

NCTU Golang 2021

Lab 0

2021 / 09 / 16



TA's information

SQLab @ EC547

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課程會使用到的連結

Facebook group:

https://www.facebook.com/groups/Go.Nycu

新的google meet:

https://meet.google.com/zjh-gxhd-rmg

google classroom:

https://classroom.google.com/c/Mzc2NDg1NTA1NzQ5?cjc=zmra7pw

課程line 群組:

http://line.me/ti/g/0bzuzD2CsE





Preparatory Work: Environment

- 1. 使用 AWS Cloud9 雲端IDE寫程式
- 2. 自己的電腦(Windows、Mac OS X、Unix-like)



審核約需三天時間, 請儘早完成以利第三週課程進行

取得免費額度之前,請小心使用以免信用卡遭意外扣款

取得免費額度之後,請酌量使用以免後續進行作業及考試時額度用罄(e.g. 非操作期間,請確保環境關機,以免持續花用額度)



AWS Educate 為提供教育機構、教育工作者及學生申請之免費方案。

請就下述兩種方案擇一申請:

- A) 無需綁定信用卡之 AWS Starter Account 獲得之免費額度較低, 且無法使用某些特定服務
- B) 將已綁定信用卡之 AWS 帳號, 註冊 AWS Educate 方案 獲得較高免費額度, 並可以使用所有 AWS 服務

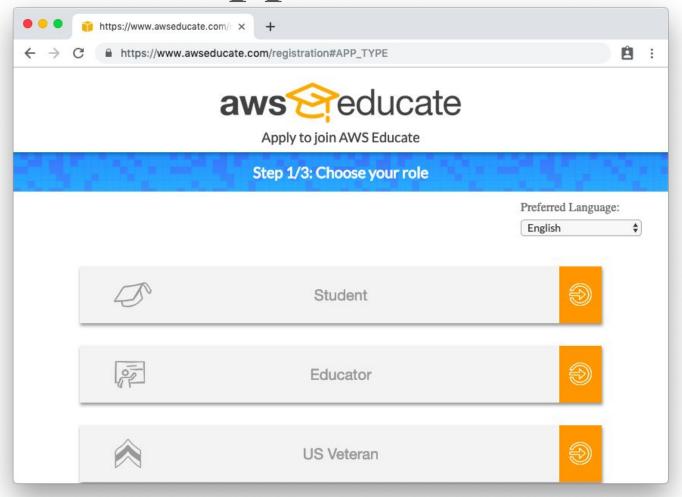
申請網址:

https://aws.amazon.com/tw/education/awseducate/













Step 2/3: Tell us about yourself

Preferred Language:
English

Indivan

National Chiao Tung University

Start typing the name of your school and select from the list. If you don't see your school, enter the full name, example: Harvard University:

Hsinchu

State (where your school is located)

First Name

A

Last Name

#

Computer Science

Email 請填寫交通大學之 email

Graduate

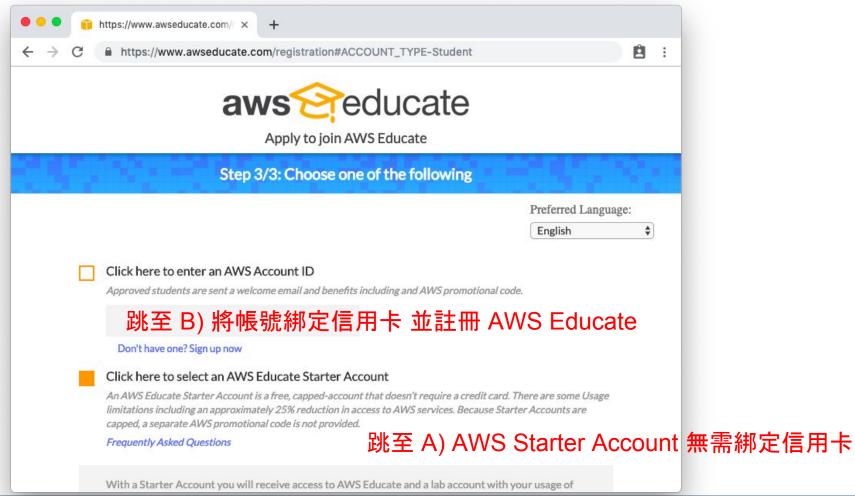
Graduate

Frequently Asked Questions

Frequently Asked Questions

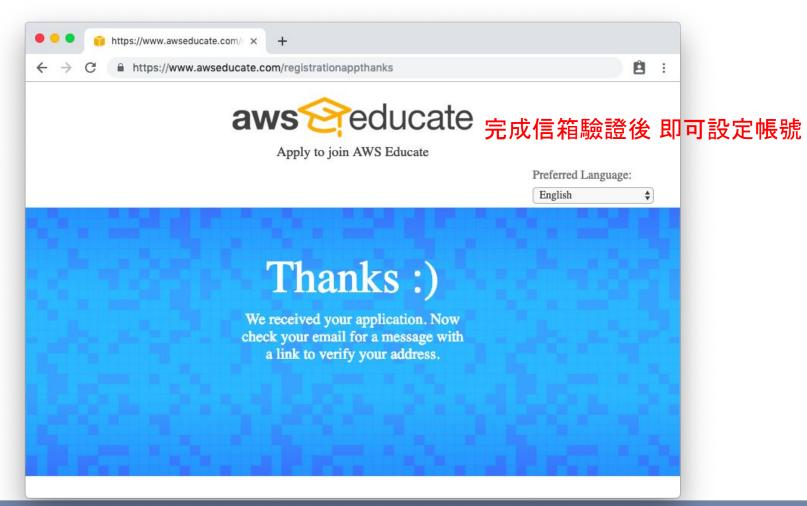
Please click the box below to help assure that a person and not an automated program is submitting this application. If a set of letters is displayed enter them on the line. If you have any difficulty with the letters, you can click the reload icon to get a new set of letters, or click the headphones to hear audio of what to enter.



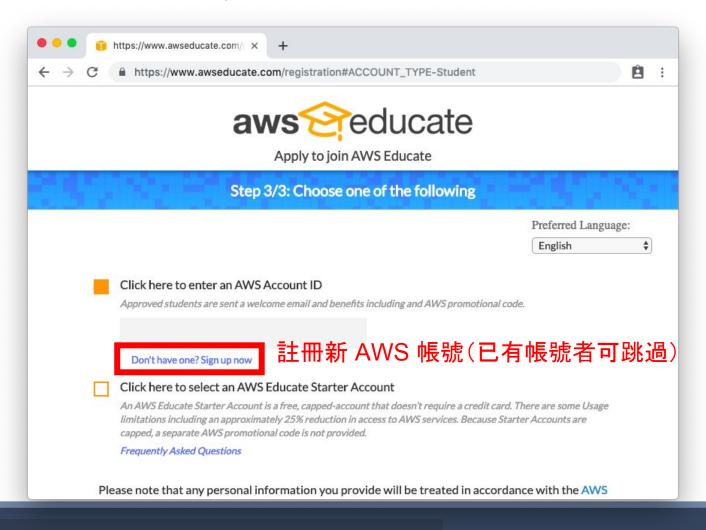




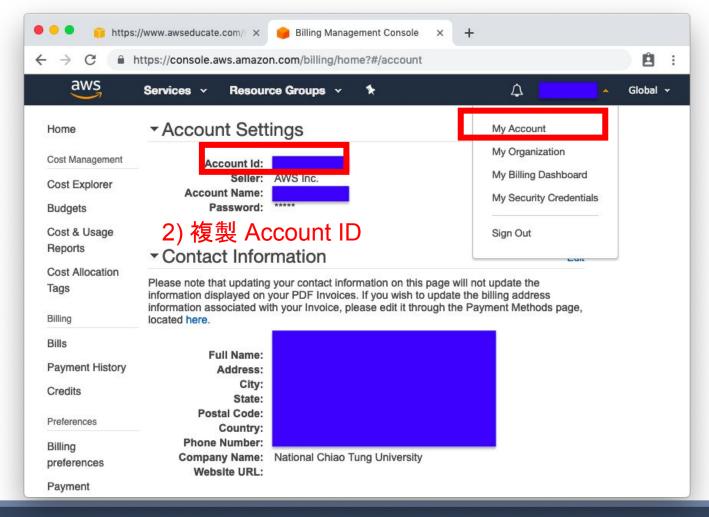
(A) AWS Starter Account 無需綁定信用卡





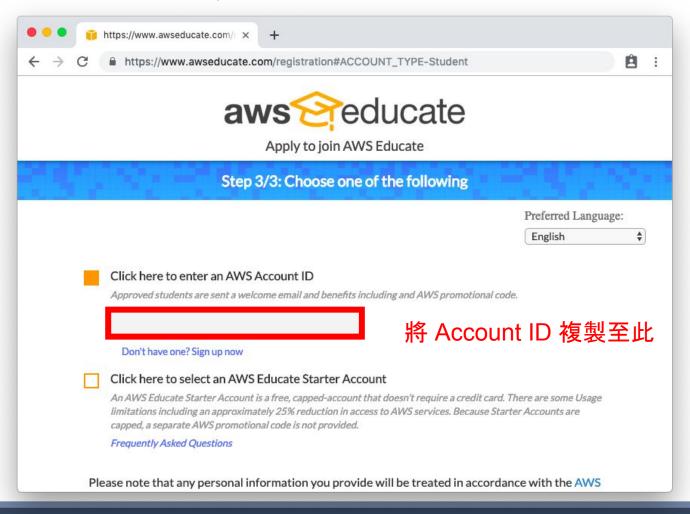




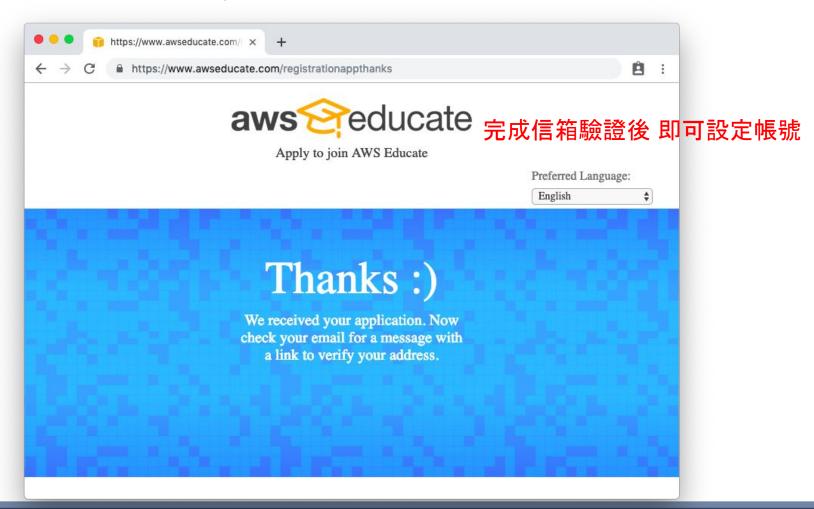


1) 完成帳號註冊後 進入 My Account 頁面





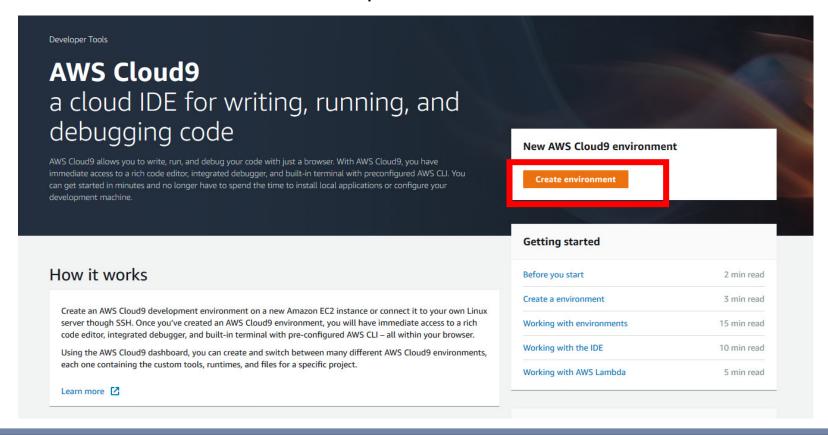






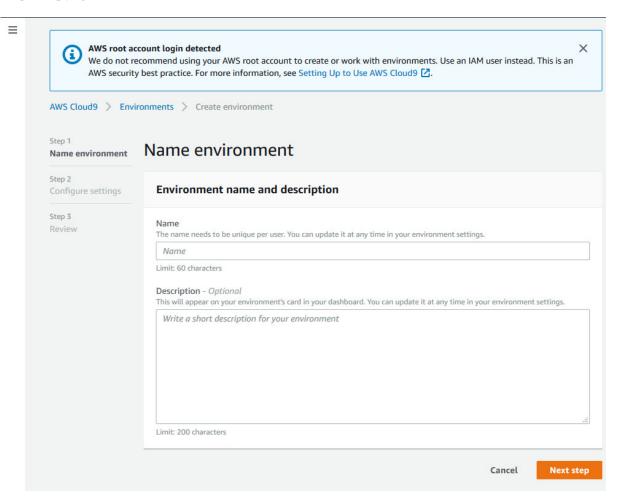
AWS Cloud9

https://console.aws.amazon.com/cloud9/home/product



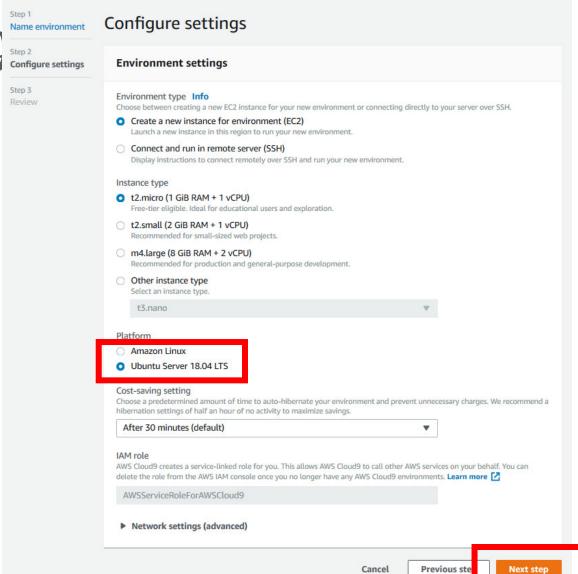


AWS Cloud9





AWS Clouds Step 2 Configure settings





AWS Clouds

Name environment

Review

Review

Environment name and settings

Name

NCTU-Golang-2019

Description

No description provided

Environment type

EC2

Instance type

t2.micro

Subnet

Platform

Ubuntu Server 18.04 LTS

Cost-saving settings

After 30 minutes (default)

IAM role

AWSServiceRoleForAWSCloud9 (generated)



We recommend the following best practices for using your AWS Cloud9 environment

- Use source control and backup your environment frequently. AWS Cloud9 does not perform automatic backups.
- Perform regular updates of software on your environment. AWS Cloud9 does not perform automatic updates on your behalf.
- Turn on AWS CloudTrail in your AWS account to track activity in your environment. Learn
- Only share your environment with trusted users. Sharing your environment may put your AWS access credentials at risk. Learn more [2]

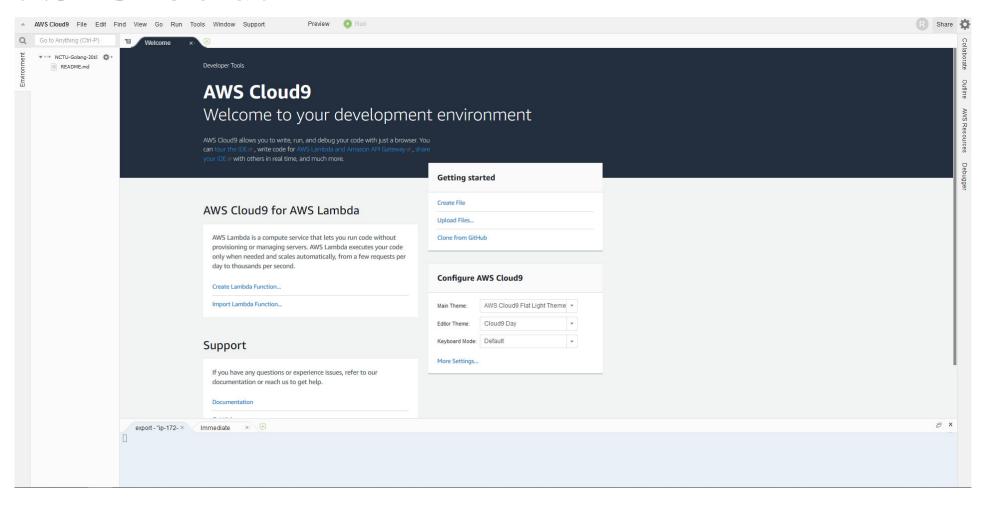
Cancel

Previous step

Create environment

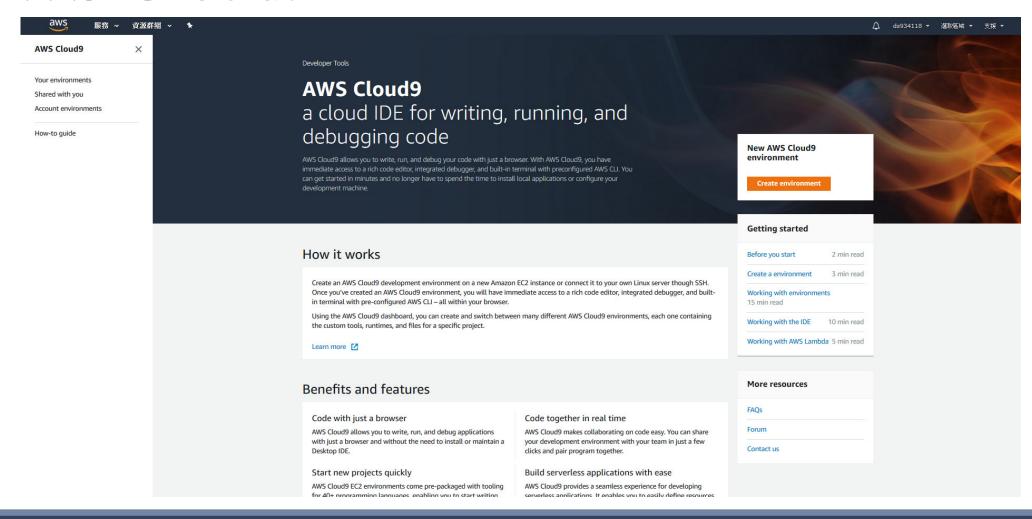


AWS Cloud9





AWS Cloud9





Preparatory work (Your own PC)

Go Downloading page: https://golang.org/dl/

Installation guide: https://ppt.cc/fT9atx

Git Downloading page:

https://git-scm.com/



Preparatory work: IDE, Editor

IDE: GoLand (Free for Education)

https://www.jetbrains.com/go/

Editor: Vim, VScode, Sublime Text

Golang on VScode: https://ppt.cc/fmOFex



Preparatory work: Go

```
C:\WINDOWS\system32\cmd.exe
                                                                                                                                                                                                                  Microsoft Windows [版本 10.0.18362.295]
(c) 2019 Microsoft Corporation. 著作權所有,並保留一切權利。
C:\Users\ds934>go
  o is a tool for managing Go source code.
 sage:
           go <command> [arguments]
The commands are:
                            start a bug report
compile packages and dependencies
remove object files and cached files
          bug
build
                            show documentation for package or symbol print Go environment information
                          print Go environment information update packages to use new APIs gofmt (reformat) package sources generate Go files by processing source add dependencies to current module and install them compile and install packages and dependencies list packages or modules
           fmt
                             module maintenance
                            compile and run Go program
                            test packages
run specified go tool
           test
           tool
                            print Go version
                            report likely mistakes in packages
Use "go help <command>" for more information about a command.
Additional help topics:
           buildmode build modes
                            calling between Go and C
                            build and test caching
           environment environment variables
           filetype file types
          go.mod the go.mod file
gopath GOPATH environment variable
gopath-get legacy GOPATH go get
goproxy module proxy protocol
            importpath import path syntax
           modules modules, module versions, and more
```



Github 註冊

```
Welcome to GitHub!
Let's begin the adventure
Enter your email
V
Create a password
v
Enter a username
```

提供github user name給助教

https://forms.gle/Wqndq53LLG9JogiV9



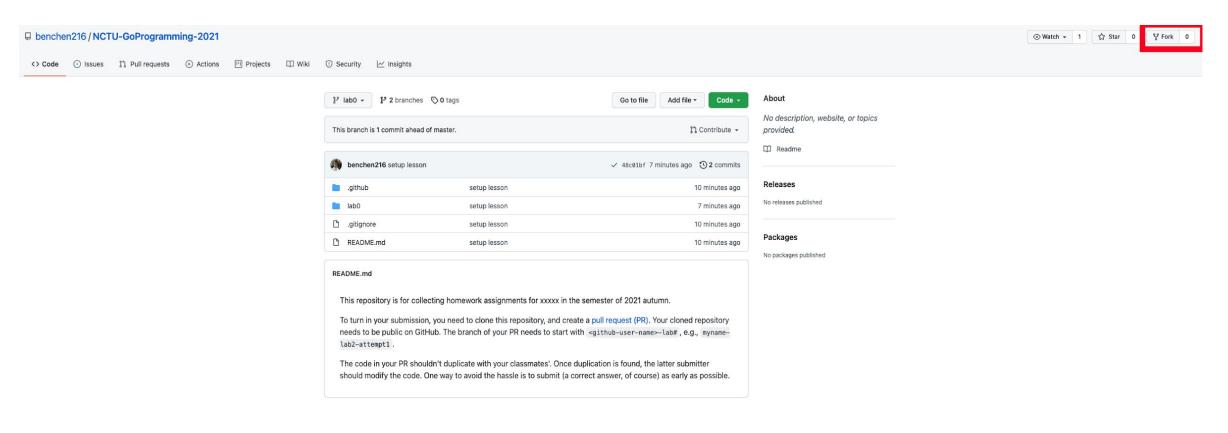
Preparatory work: Git

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [版本 10.0.18362.295]
(c) 2019 Microsoft Corporation. 著作權所有,並保留一切權利。
C:\Users\ds934>git
[--git-dir=<path>] [--work-tree=<path>] [--namespace=<name>]
          <command> [<args>]
These are common Git commands used in various situations:
start a working area (see also: git help tutorial)
             Clone a repository into a new directory
   clone
             Create an empty Git repository or reinitialize an existing one
   init
work on the current change (see also: git help everyday)
             Add file contents to the index
             Move or rename a file, a directory, or a symlink
Reset current HEAD to the specified state
             Remove files from the working tree and from the index
examine the history and state (see also: git help revisions)
             Use binary search to find the commit that introduced a bug
  bisect
             Print lines matching a pattern
   grep
             Show commit logs
   log
  show
             Show various types of objects
             Show the working tree status
   status
grow, mark and tweak your common history
```



Fork from github

https://github.com/benchen216/NCTU-GoProgramming-2021





Git clone

git clone

https://github.com/[your-github-username]/NCTU-GoProgramming-2 021



go run

cd NCTU-GoProgramming-2021

git checkout lab0

cd lab0/benchen216

go run helloworld.go



Cloud9 IDE

AWS Cloud9 File Edit Find View Go Run Tools Run Previe Go to Anything (Ctrl-P) HelloWorld.go Welcome README.md 2. 點擊 Run 執行 package main ▼ NCTU-Golang-2019 🏂 ▼ NCTU-GoProgramming-2 import "fmt" HelloWorld func main() { HelloWorld.go fmt.Println("Hello world!") README.md 8 README.md 1. 打開剛剛git clone的檔案,找到helloworld.go,並打開 NCTU-GoProgra × + bash - "ip-172-31× Immediate (Java × bash - "ip-172-31× NCTU-GoProgramming-2019/HelloWorld.go Warning: PATH set to RVM ruby but GEM HOME and/or GEM PATH not set, see: https://github.com/rvm/rvm/issues/3212 Running ... /home/ubuntu/environment/NCTU-GoProgramming-2019/HelloWorld.go Hello world! 3. 程式結果 Process exited with code: 0



Lab 0-1

- 1. 請將Github上的專案Clone下來
- 2. 執行 Hello world 並將畫面截圖
- 3. 命名為 學號_姓名_Lab0-1.jpg
- 4. 程式命名為helloworld.go



Lab 0-2

- 1. 將 Lab 0-1 的 Hello world 改為 輸出自己的 github username 並截圖
- 2. 命名為 學號_姓名_Lab0-2.jpg
- 3. 程式命名為 username.go



作業繳交方式-1

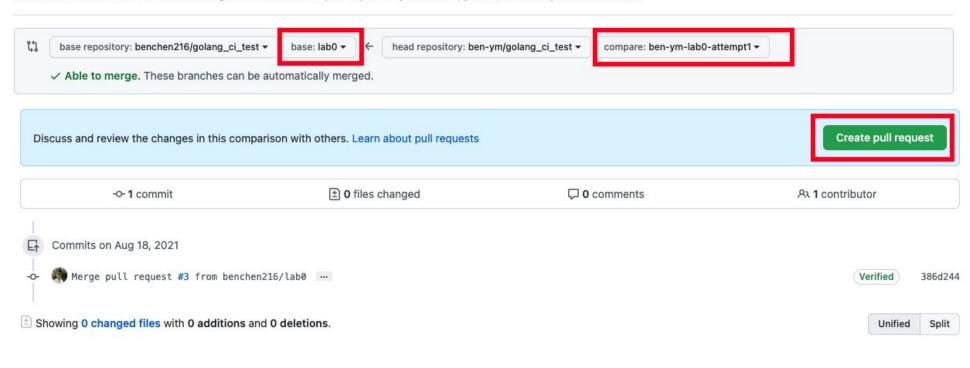
- git branch [username]-lab0-attempt* #e.g. benchen216-lab0-attpempt1
- mkdir [username]
- cd [username]
- 將作業都放到這個資料夾
- git add .
- git commit -m " what ever you want to write "
- git push



作業繳交方式-2

Comparing changes

Choose two branches to see what's changed or to start a new pull request. If you need to, you can also compare across forks.

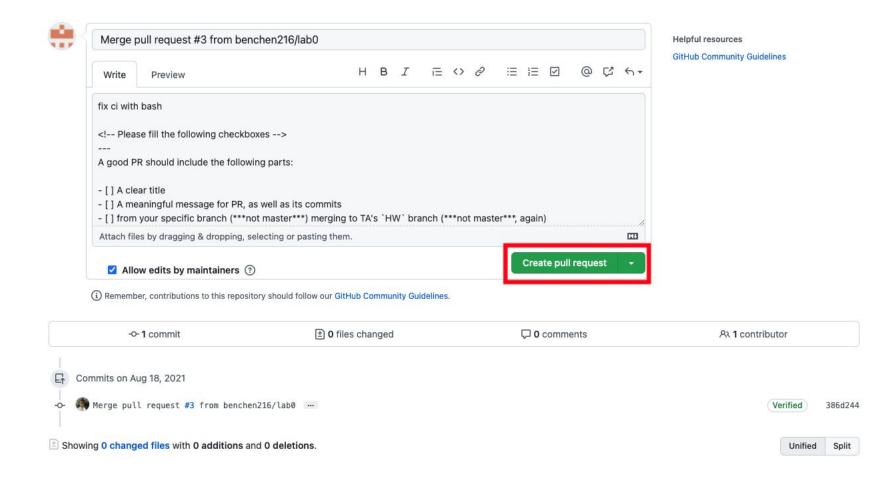


-0-

No commit comments for this range



作業繳交方式-3





作業繳交期限

隔週

延遲一週內 80%

一個月內: 70%

學期結束前: 60%



詢問問題

New issue 直接提問

讓大家都能知道解答

