Computer Networks
@CS.NCTU

Lab. 0: Learn Git and Python

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Objectives

1. Learn how to use Git for version control
2. Learn how to write a Python function

Task

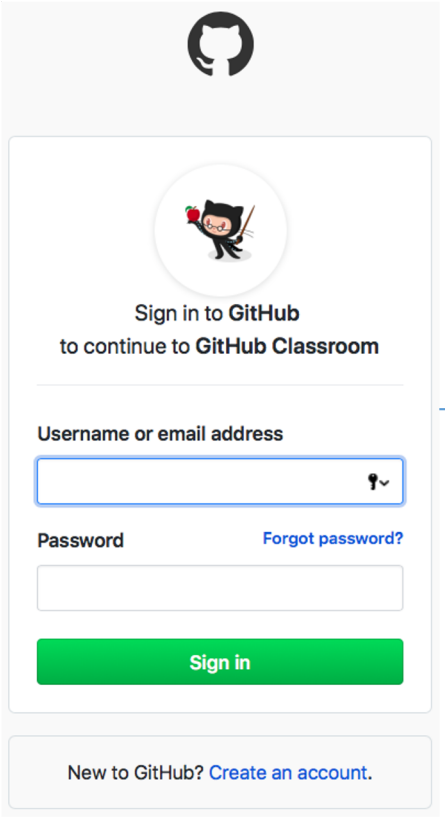
1. Clone a Git project (20%)
2. Push a Git project (20%)
3. Write a Python function that return the sum of multiples of 3 or 5 between 0 and 100 (40%)
4. Commit a Git update (20%)

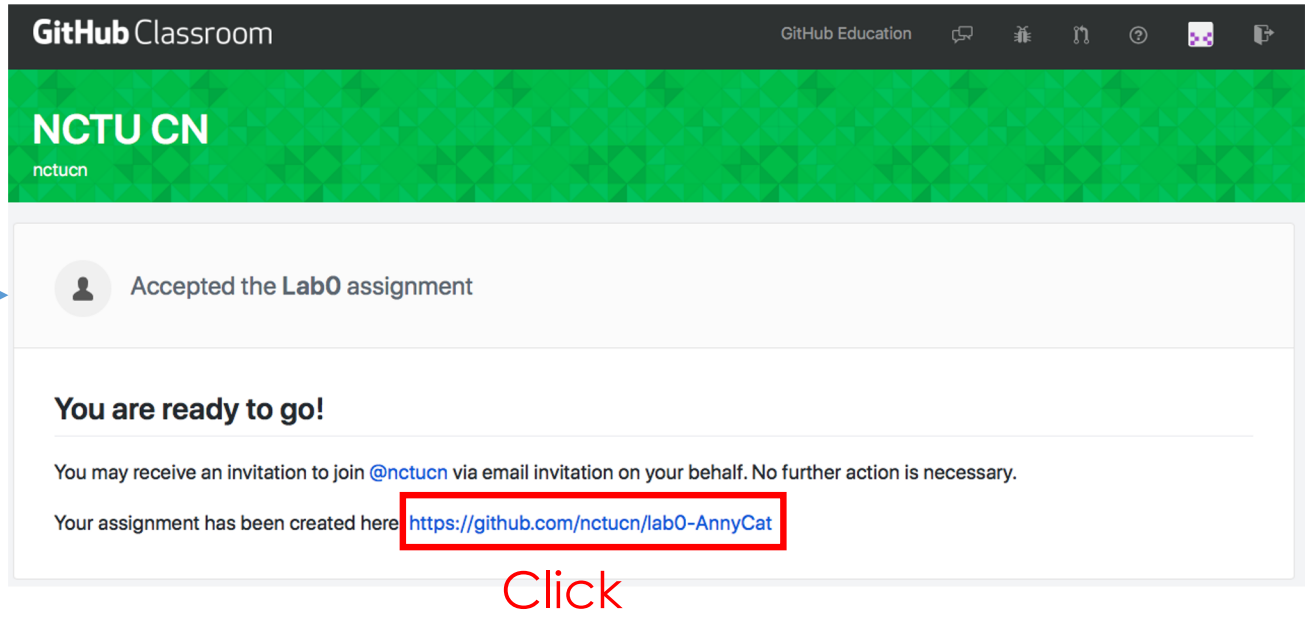
Git & GitHub

- **Git** is a free open source distributed version control system designed to handle everything from small to very large projects with speed and efficiency
  - 連猴子都能懂的 Git 入門指南 (CH)
  - Slides - Let's Git (CH)
  - Git Handbook (EN)
  - Online practice - Try Git / Codecademy – Learn Git
- **GitHub** is a web-based hosting service for version control using Git

GitHub

1. Create GitHub Account
2. Fill out the form
   NCTU CN 2020 - GitHub Account
3. Join the GitHub Classroom Lab0





Installation

- Mac / Windows: https://git-scm.com
- Linux:

```
# For Debian / Ubuntu install command
$ sudo apt-get install git-all
# For Fedora / CentOS install command
$ sudo yum install git-all
```

Task 1: Clone the Project

- Download required files from GitHub

```
$ git clone https://github.com/sherry110534/NCTUCN2020-Lab0
```

- Get and set repository or global options

```
$ git config --global user.name "<NAME>"
$ git config --global user.email "<EMAIL>"
```

Task 2: Add/Push the Project

- Set a new remote URL to your repository

```
$ git remote set-url origin
https://github.com/nctucn/lab0-<GITHUB_ID>.git
```

- Push/Upload your repository to GitHub

```
$ git push origin master
```

Task 3: Write a Python Function

- Write a Python function that return the sum of multiples of 3 or 5 between 0 and 100
- Output the value of 3+5+6+9+10+…+99+100
- Some useful tutorials:
  - Python 3.5.7 documentation (CN)/(EN)
  - CodeData – Python 2 Tutorial (CN)
  - w3schools.com – Learn Python (EN)

Task 4: Commit the Modification

- Modify the file “lab0.py”

```
# git add <FILENAME>
$ git add lab0.py
```

or

```
$ git add .
```

- Record changes to the repository

```
# git commit -m "<COMMIT_MESSAGE>"
$ git commit –m "Initial commit"
```

- Upload to GitHub

```
$ git push origin master
```