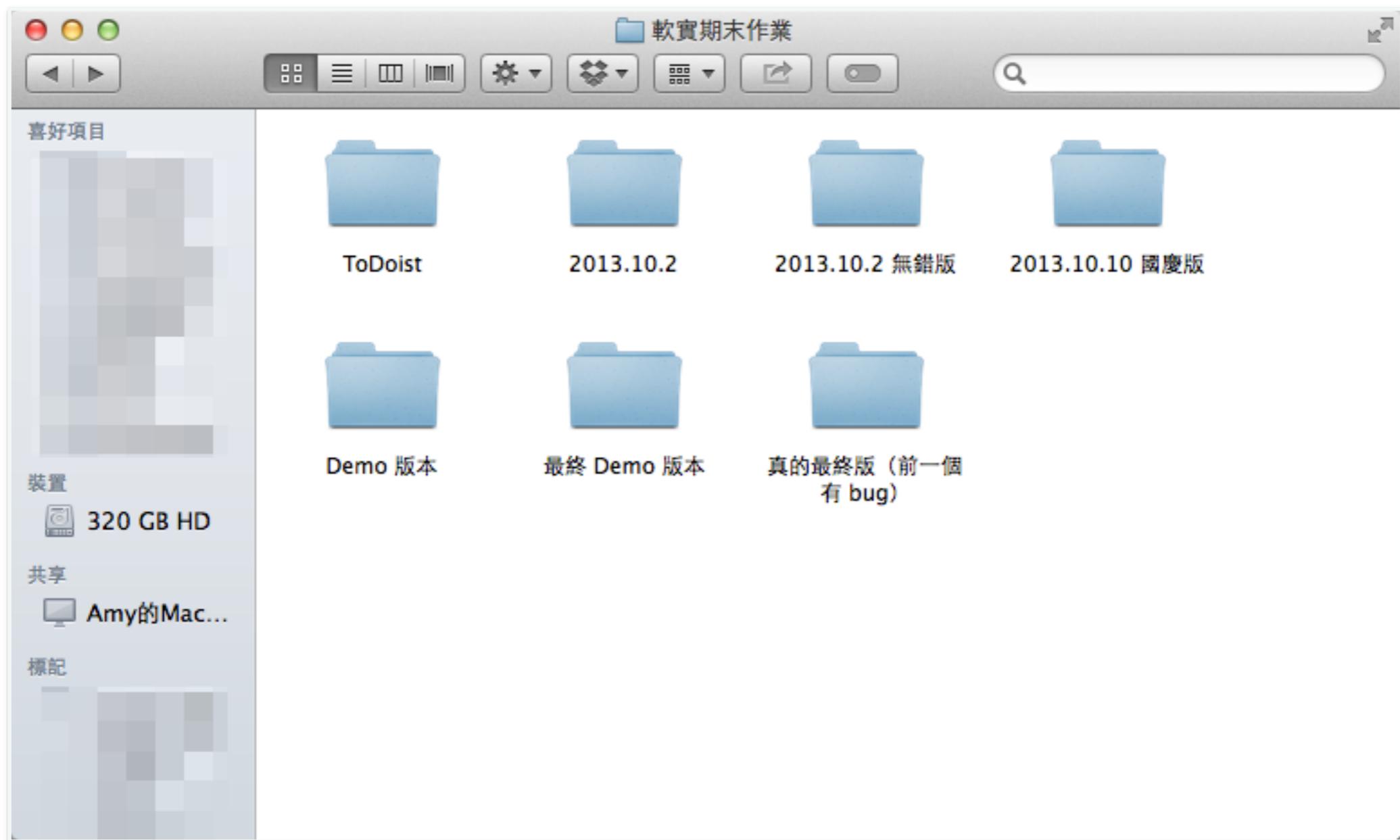
Outline

- General Rule
- Introduction to Git
 - Version control
 - Git Basics
 - Try Git!
 - Remote Repositories
- How to Submit Your Code to Gitlab
- Tools & References

Why use version control?

We want to track what we did and when we did it.

Students' VCS



How to work with others?



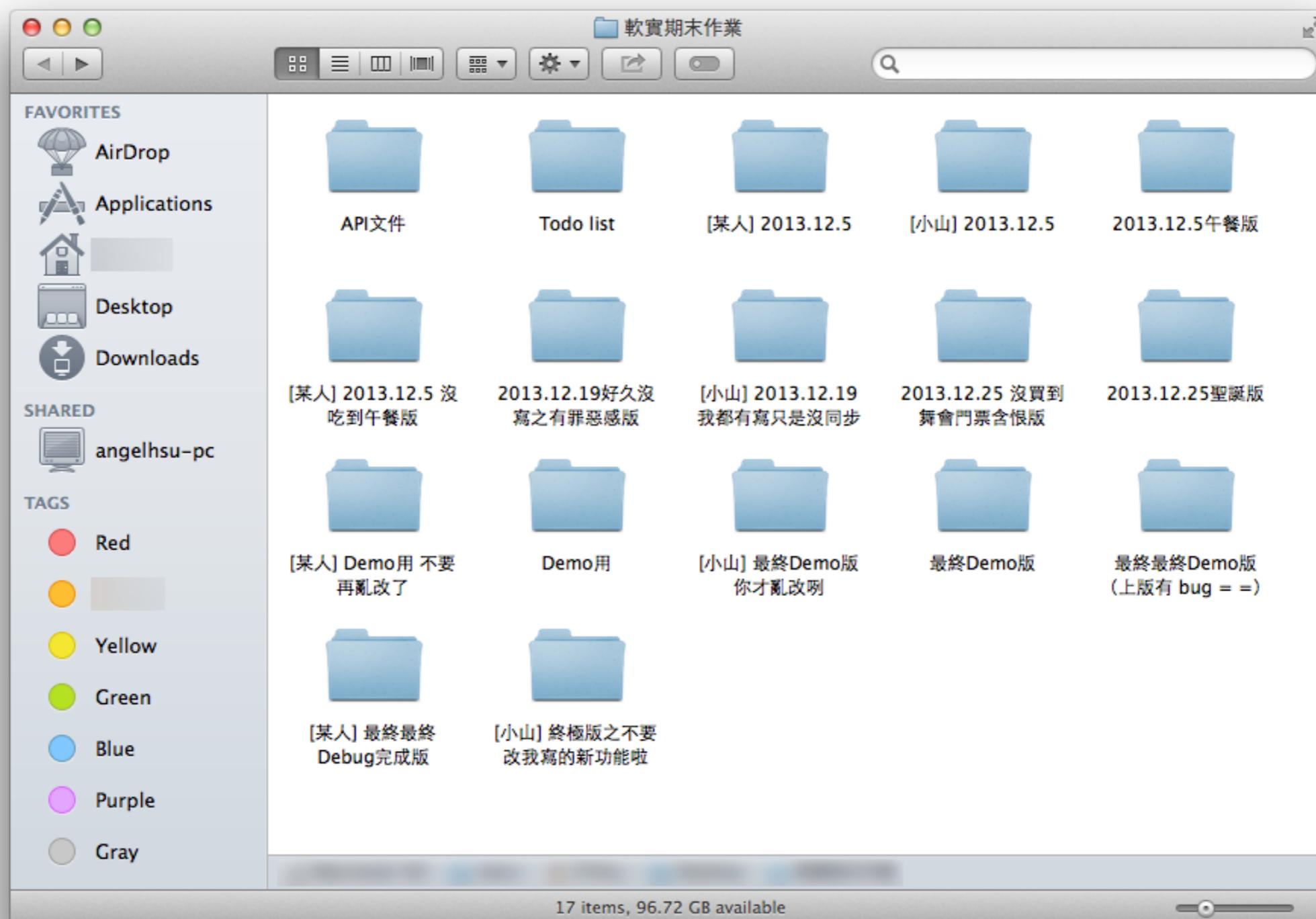
?



Dropbox

?

Dropbox VCS in Reality



Why use VCS?

- Managing your projects - tracking your files and modifications.
- Synchronization between modifications made by different developers.
- Revision history is still very helpful even if you work alone.

Outline

- General Rule
- Introduction to Git
 - Version control
 - **Git Basics**
 - Try Git!
 - Remote Repositories
- How to Submit Your Code to Gitlab
- Tools & References

Git



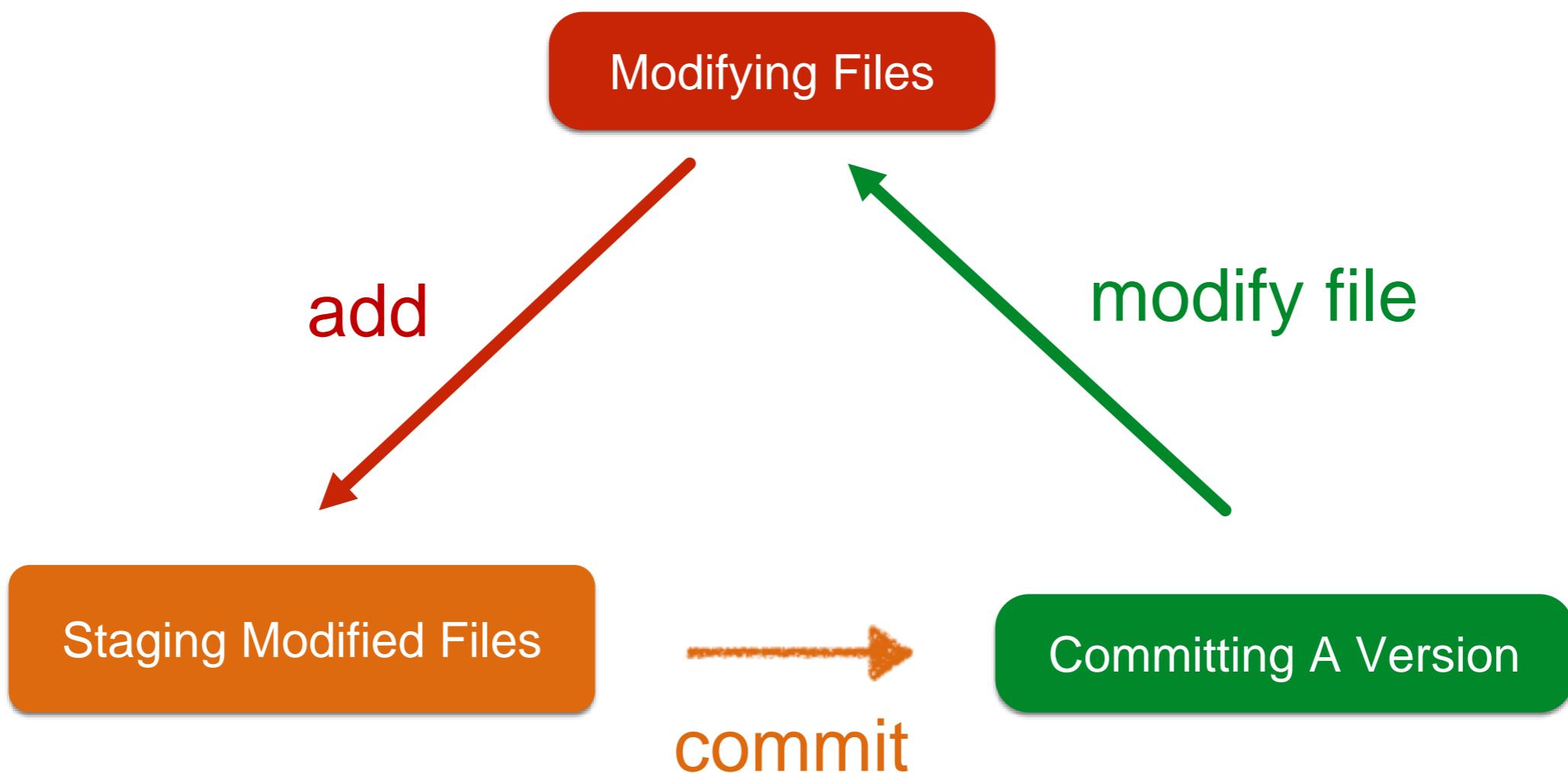
Git

- Git is a popular version control system which is
 - Fast
 - Easy to use
 - Distributed
- A git repository is a mini database that tracks your files.

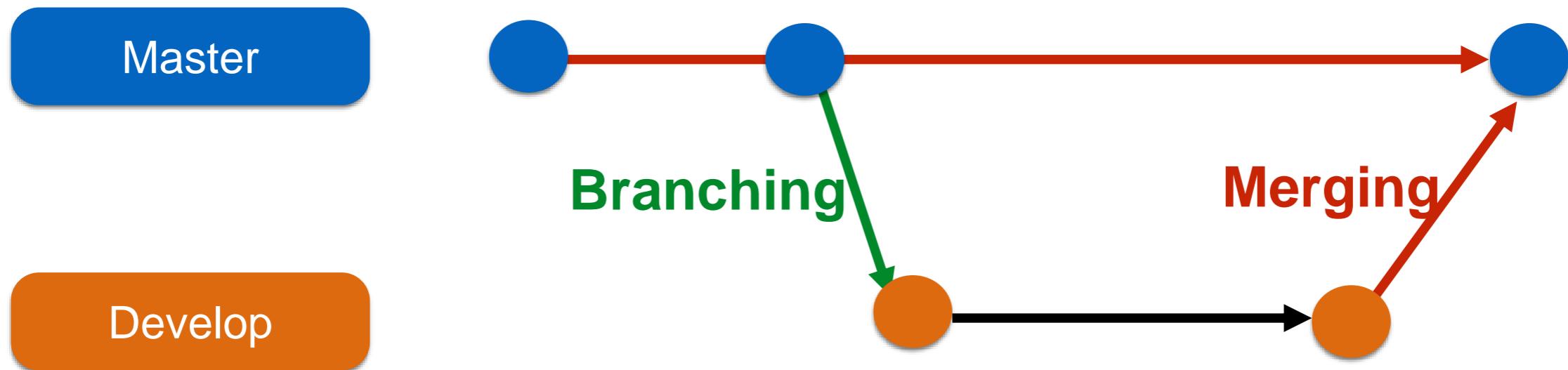
Git Workflow (1/2)

- With a local repository in your computer, you'll need following operations to make git track your work:
 - Create/modify files
 - Let git monitor the files by *adding* them to staging files.
 - Commit* your changes to and git will create snapshots (versions) of the files for you.

Git Workflow (2/2)



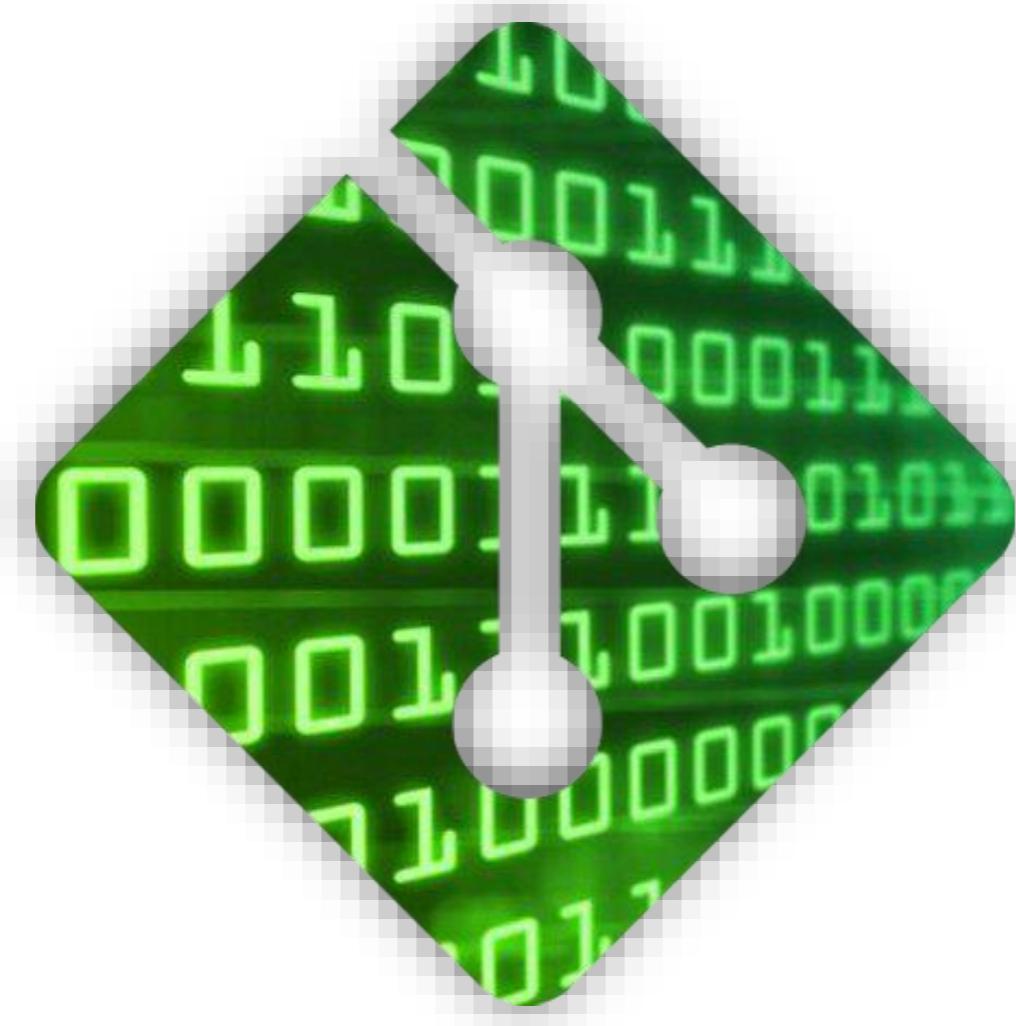
Git Branch



Outline

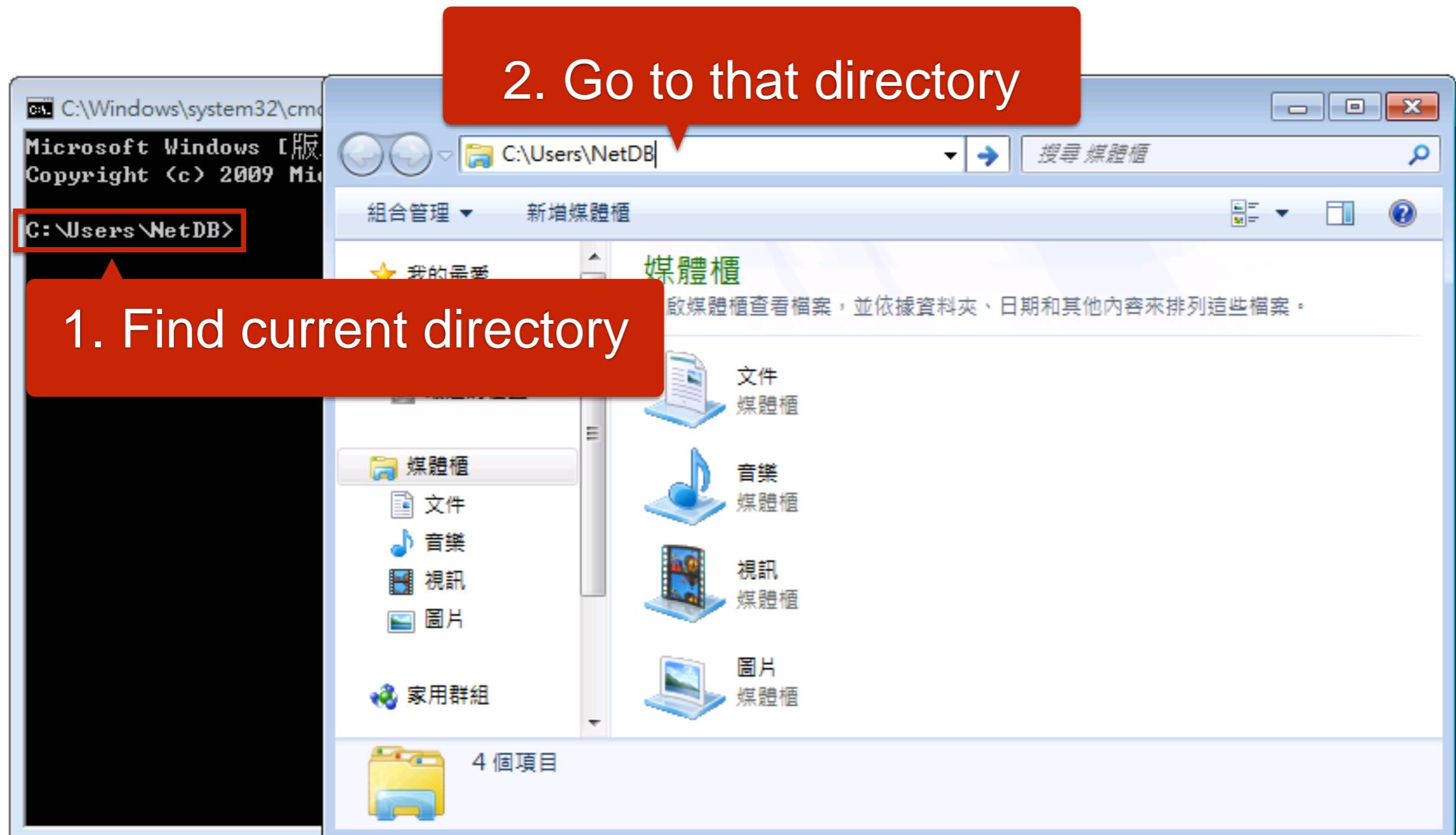
- General Rule
- **Introduction to Git**
 - Version control
 - Git Basics
 - Try Git!
 - Remote Repositories
- How to Submit Your Code to Gitlab
- Tools & References

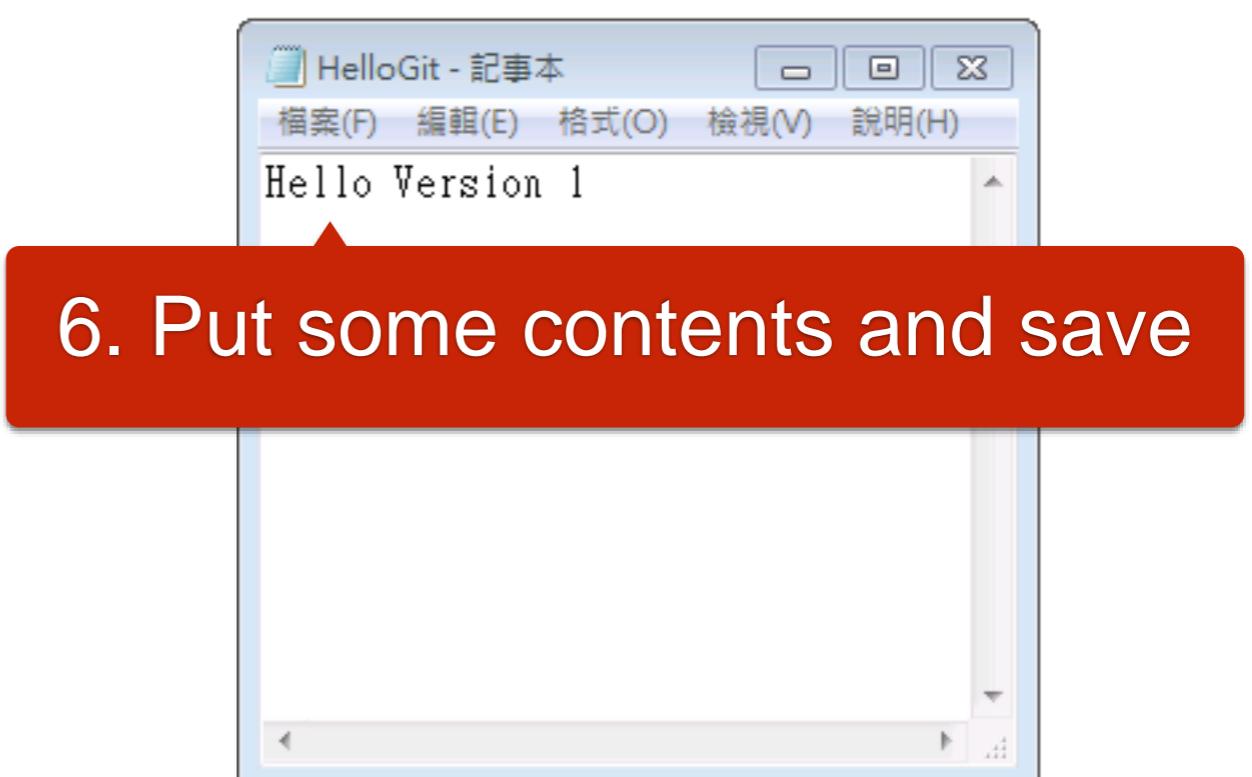
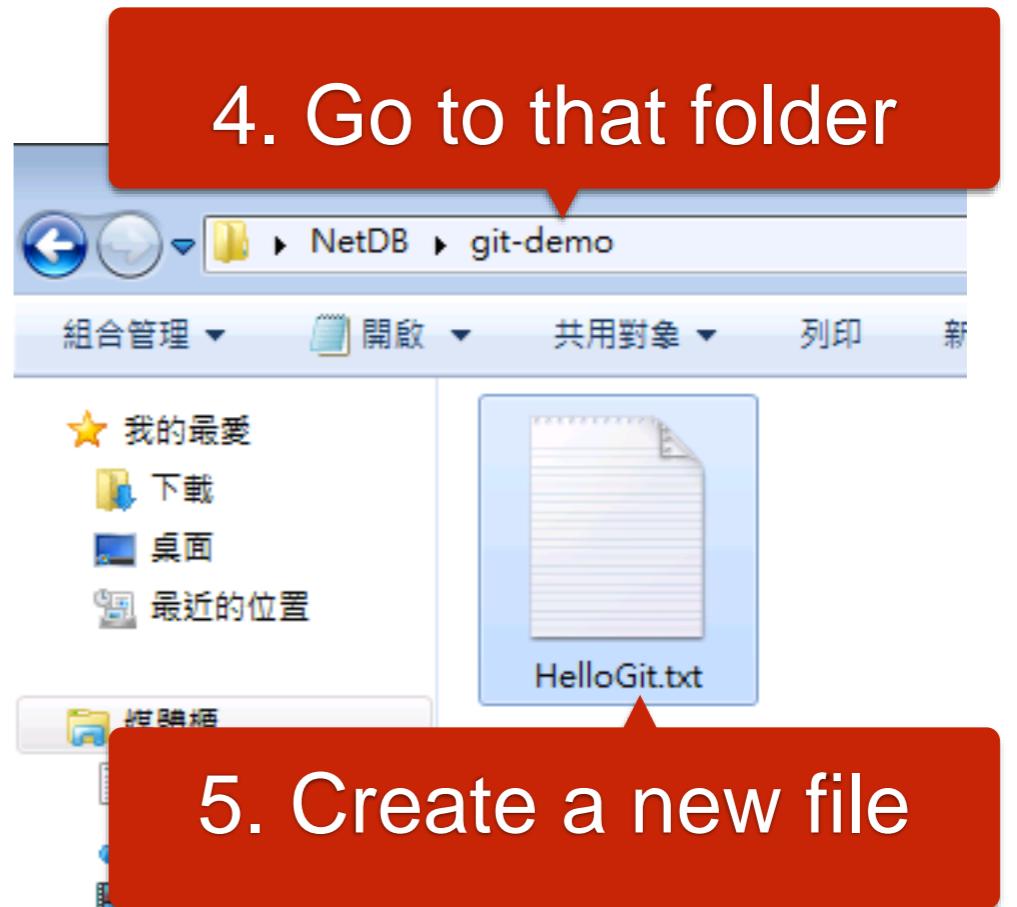
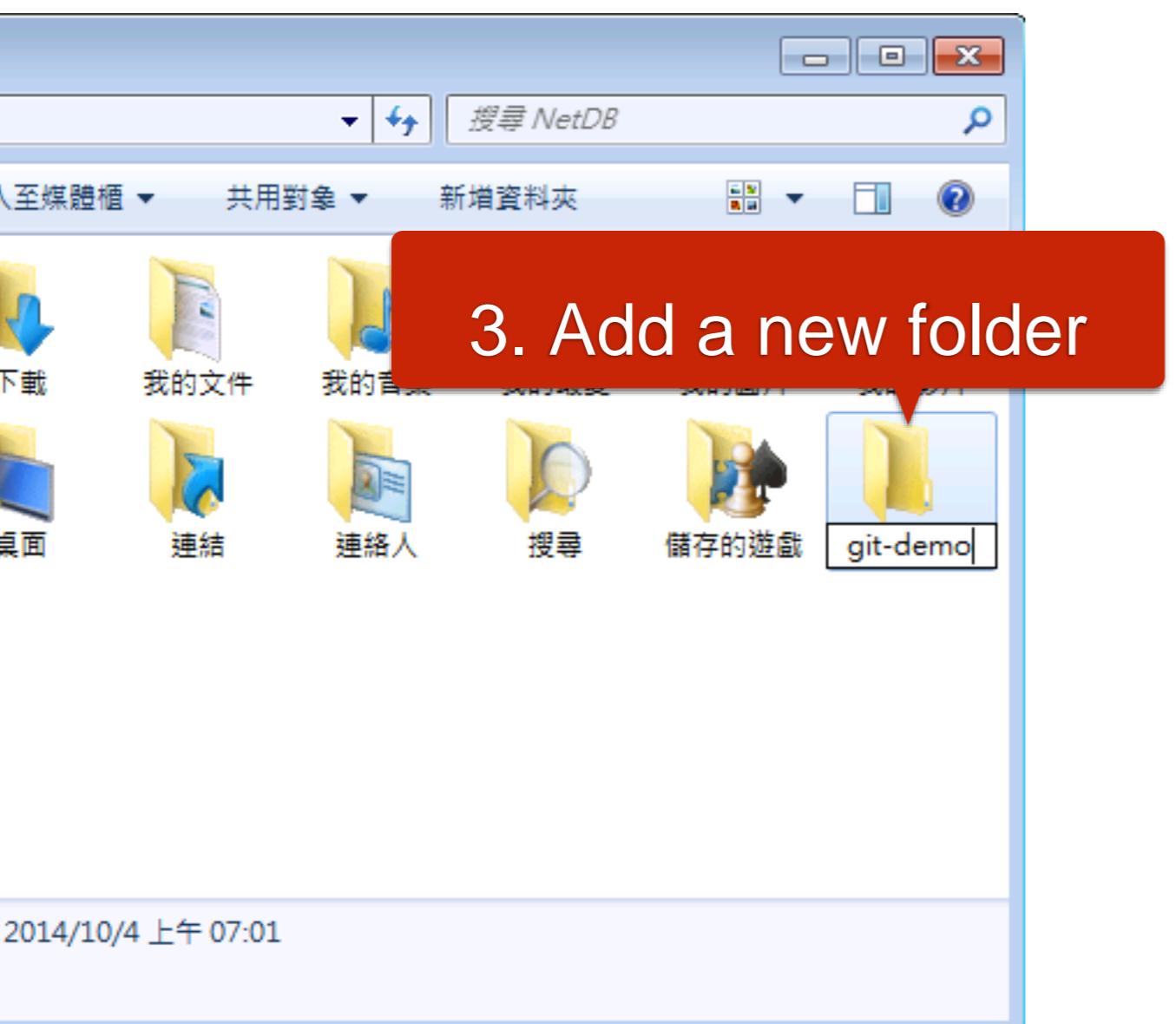
Be Professional



Basic Git Commands

- **git init**
 - Initialize a repository at current directory.
- **git add [file_name]**
 - Add files to git repository and let git track them.
- **git commit -m "commit messages"**
 - Save the changes to the git repository and create snapshots of the files.
- **git checkout [version]**
 - Go to a specific version.





```
命令提示字元  
Microsoft Windows [版本 6.1.7601]  
Copyright (c) 2009 Microsoft Corporation. All rights reserved.  
  
C:\Users\NetDB>git config --global user.name "cyhsu"  
C:\Users\NetDB>git config --global user.email "cyhsu@netdb.cs.nthu.edu.tw"  
C:\Users\NetDB>
```

7. Setup user information

With --global: for all repositories in computer
Without --global: for current repository

```
$ git config --global user.name "name"  
$ git config --global user.email "email"
```

命令提示字元
Microsoft Windows [版本 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.
C:\Users\NetDB>cd git-demo
C:\Users\NetDB\git-demo>dir
磁碟區 C 中的磁碟是 WIN7
磁碟區序號: 187B-C5C9
C:\Users\NetDB\git-demo 的目錄
2014/10/04 上午 02:12 <DIR>
..
15 HelloGit.txt
15 位元組
6,944 位元組可用
C:\Users\NetDB\git-demo>git init
Initialized empty Git repository in C:/Users/NetDB/git-demo/.git/
C:\Users\NetDB\git-demo>

8. Go to “git-demo”

9. Show the files in “git-demo”

10. Initialize a Git repository

```
$ cd git-demo # go to git-demo directory  
$ dir # list the files  
$ git init # initialize a repository
```

C:\ 命令提示字元

```
C:\Users\NetDB>cd git-demo

C:\Users\NetDB\git-demo>dir
磁碟區 C 中的磁碟是 WIN7
磁碟區序號： 187B-C5C9

C:\Users\NetDB\git-demo 的目錄

2014/10/04 上午 07:17 <DIR> .
2014/10/04 上午 07:17 <DIR> ..
2014/10/04 上午 07:16 15 HelloGit.txt
1 個檔案          15 位元組
```

C:\Users\NetDB>git init
Initialized empty Git repository in C:/Users/NetDB/git-demo/.git/
C:\Users\NetDB>git add HelloGit.txt
C:\Users\NetDB>git commit -m "version 1"
[master (root-commit) b302d9c] version 1
 1 file changed, 1 insertion(+)
 create mode 100644 HelloGit.txt

11. Add HelloGit.txt to staging files

12. Commit your changes

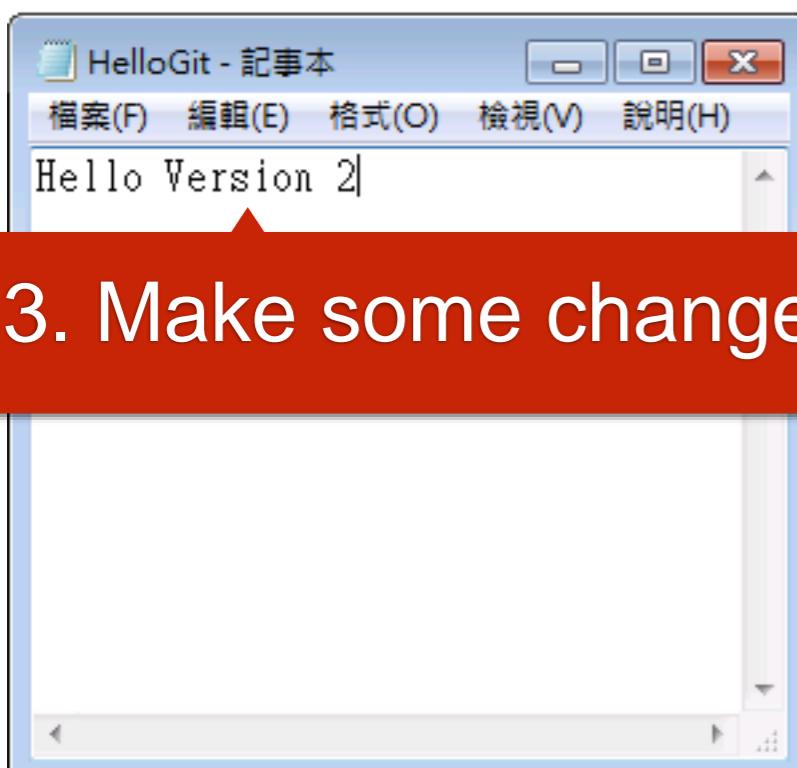
```
# Add HelloGit.txt to staging files
$ git add HelloGit.txt
```

```
# Commit the changes to the repository
# where "version 1" is the commit message
$ git commit -m "version 1"
```

14. Add it and commit again

```
C:\Users\NetDB\git-demo>git add HelloGit.txt  
C:\Users\NetDB\git-demo>git commit -m "version 2"  
[master e134c84] version 2  
 1 file changed, 1 insertion(+), 1 deletion(-)
```

13. Make some changes and save



15. View your versions

Version ID

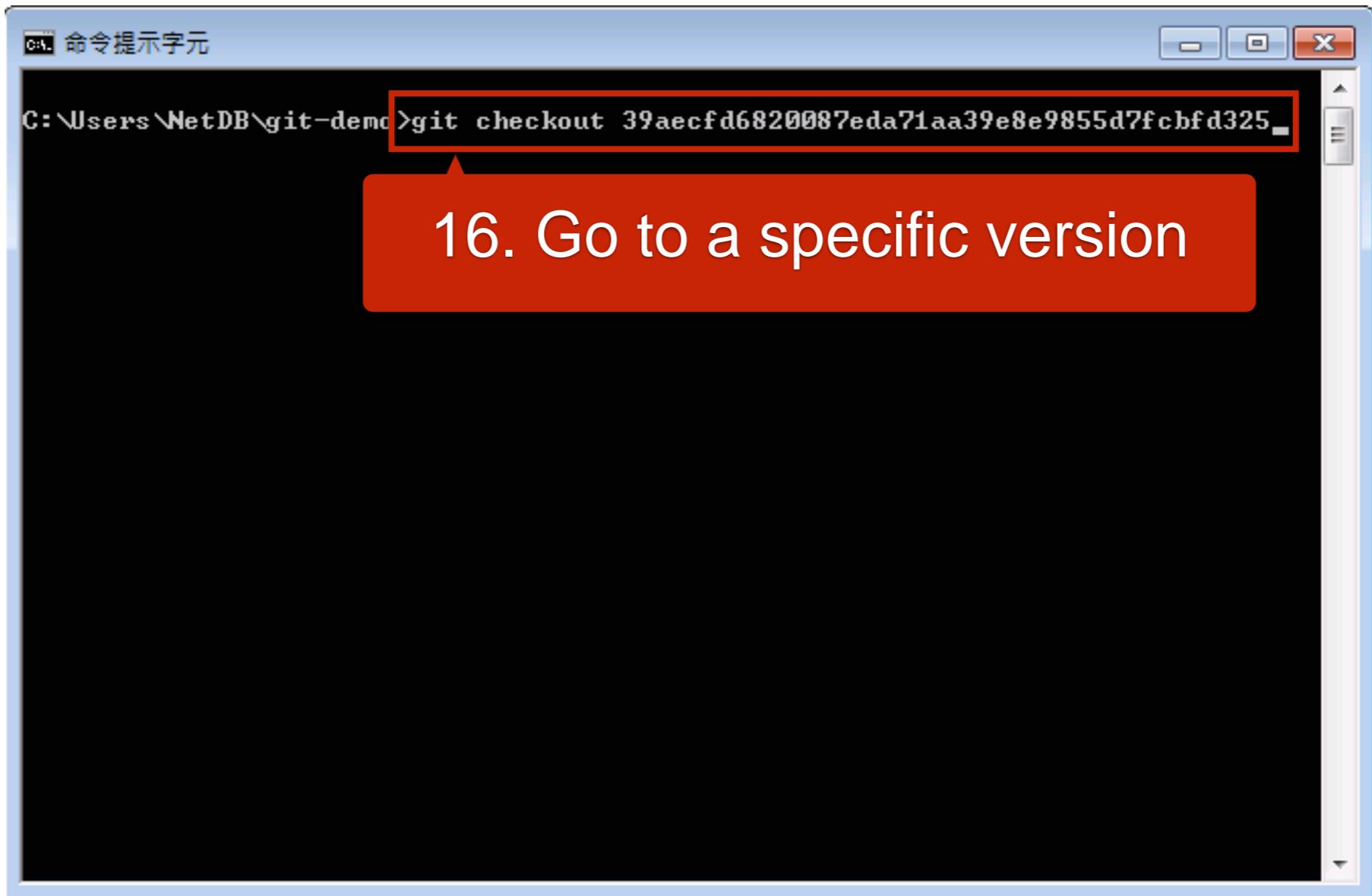
```
C:\Users\NetDB\git-demo>git log
commit e134c845df593f1451c4e9ebc874ddef6df42a76
Author: cyhsu <cyhsu@netdb.cs.nthu.edu.tw>
Date:   Sat Oct 4 08:09:55 2014 +0800

    version 2

commit 39aecfd6820087eda71aa39e8e9855d7fcfd325
Author: cyhsu <cyhsu@netdb.cs.nthu.edu.tw>
Date:   Sat Oct 4 08:09:16 2014 +0800

    version 1
```

```
# Show the versions you've created so far
$ git log
```

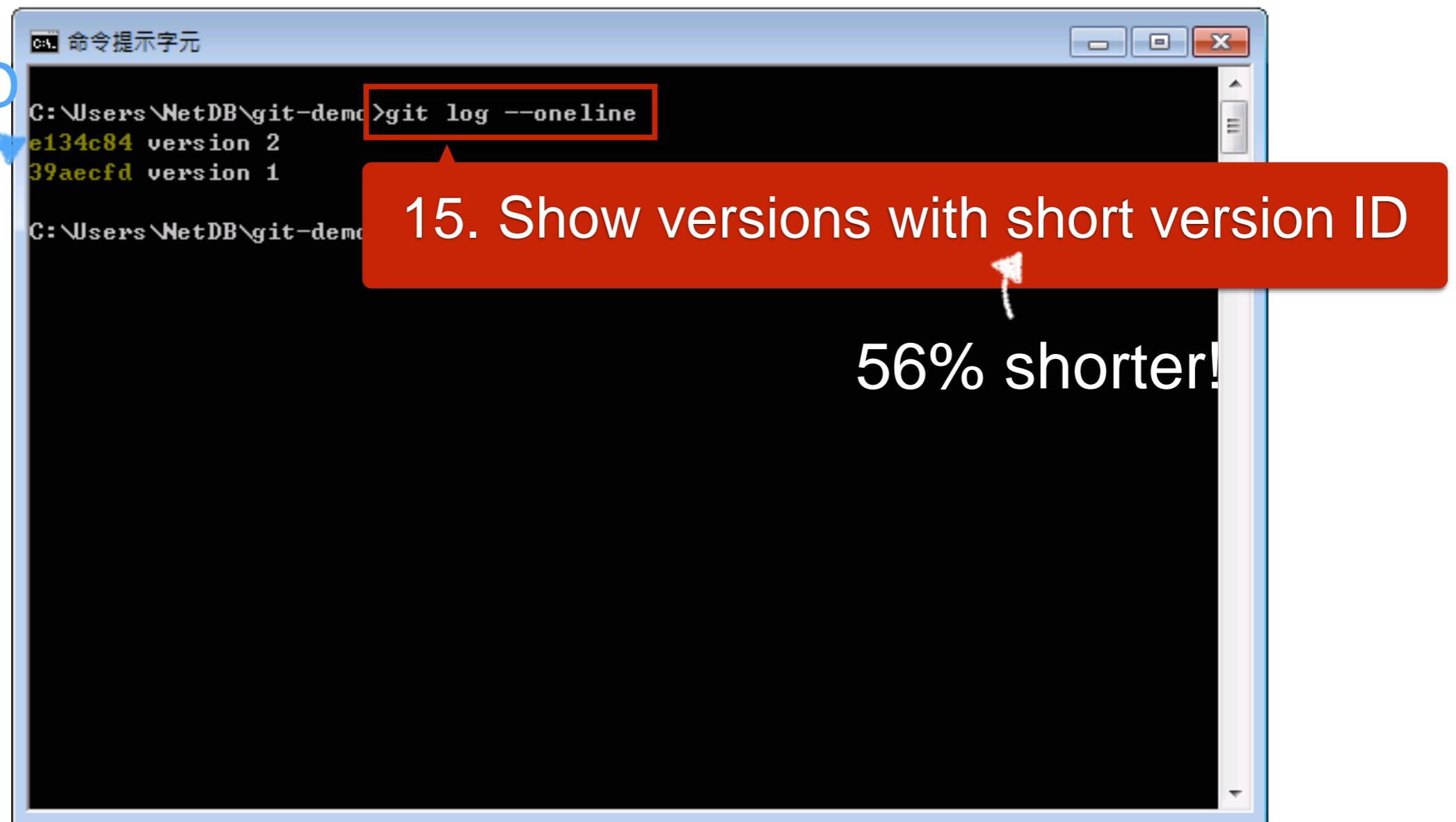


```
# Go to a specific version  
$ git checkout {version_id}
```

**LIFE IS
TOO SHORT
TO TYPE
THAT
VERSION ID!**

which is 40 characters long...

Version ID



A screenshot of a Windows Command Prompt window titled "命令提示字元". The window shows the command `git log --oneline` being run in the directory `C:\Users\NetDB\git-demo`. The output displays two commits:

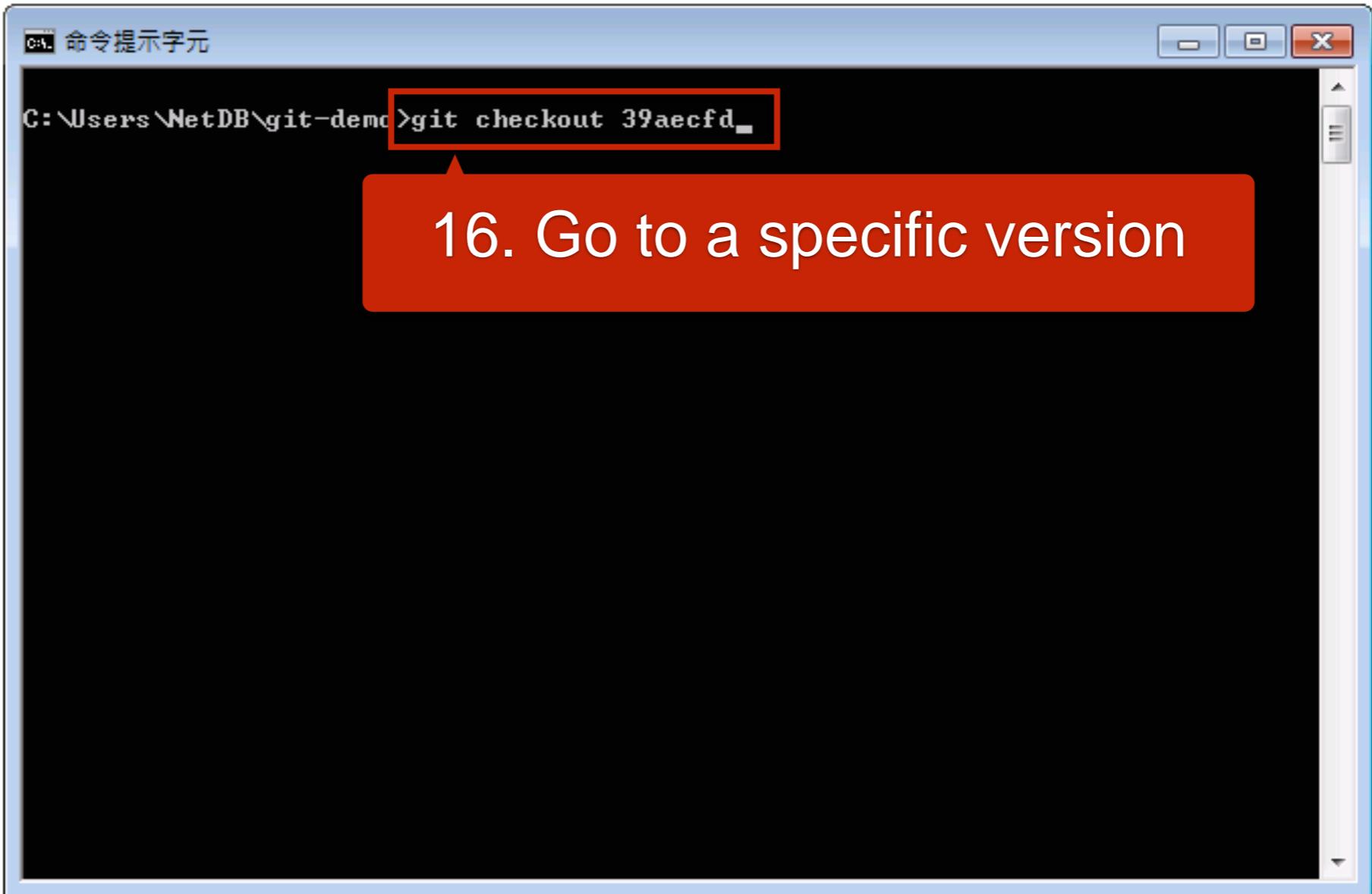
```
C:\Users\NetDB\git-demo>git log --oneline
e134c84 version 2
39aecfd version 1
```

The command `git log --oneline` is highlighted with a red box. A blue arrow points from the text "Version ID" to the commit hash "e134c84". A red callout box contains the text "15. Show versions with short version ID". A white arrow points from this callout to the commit hash "e134c84". Another white arrow points from the text "56% shorter!" to the commit hash "e134c84".

15. Show versions with short version ID

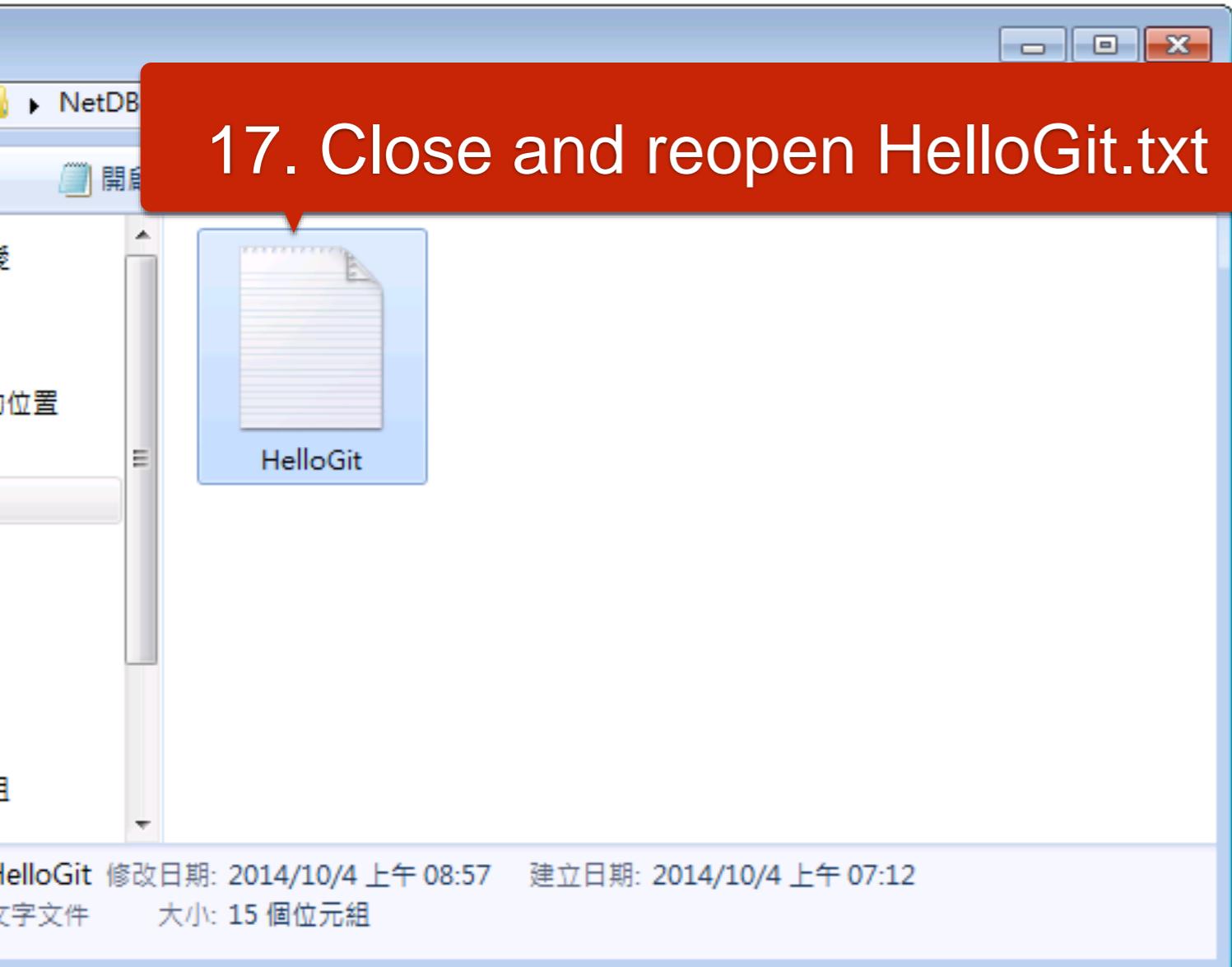
56% shorter!

```
# Show versions with short version id
$ git log --oneline
```

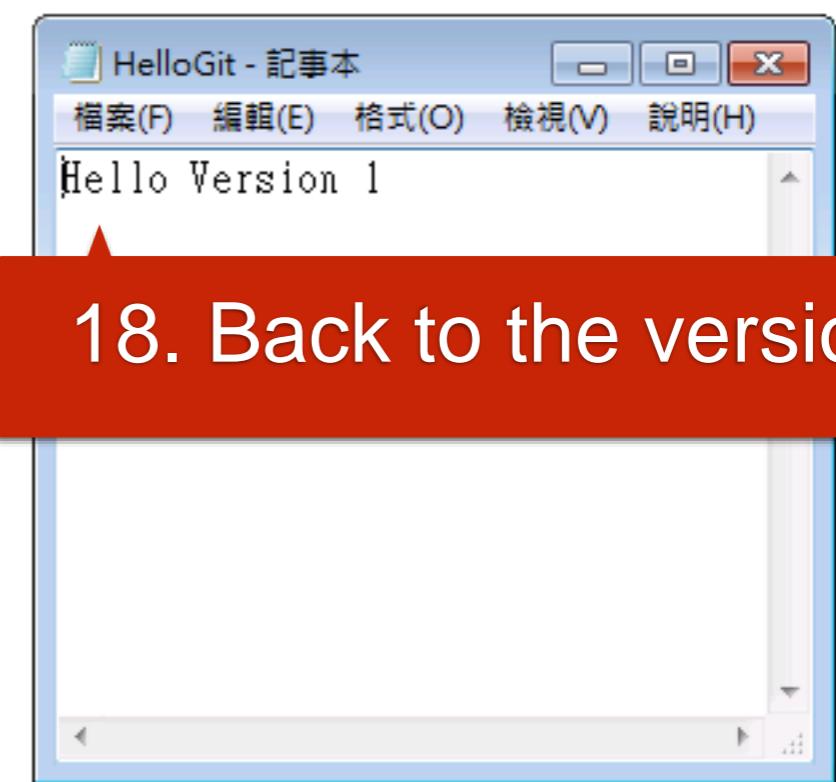


```
# Go to a specific version.  
# In fact, you only need to type  
# the first 5 characters.  
$ git checkout {short_version_id}
```

17. Close and reopen HelloGit.txt



18. Back to the version 1!



Try yourself (1/2)

- Branching steps
 - Creating a new branch

`git branch [branch name]`

- Checking out the branch

`git checkout [branch name]`

Try yourself (2/2)

- Merging steps
 - Checking out a branch to merge

```
git checkout [branch 1 name]
```

- Merging another branch

```
git merge [branch 2 name]
```

Outline

- General Rule
- Introduction to Git
 - Version control
 - Git Basics
 - Try Git!
 - Remote Repositories
- How to Submit Your Code to Gitlab
- Tools & References

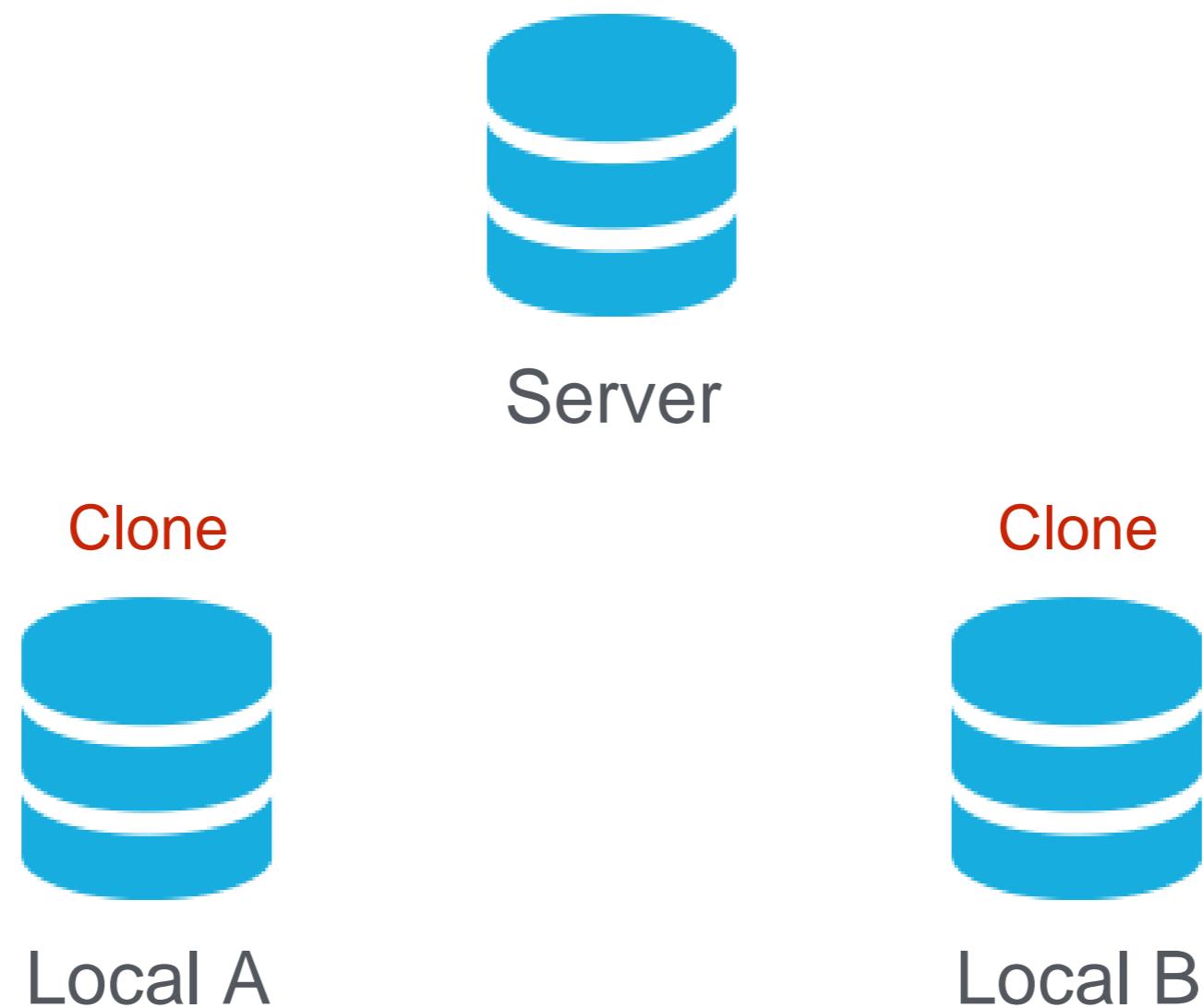
Collaboration

- To work with others using git, you'll need a server that store the repository.
- Git is distributed, which means
 - Everyone can store a copy of the repository downloaded from the server to their computer and do their jobs independently.

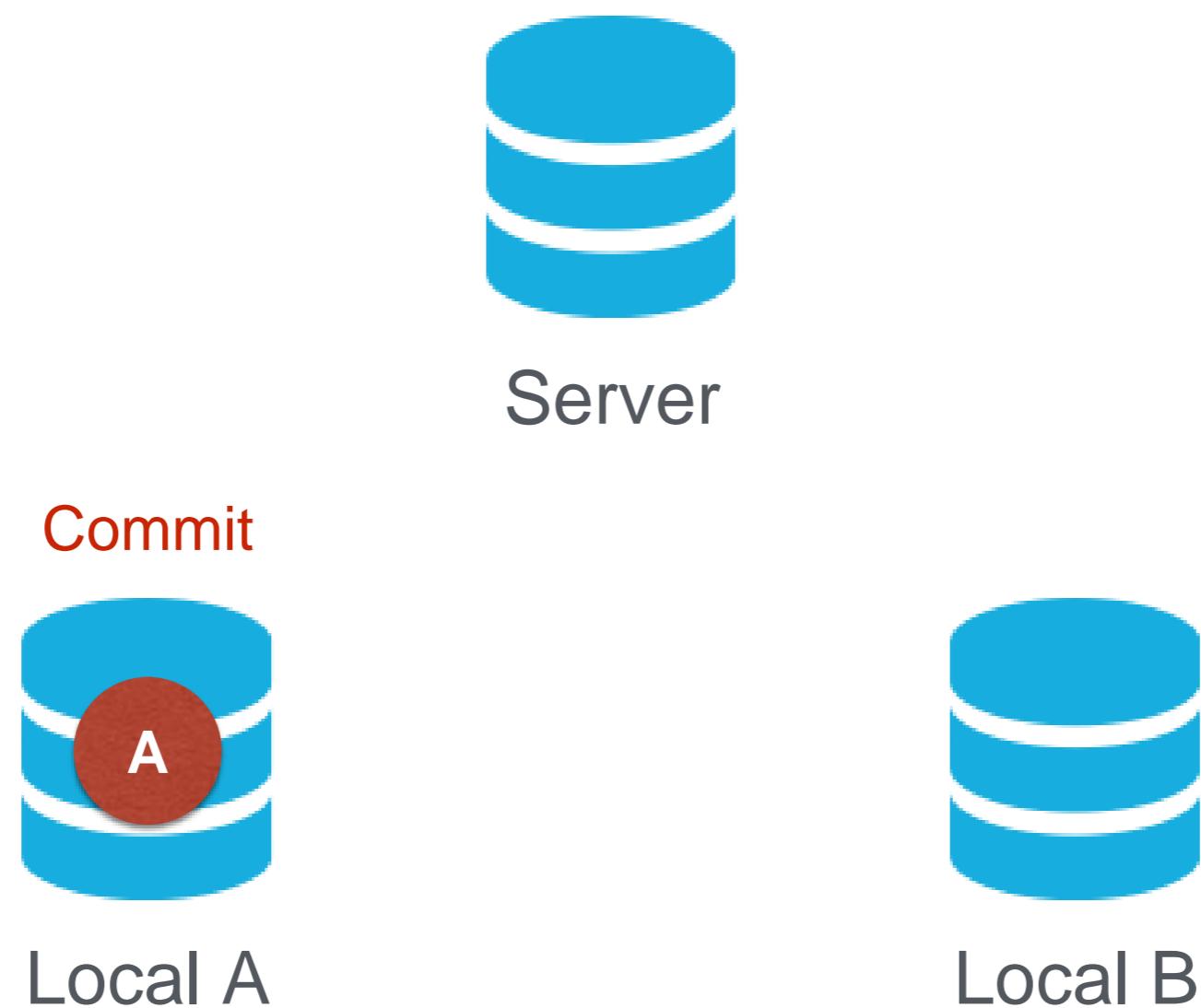
Collaboration Workflows (1/2)

1. If you don't have the project, *clone* (download) the repository from the server.
2. Do your work and commit the changes at local. Once done, *push* (upload) the repository to the server.
3. If someone else modified the project, you can *pull* (sync) the repository to get the updated project.
4. Repeat 2 and 3.

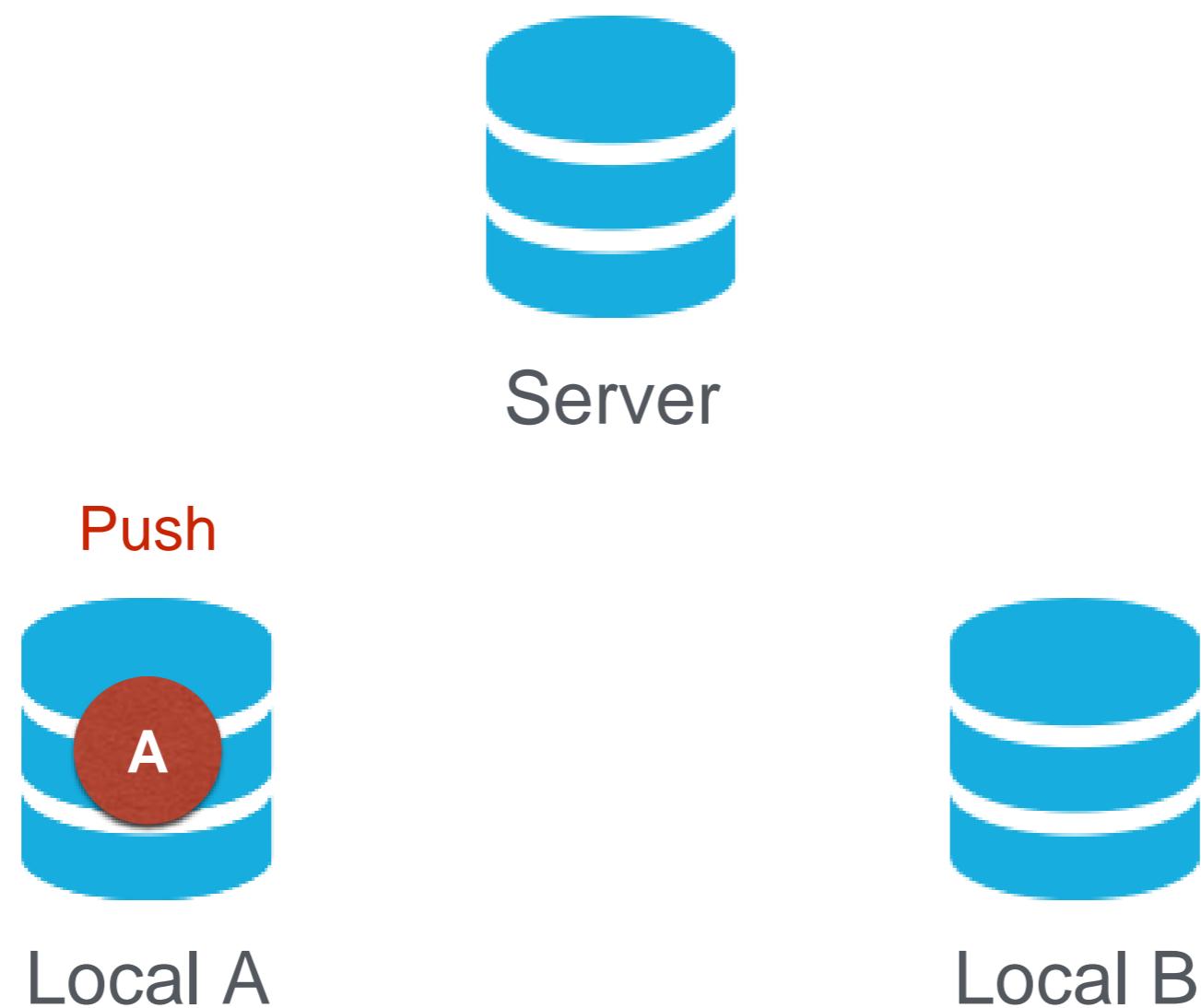
Collaboration Workflows (2/2)



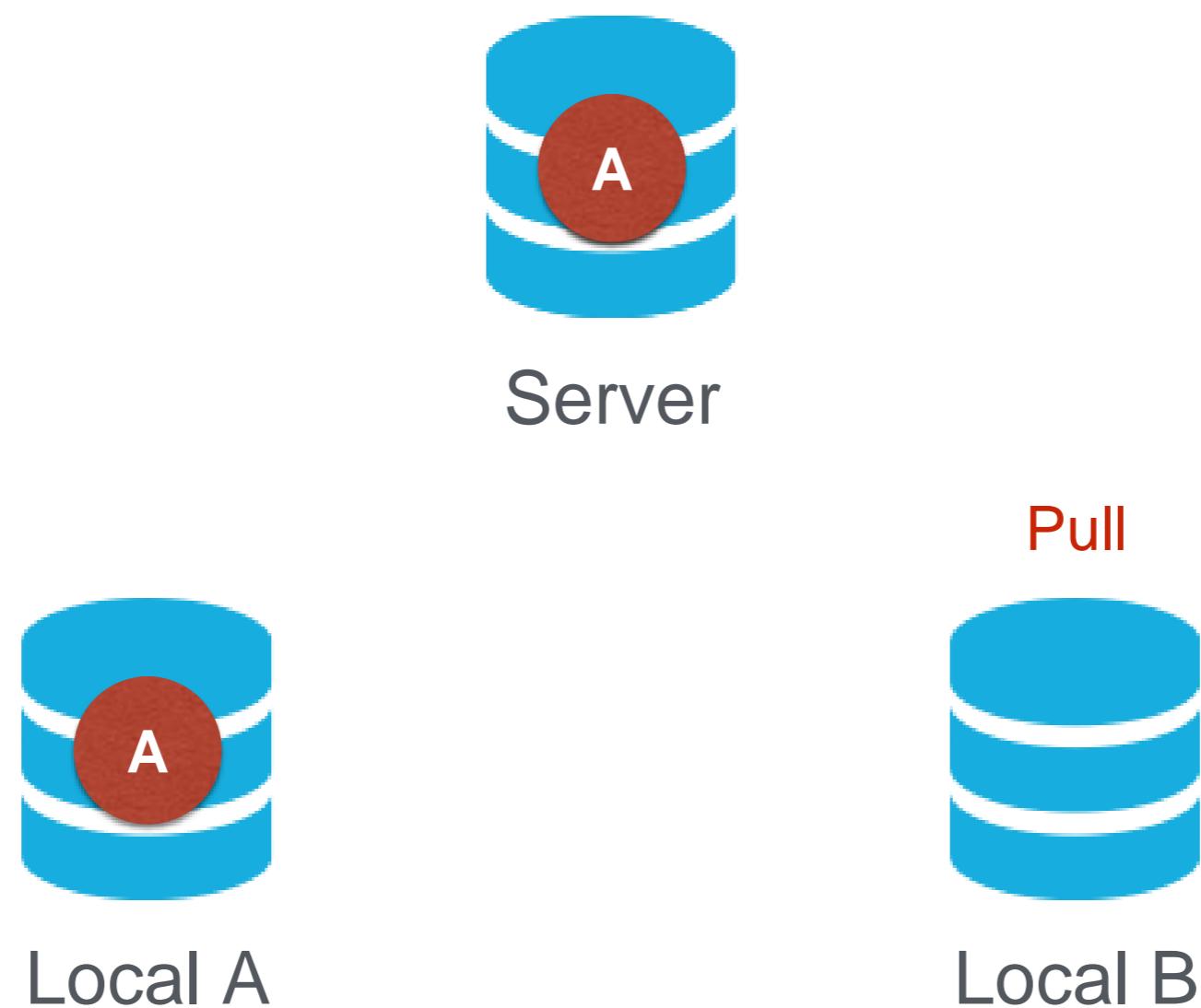
Collaboration Workflows (2/2)



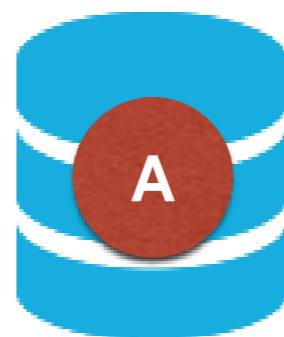
Collaboration Workflows (2/2)



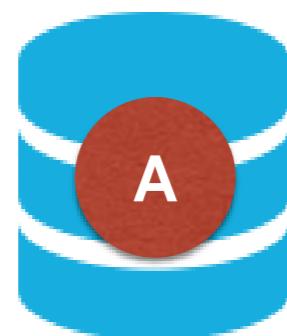
Collaboration Workflows (2/2)



Collaboration Workflows (2/2)

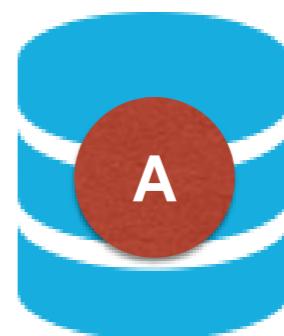


Server



Local A

Pull



Local B

Why Authentication Failed?

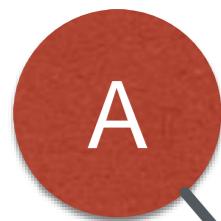
Collaboration Workflow

- If you tried to clone the code template from a server and want to push the modified file.
 - You will get authentication failed.
 - It's because it was a project of others, which means you are not able to save the changes back to the server.
- So, how can I copy a project from others on a open source platform like Github?

Introducing
Fork



Original Project



Forked Project



Forked from Red

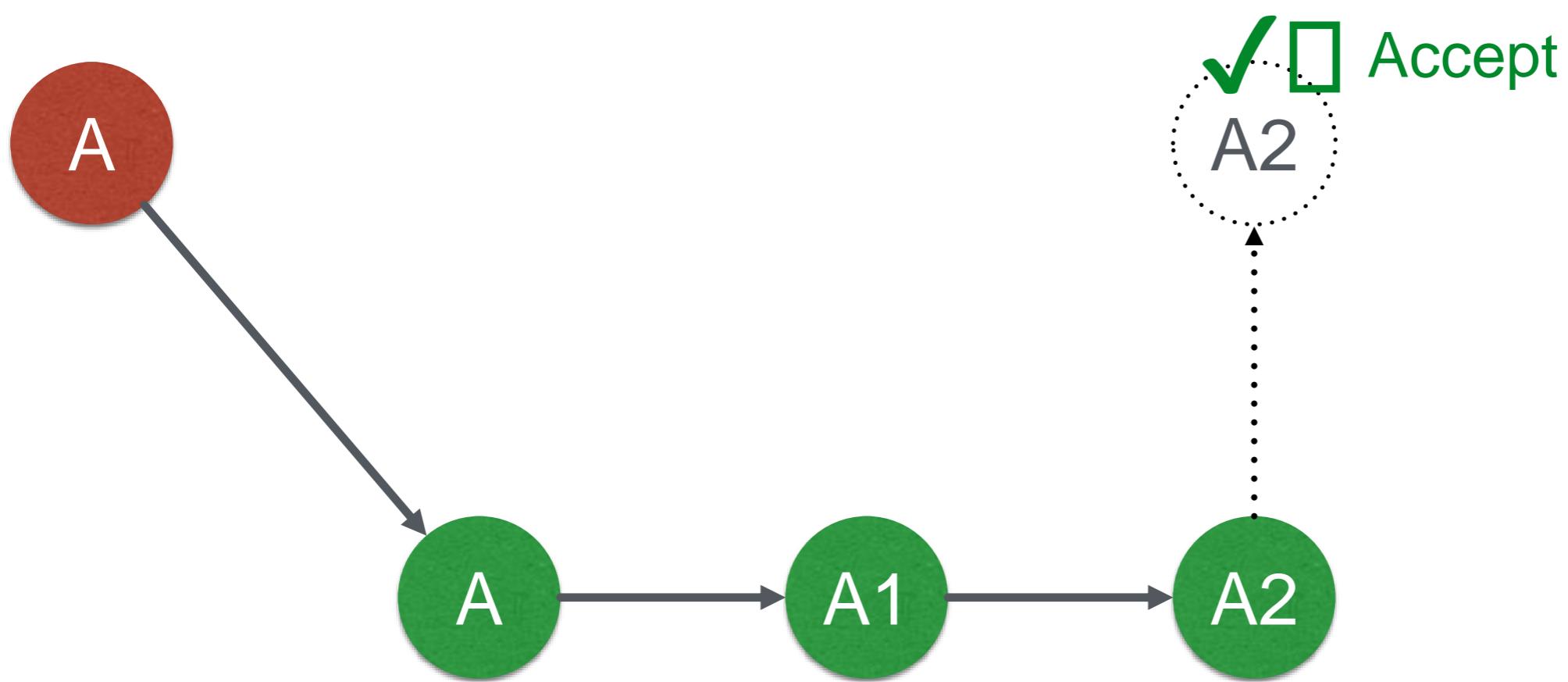


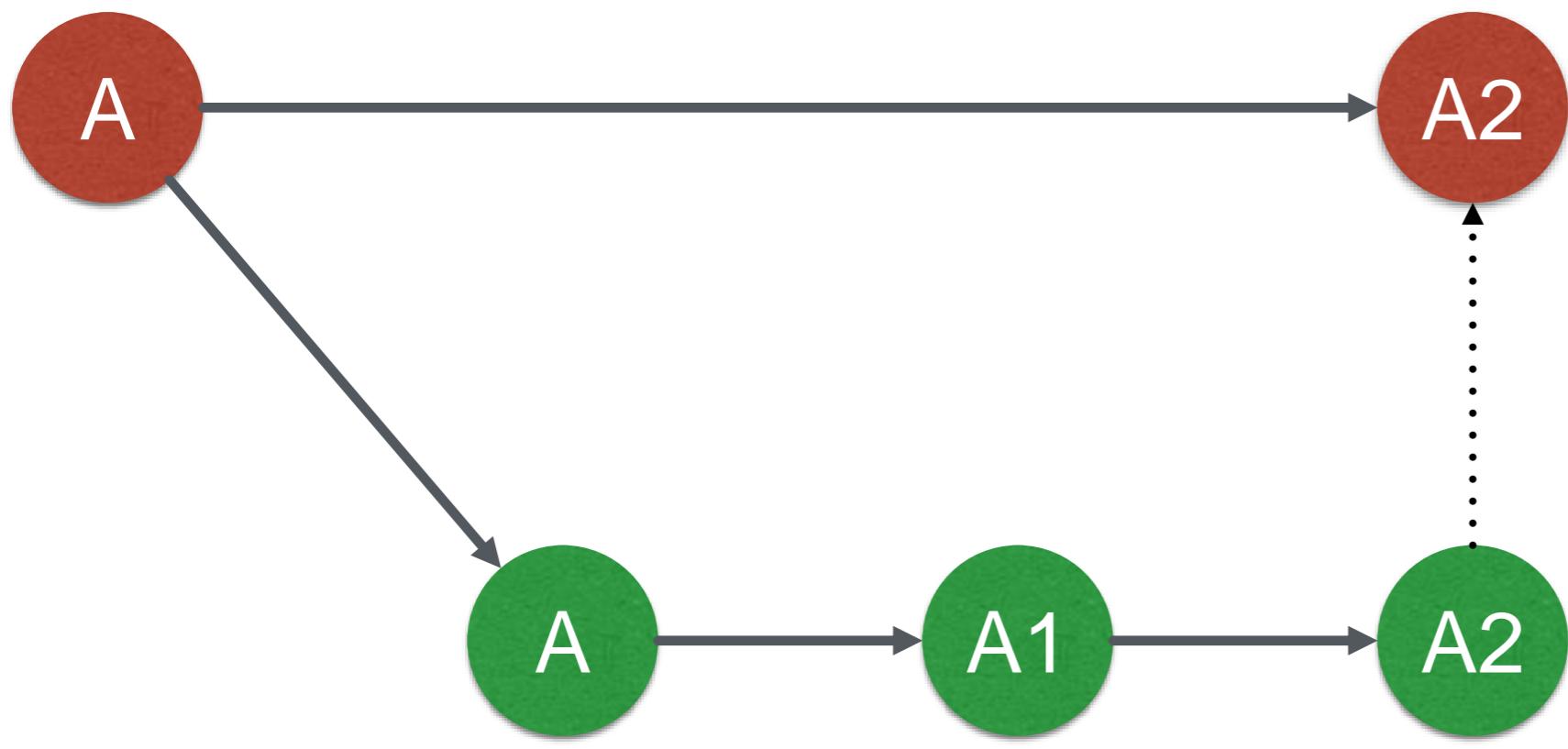
Commit

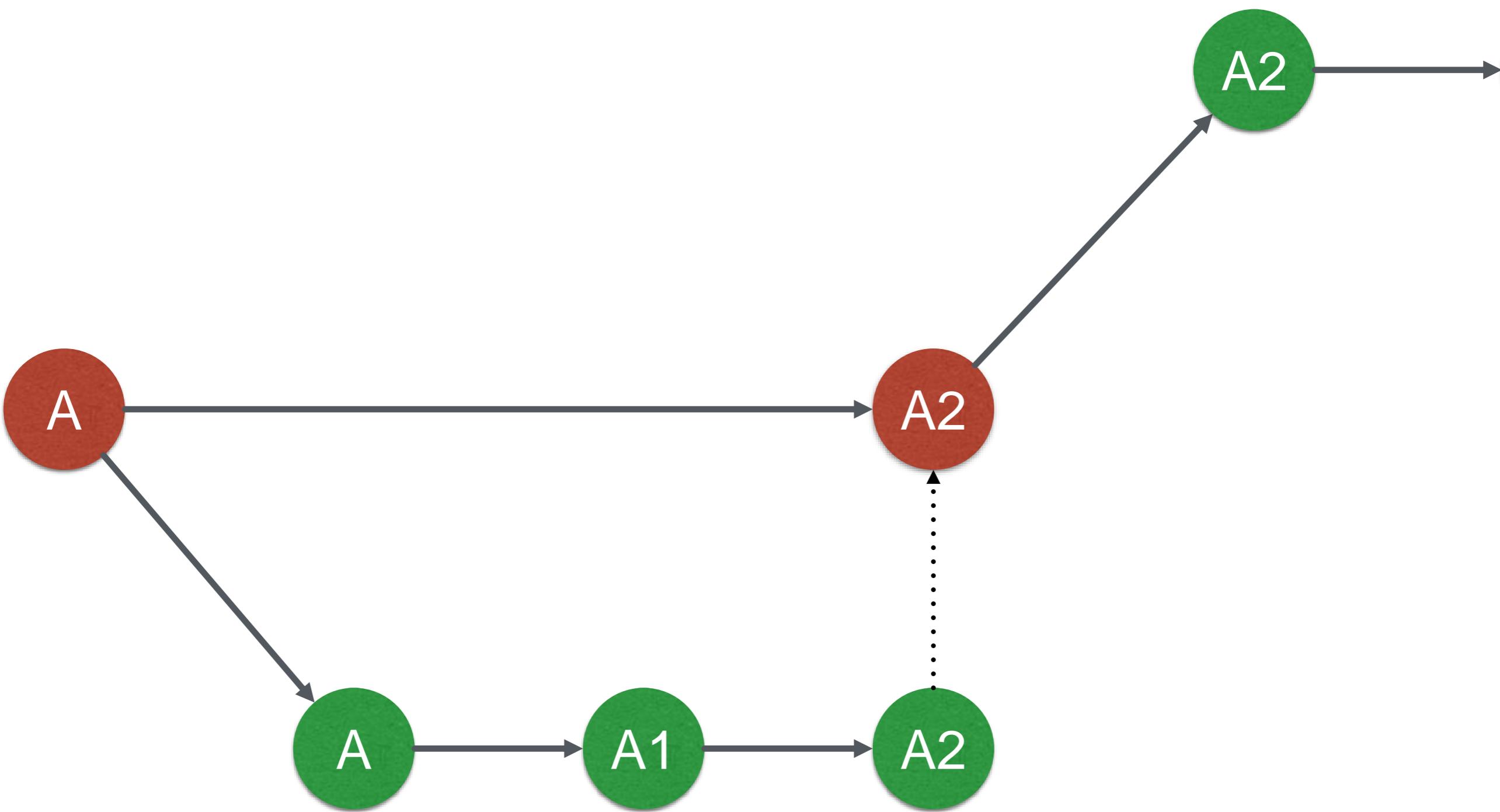


Commit

Open a Merge Request







Git Collaboration Workflow

1. *Fork* a repository to make a copy of it.
2. *Clone* the repository you forked to your workspace.
3. Do your work and *commit* the changes in your workspace.
4. *Push* the repository to the server to synchronize them.
5. Open a *merge request* to origin repository .

Basic Git Commands (2/2)

- **git clone [url]**
 - Clone a repository from remote server
- **git push [url] [branch-name]**
 - Push committed file to remote server

Outline

- General Rule
- Introduction to Git
 - Version control
 - Git Basics
 - Try Git!
 - Remote Repositories
- How to Submit Your Code to Gitlab
- Tools & References

Gitlab

- We have created account for you
- Account: student ID (e.g. 106012345)
- Password: webapp+studentID (e.g. webapp106012345)

Workflow

- For each lab, you should follow the workflow below
 1. Fork our template repository on Gitlab
 2. Clone the **forked** repository to your computer
 3. Finish your lab
 4. Commit in your computer
 5. Push to Gitlab
 6. Send merge request of **your branch** to our template repository

Workflow

- For each lab, you should follow the workflow below
 1. Fork our template repository on Gitlab
 2. Clone the **forked** repository to your computer
 3. Finish your lab
 4. Commit in your computer
 5. Push to Gitlab
 6. Send merge request of **your branch** to our template repository

You can access course projects in this group

Screenshot of a GitLab group details page for "2019-spring".

The top navigation bar includes: GitLab logo, Projects, Groups, Activity, Milestones, Snippets, a plus icon, This group (selected), Search, and user icons.

The sidebar on the left shows group navigation: Overview (selected), Details, Activity, Issues (0), Merge Requests (16), Members, and Settings.

The main content area displays the group's logo (blue atom icon), name "2019-spring", and a "Leave group" button. A "Global" notifications dropdown is also present.

Below the header are filters: "Filter by name...", "Last created", and a green "New project" button.

The project list contains two items:

- hello-html**: Created 1 day ago, 0 stars, 0 global notifications.
- submission-exercise**: Created 1 day ago, 0 stars, 0 global notifications.

At the bottom left is a "Collapse sidebar" button.

GitLab Projects Groups Activity Milestones Snippets This project Search

courses > ... > 2019-spring > submission-exercise > Details

S submission-exercise

Project Details Activity Cycle Analytics Repository Issues Merge Requests Wiki Snippets Members

1. Click to fork

Star 0 Fork 18 HTTPS https://shwu10.cs.nthu.edu.tw/courses/2019-spring/submission-exercise/ Commit (1) Branches (56) Tags (0) Readme

master submission-exercise + History Find file

initial commit
Bing-Han Chiang authored 1 day ago 2df95d29

Name	Last commit	Last update
README.md	initial commit	1 day ago

README.md

Practice Submission

<< Collapse sidebar

GitLab Projects Groups Activity Milestones Snippets + This project Search S submission-exercise 江秉翰 > submission-exercise > Details

2. Check if this repository is under your account

submission-exercise Forked from courses / web-app / 2019-spring / submission-exercise

Star 0 Fork 0 HTTPS https://shwu10.cs.nthu.edu.tw/1f S Global

Issues 0 Merge Requests 0 Files (92 KB) Commit (1) Branches (56) Tags (0) Readme Add Changelog Add License Add Contribution guide Set up CI/CD

Wiki Snippets Settings master submission-exercise / + History Find file Web IDE 2df95d29

initial commit

Bing-Han Chiang authored 1 day ago

Name	Last commit	Last update
README.md	initial commit	1 day ago

3. Go to settings

Collapsible sidebar README.md

GitLab Projects Groups Activity Milestones Snippets + This project Search

S submission-exercise 江秉翰 > submission-exercise > General Settings

Project Repository Issues Merge Requests Wiki Snippets Settings General Members Badges Integrations Repository

Expand Collapse

General project

Update your project name, description, avatar, and other general settings.

Permissions

Enable or disable certain project features and choose access levels.

Project visibility ?

4. Set project to private

Public Private Internal Public

Issues Lightweight issue tracking system for this project Everyone With Access

Repository View and edit files in this project Everyone With Access

Merge requests Submit changes to be merged upstream

<< Collapse sidebar

GitLab Projects Groups Activity Milestones Snippets + This project Search

S submission-exercise

Project Repository Issues 0 Merge Requests 0 Wiki Snippets

Settings

General Members Badges Integrations Repository

« Collapse sidebar

Build, test, and deploy your changes
Enable feature to choose access level

Git Large File Storage ?
Manages large files such as audio, video, and graphics files

Wiki
Pages for project documentation
Only Project Members

Snippets
Share code pastes with others out of Git repository

5. Scroll down and save changes

Save changes

Merge request
Customize your merge request restrictions. Expand

Export project
Export this project with all its related data in order to move your project to a new GitLab instance. Once the export is finished, you can import the file from the "New Project" page. Expand

Workflow

- For each lab, you should follow the workflow below
 1. Fork our template repository on Gitlab
 2. Clone the **forked** repository to your computer
 3. Finish your lab
 4. Commit in your computer
 5. Push to Gitlab
 6. Send merge request of **your branch** to our template repository

GitLab Projects Groups Activity Milestones Snippets + This project Search

S submission-exercise 江秉翰 > submission-exercise > Details

Project Details Activity Cycle Analytics Repository Issues Merge Requests Wiki Snippets Settings

1. Choose HTTPS 2. Copy the link

submission-exercise Forked from courses / web-app / 2019-spring / submission-exercise

Star 0 Fork 0 HTTPS https://shwu10.cs.nthu.edu.tw/16 Copy URL to clipboard Commit (1) Branches (56) Tags (0) Readme Add Changelog Add License Add Contribution guide Set up CI/CD

master submission-exercise / History Find file Web IDE

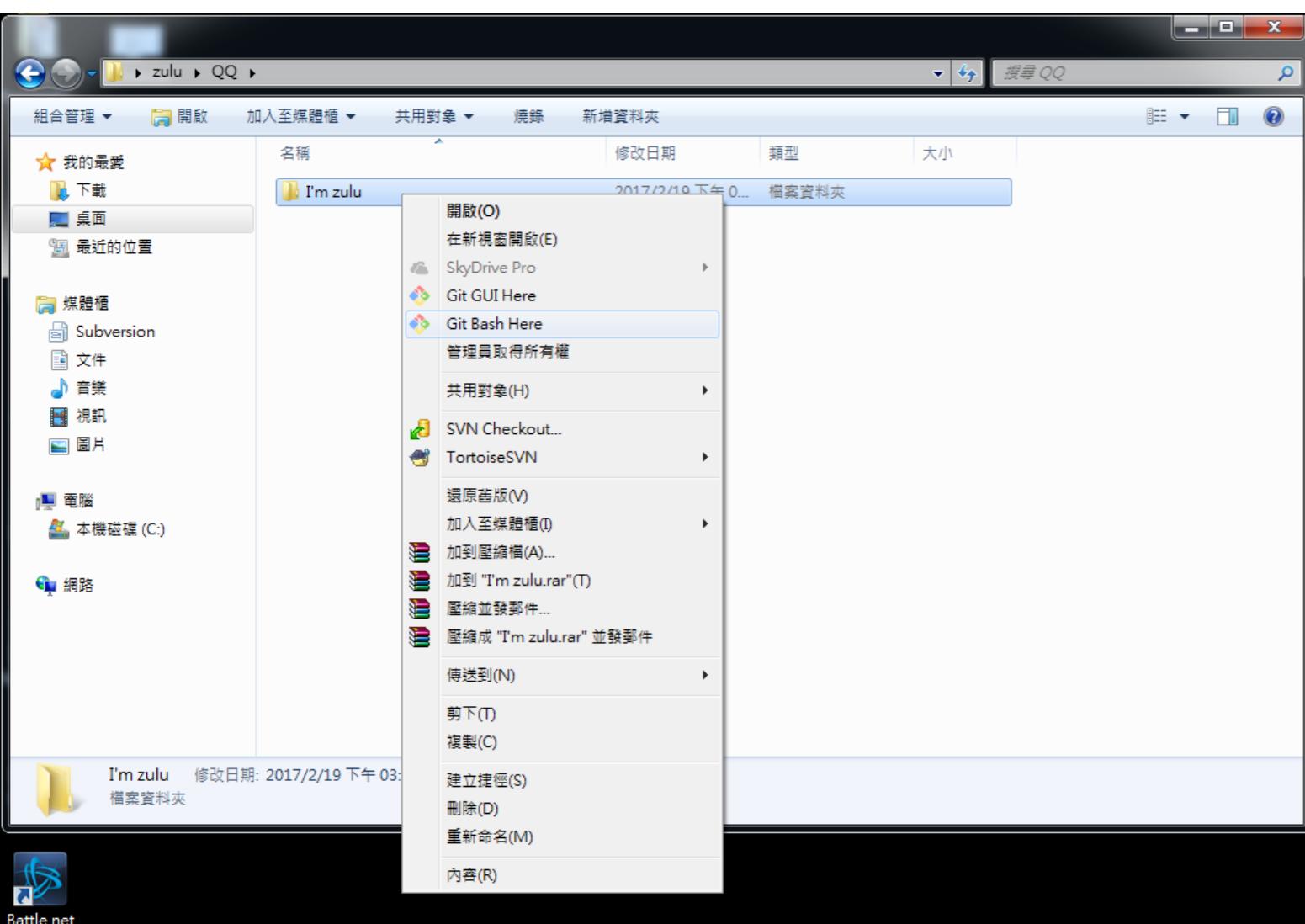
initial commit Bing-Han Chiang authored 1 day ago 2df95d29

Name	Last commit	Last update
README.md	initial commit	1 day ago

Collapsible sidebar README.md

The screenshot shows a GitLab project page for 'submission-exercise'. A red callout box labeled '1. Choose HTTPS' points to the 'HTTPS' dropdown menu, which is currently set to 'https://shwu10.cs.nthu.edu.tw/16'. Another red callout box labeled '2. Copy the link' points to the 'Copy URL to clipboard' button next to the URL. The page also displays basic repository statistics (0 stars, 0 forks), a commit history (1 commit by Bing-Han Chiang, 1 day ago), and file details (README.md, last updated 1 day ago).

If You use Windows



A screenshot of a terminal window titled 'MINGW64:/c/Users/EdwinYeh/QQ/I'm zulu'. The window shows a command-line interface with the user 'EdwinYeh@NetDb_EdwinYeh' at the prompt. The terminal is black with white text, and the window has a standard Windows-style title bar and borders.

3. Create a folder to put your repos

```
~/SS-Projects ➔ git clone https://shwu10.cs.nthu.edu.tw/ss-student/submission-exercise.git  
Cloning into 'submission-exercise'...  
remote: Counting objects: 3, done.  
remote: Compressing objects: 100% (2/2), done.  
remote: Total 3 (delta 0), reused 3 (delta 0)  
Unpacking objects: 100% (3/3), done.  
~/SS-Projects ➔ ls  
submission-exercise  
~/SS-Projects ➔
```

4. Type "git clone {URL}"

5. The repo has been successfully cloned

Workflow

- For each lab, you should follow the workflow below
 1. Fork our template repository on Gitlab
 2. Clone the **forked** repository to your computer
 3. Finish your lab
 4. Commit in your computer
 5. Push to Gitlab
 6. Send merge request of **your branch** to our template repository

```
~/SS-Projects/submission-exercise master vim lab1.js  
~/SS-Projects/submission-exercise master git add -A  
~/SS-Projects/submission-exercise master + git status  
On branch master  
Your branch is up-to-date with 'origin/master'.  
Changes to be committed:  
(use "git reset HEAD <file>..." to unstage)
```

1. -A means all files

```
new file: lab1.js
```

```
~/SS-Projects/submission-exercise master + git commit -m "Finish lab1"  
[master c1acaf4] Finish lab1  
 1 file changed, 1 insertion(+)  
 create mode 100644 lab1.js  
~/SS-Projects/submission-exercise master
```

2. Check if your file is added to git

3. Commit your changes

```
~/SS-Projects/submission-exercise ➤ master ➤ vim lab1.html
~/SS-Projects/submission-exercise ➤ master ➤ git add -A
~/SS-Projects/submission-exercise ➤ master + ➤ git commit -m "Finish lab1"
[master 8a603d9] Finish lab1
Committer: Real Wei <realwei@Realweis-MBP.local>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly:

git config --global user.name "Your Name"
git config --global user.email you@example.com

After doing this, you may fix the identity used for this commit with

git commit --amend --reset-author

1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 lab1.html
~/SS-Projects/submission-exercise ➤ master ➤
```

If you see these message, type
git config --global user.name "{name}"
git config --global user.email "{email}"

{email} is the email you use on gitlab

Workflow

- For each lab, you should follow the workflow below
 1. Fork our template repository on Gitlab
 2. Clone the **forked** repository to your computer
 3. Finish your lab
 4. Commit in your computer
 5. Push to Gitlab
 6. Send merge request of **your branch** to our template repository

```
~/SS-Projects/submission-exercise ➜ master ➜ git push -u origin master  
Counting objects: 6, done.  
Delta compression using up to 4 threads.  
Compressing objects: 100% (4/4), done.  
Writing objects: 100% (6/6), 497 bytes | 0 bytes/s, done.  
Total 6 (delta 1), reused 0 (delta 0)  
To https://shwu10.cs.nthu.edu.tw/ss-student/submission-exercise.git  
  b1e0571..8a603d9  master -> master  
Branch master set up to track remote branch master from origin.  
~/SS-Projects/submission-exercise ➜ master ➜
```

Type "git push -u origin master"

Workflow

- For each lab, you should follow the workflow below
 1. Fork our template repository on Gitlab
 2. Clone the **forked** repository to your computer
 3. Finish your lab
 4. Commit in your computer
 5. Push to Gitlab
 6. Send merge request of **your branch** to our template repository

GitLab Projects Groups Activity Milestones Snippets + This project Search

S submission-exercise 江秉翰 > submission-exercise > Details

Project Details Activity Cycle Analytics Repository Issues Merge Requests Wiki Snippets Settings

Forked from courses / web-app / 2019-spring / submission-exercise

Star 0 Fork 0 HTTPS https://shwu10.cs.nthu.edu.tw/103060010/branch/commit/1f1e2d95d29 Global

1. Click Merge Requests Commit (1) Branches (56) Tags (0) Readme Add Changelog Add License Add Contribution guide Set up CI/CD

master submission-exercise / + History Find file Web IDE

initial commit Bing-Han Chiang authored 1 day ago 2df95d29

Name	Last commit	Last update
README.md	initial commit	1 day ago

Collapsible sidebar https://shwu10.cs.nthu.edu.tw/103060010/submission-exercise/merge_requests

GitLab Projects Groups Activity Milestones Snippets + This project Search

S submission-exercise

Project Repository Issues 0 Merge Requests 0 Wiki Snippets Settings

Merge requests are a place to propose changes you've made to a project and discuss those changes with others

Interested parties can even contribute by pushing commits if they want to.

New merge request

New merge request

2. New merge request

« Collapse sidebar

https://shwu10.cs.nthu.edu.tw/103060010/submission-exercise/merge_requests/new

The screenshot shows the GitLab interface for creating a new merge request. On the left is a sidebar with navigation links: Projects, Groups, Activity, Milestones, Snippets, Project (selected), Repository, Issues (0), Merge Requests (0), Wiki, Snippets, and Settings. The main area shows a 'New Merge Request' form for the project 'submission-exercise'. The 'Source branch' dropdown is set to '103060010/submission-exerc...' and the 'master' dropdown is set to 'master'. Below these are two commit cards: 'initial commit' by Bing-Han Chiang from 1 day ago, with hash '2df95d29'. A green button at the bottom says 'Compare branches and continue'. Three red callout boxes with white text are overlaid on the interface:

3. Choose the branch you pushed in your repo
4. Choose the branch named after your ID
5. Compare branches

GitLab Projects Groups Activity Milestones Snippets + This project Search

江秉翰 > submission-exercise > Merge Requests

New Merge Request

From 103060010/submit... To 103011228 Change branches

S submission-exercise

Project Repository Issues Merge Requests Wiki Snippets Settings

0 0 0 0

6. Set title to "{ID} Submission"

Title: 103060010 Submission

Start the title with **WIP:** to prevent a **Work In Progress** merge request from being merged before it's ready.

Description

Write Preview

Write a comment or drag your files here...

Markdown and quick actions are supported

Attach a file

Source branch: master

Target branch: 103011228 Change branches

Squash commits when merge request is accepted. [About this feature](#)

<< Collapse sidebar

GitLab Projects Groups Activity Milestones Snippets + This project Search

S submission-exercise

Project Repository

Markdown and quick actions are supported

Attach a file

Issues 0

Merge Requests 0

Source branch master

Target branch 103011228 Change branches

Squash commits when merge request is accepted. [About this feature](#)

Snippets

Settings

Contribution Allow commits from members who can merge to the target branch. [About this feature](#)
Not available for private projects

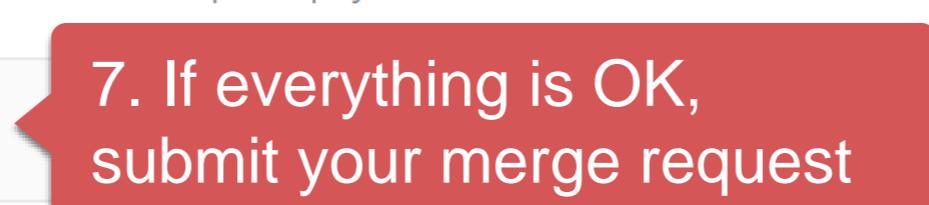
Submit merge request

Cancel

7. If everything is OK, submit your merge request

There are no commits yet.

<< Collapse sidebar



Notice



gitlab



Google 搜尋

好手氣



gitlab



全部 圖片 影片 新聞 書籍 更多

設定 工具

約有 8,300,000 項結果 (搜尋時間 : 0.45 秒)

GitLab

<https://gitlab.com/> ▾ 翻譯這個網頁

這項網站搜尋結果說明因為網站的 robots.txt 而無法提供
瞭解詳情

GitLab.com | GitLab

<https://about.gitlab.com/gitlab-com/> ▾ 翻譯這個網頁

GitLab.com. unlimited free repositories and collaborators. Sign Up. Free public & private repositories
and unlimited collaborators. Runs GitLab Enterprise Edition ...

GitLab介紹— Practical guide for git users 0.1 文档

<git-tutorial.readthedocs.io/zh/latest/gitlab.html> ▾

GitLab介紹¶. 目前最流行的線上Git專案管理系統可以說是非GitHub 莫屬，對於一般OpenSource的專案
選擇使用GitHub做為線上Git專案管理系統即可，也免收任何 ...

GitHub - gitlabhq/gitlabhq: GitLab CE | Please open new issues in our ...

<https://github.com/gitlabhq/gitlabhq> ▾ 翻譯這個網頁

README.md. GitLab. Build status CE coverage report Code Climate Core Infrastructure Initiative Best
Practices. Canonical source. The canonical source of ...

Gitlab - 維基百科，自由的百科全書 - Wikipedia

<https://zh.wikipedia.org/zh-tw/Gitlab> ▾

GitLab是一個利用Ruby on Rails開發的開源應用程式，實現一個自代管的Git專案倉庫，可通過Web介面
進行存取公開的或者私人專案。它擁有與GitHub類似的功能， ...



GitLab.com

GitLab.com offers free unlimited (private) repositories and unlimited collaborators.

- [Explore projects on GitLab.com](#) (no login needed)
- [More information about GitLab.com](#)
- [GitLab.com Support Forum](#)

By signing up for and by signing in to this service you accept our:

- [Privacy policy](#)
- [GitLab.com Terms](#).

[Sign in](#) [Register](#)

Username or email

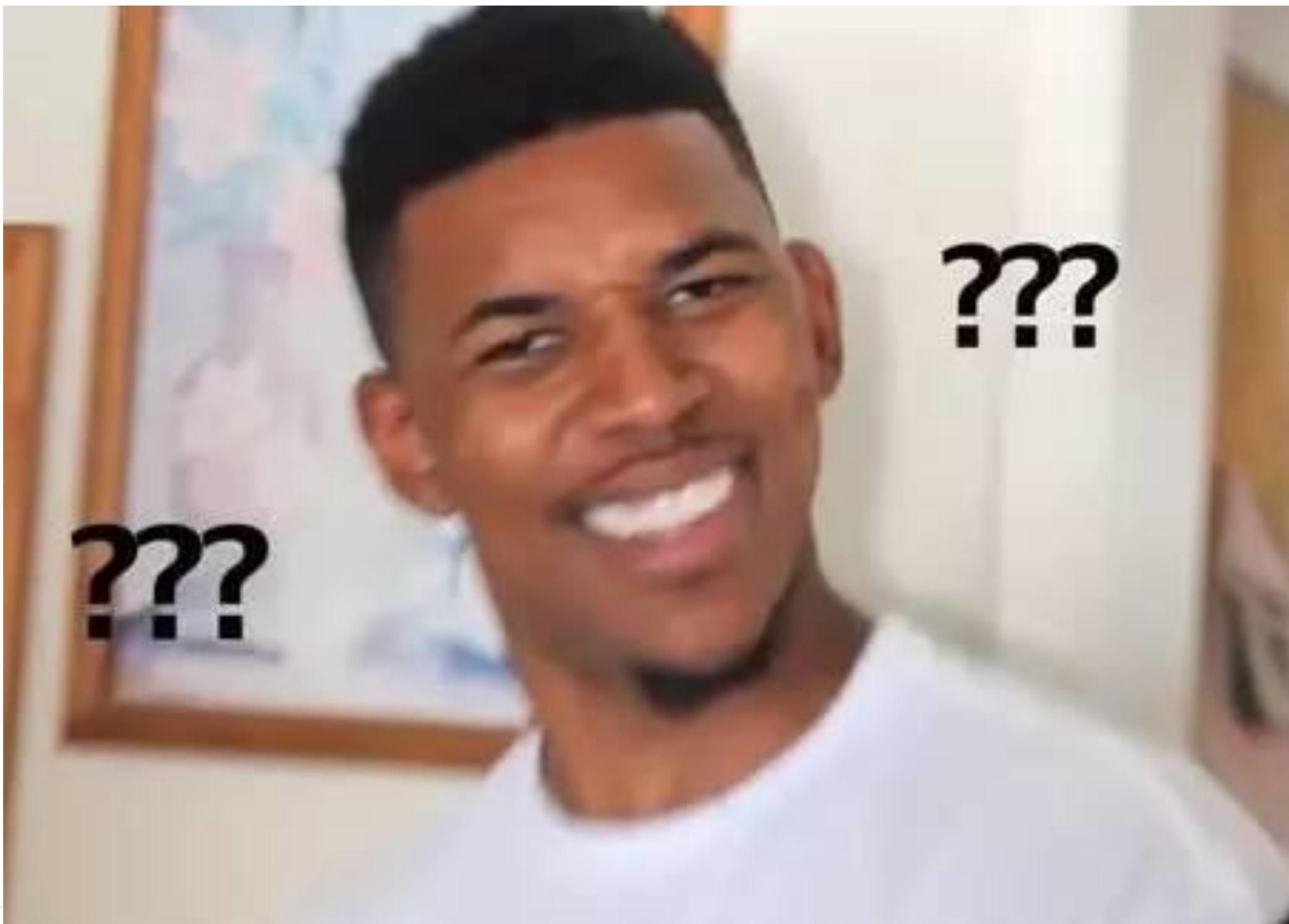
Password

Remember me [Forgot your password?](#)

[Sign in](#)

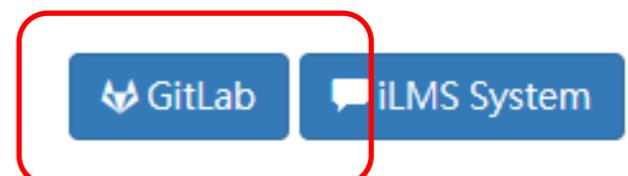
Didn't receive a confirmation email? [Request a new one.](#)

Sign in with



Resources

Here are some course materials and resources related to this course. For code and its details (such as assigned reading, project links, quiz, etc.) please refer to the GitLab. For online forum please refer to the iLMS system.



Here!!!!!

Outline

- General Rule
- Introduction to Git
 - Version control
 - Git Basics
 - Try Git!
 - Remote Repositories
- How to Submit Your Code to Gitlab
- Tools & References

Tools

- Git GUI
 - GitKraken
- Editor / IDE
 - Visual Studio Code
 - Atom
 - Sublime Text
 - Brackets
 - Notepad++
 - Webstorm



axosoft

GitKraken

Repositories > GitKraken > master

Viewing 112/151 Show All

LOCAL (7/11)

- fancier-refbar-changes
- fancy-responsive-refbar-it... 42 ↗ 99+
- graph-color-test
- hopscotch 24 ↗ 99+
- init-repo-gitignore-typeahead
- invite-system 6 ↗ 99+
- jars-view-file-history
- master 5 ↗
- remote-panel-redesign 15 ↗ 13+
- settings-theme-styling
- view-file-history 24 ↗ 99+

REMOTE (6/41)

- Jeff-Schinella (0/1)
- Jordan-Wallet (0/7)
- Justin-GK (0/1)
- Ken-Price (0/2)
- Kyle-Smith (2/8)
- Max-Korp (0/2)
- Sjepan-Rajko (0/8)
- ayresa (0/3)
- cbargen (0/5)
- origin (4/4)

TAGS (99/99)

0.1.40

Fix un/stageall and stashing
Keep rename detection stage/unstage all
Bump to version 0.1.40
Merge pull request #597 from johnhaley81/fix-dispat...
Merge pull request #594 from Mr-Wallet/nicer-ref-nam...
Fix `waitFor` bug in dispatcher
Merge pull request #596 from johndavidsparrow/gh-p...
Revised custom variable script and switch
Merge pull request #595 from johndavidsparrow/gh-p...
Resolved edge case where RefNodes could overlap
/universe removal of in-app invite wording
Bump to version 0.1.39
Merge pull request #591 from Mr-Wallet/fix-graph-ref...
Merge pull request #590 from srajko/div-be-gone
Merge pull request #588 from Mr-Wallet/friendlier-app...
Merge pull request #568 from Mr-Wallet/nicer-ref-nam...
Merge pull request #589 from johndavidsparrow/gh-p...
Merge pull request #592 from implausible/FixNSFW
JS tidy up in form-validation.js
Javascript update for /universe
/universe page
added maxwait to updateworkdir debounce
Update NSFW for memory leak
Fix NSFW segfault
Fix flickering GraphRefColumn every time ... 6 days ago
Preventing page reload on default pull click
Eliminate console spam when conflicts exist in a statel...
Upgrading to react-bootstrap v0.24.5

Commit: cca151e6b9e32c3f9209c25131706740050
Parent: 8efe30a11761983173f844900fa5ec5c6be2
Author: John Haley <johnh@axosoft.com>
Author Date: September 30th 2015, 2:54 pm

Bump to version 0.1.40

+ 0 added - 0 deleted ... 2 modified

npm-shrinkwrap.json

```
@@ -1,6 +1,6 @@
 1   1 {
 2   2   "name": "gitkraken",
-3   3   "version": "0.1.39",
+3   3   "version": "0.1.40",
 4   4   "dependencies": {
 5   5     "atom-keymap": {
 6   6       "version": "5.1.11",
```

package.json

```
@@ -1,7 +1,7 @@
 1   1 {
 2   2   "name": "gitkraken",
 3   3   "productName": "GitKraken",
-4   4   "version": "0.1.39",
+4   4   "version": "0.1.40",
 5   5   "description": "An intuitive git cli
 6   6   "main": "./src/appBootstrap/main.js"
```



VS Code

The screenshot shows a code editor interface with a dark theme. On the left is a sidebar titled 'EXPLORE' containing a 'WORKING FILES' section with files like '03.jpg', 'img', 'jquery.dropdown.js', 'jquery.more.js', etc., and a 'TBL-STYLES' section with 'css', 'img', and 'js' sub-sections. The 'js' section contains files such as 'hoverIntent.js', 'jquery.dropdown.js', 'jquery.more.js', 'jquery.more.min.js', 'jquery.plugin.js', 'jquery.plugin.min.js', 'mapper.js', 'maputil.js', and 'navigation.js'. The 'navigation.js' file is currently selected and highlighted in blue. The main workspace displays the contents of the 'navigation.js' file:

```
navigation.js js
1 var scriptbase = _spPageContextInfo.webServerRelativeUrl + "/_layouts/15/";
2
3 $(document).ready(function () {
4     $.getScript(scriptbase + "SP.Runtime.js", function () {
5         $.getScript(scriptbase + "SP.js", function () {
6             $.getScript(scriptbase + "SP.Taxonomy.js", function () {
7                 context = SP.ClientContext.get_current();
8                 //Call your code here.
9                 console.log("Navigation - ready to rock.");
10
11                 // Get default termstore
12
13                 session = SP.Taxonomy.TaxonomySession.getTaxonomySession(context);
14                 termStore = session.getDefaultSiteCollectionTermStore();
15                 context.load(session);
16                 context.load(termStore);
17                 context.executeQueryAsync(
18                     function () {
19                         console.log('Got default term store');
20                     },
21                     function(sender, args) {
22                         console.log('Could not get default term store. ' + args.get_message());
23                     }
24                 );
25
26
27             });
28         });
29     });
30 });
31
32 var topnavbar;
33
34 topnavbar += '<div class="tbl-site-navigation">';
35 topnavbar += '    <ul class="dropdown">';
36 topnavbar += '        <li class=""><a href="#">The Brand Code - a</a></li>';
37 topnavbar += '        <li class="dropdown1">';
38 topnavbar += '            <ul class="sub_menu" style="visibility: hidden;">';
39 topnavbar += '                <li class="large">';
40 topnavbar += '                    <div class="dropdownbox">';
41 topnavbar += '                        <div class="dropdownbox-title">Welcome to the Brand Code</div>';
42 topnavbar += '                        <ol>';
43 topnavbar += '                            <li><a href="">The importance of Brand Building</a></li>';
44 topnavbar += '                            <li><a href="">Introduction to the Brand Code</a></li>';
45 topnavbar += '                            <li><a href="">You and the Brand Code</a></li>';
46 topnavbar += '                        </ol>';
47 topnavbar += '                    </div>';

```



ATOM

A hackable text editor
for the 21st Century

The screenshot shows the Atom code editor interface. On the left is a sidebar with a tree view of project files: build, docs, dot-atom, exports, keymaps, menus, node_modules, resources, script, spec, src (which is selected), and static. The main editor area displays the file 'atom.coffee' with the following content:

```
18
19 # Essential: Atom global for dealing with packages, themes, menus, and the window system.
20 #
21 # An instance of this class is always available as the 'atom' global.
22 module.exports =
23   class Atom extends Model
24     @version: 1 # Increment this when the serialization format changes
25
26     # Load or create the Atom environment in the given mode.
27     #
28     # Returns an Atom instance, fully initialized.
29     @loadOrCreate: (mode) ->
30       startTime = Date.now()
```

The status bar at the bottom of the editor shows the word 'Settings'.

Reference

- Learn Git branching (interactive)
 - <http://pcottle.github.io/learnGitBranching/>
- Pro Git
 - <http://git-scm.com/book/>
- 寫給大家的 Git 教學
 - <http://www.slideshare.net/littlebtc/git-5528339>

Today's exercise

- Install Git command line tool in your computer.
 - Follow appendix A.
- Try to submit in GitLab.
 - No score but very important!