

# Computer Networks @CS.NCTU

Lab. 0: Learn Git and Python

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# Objectives

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

# Task

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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%)

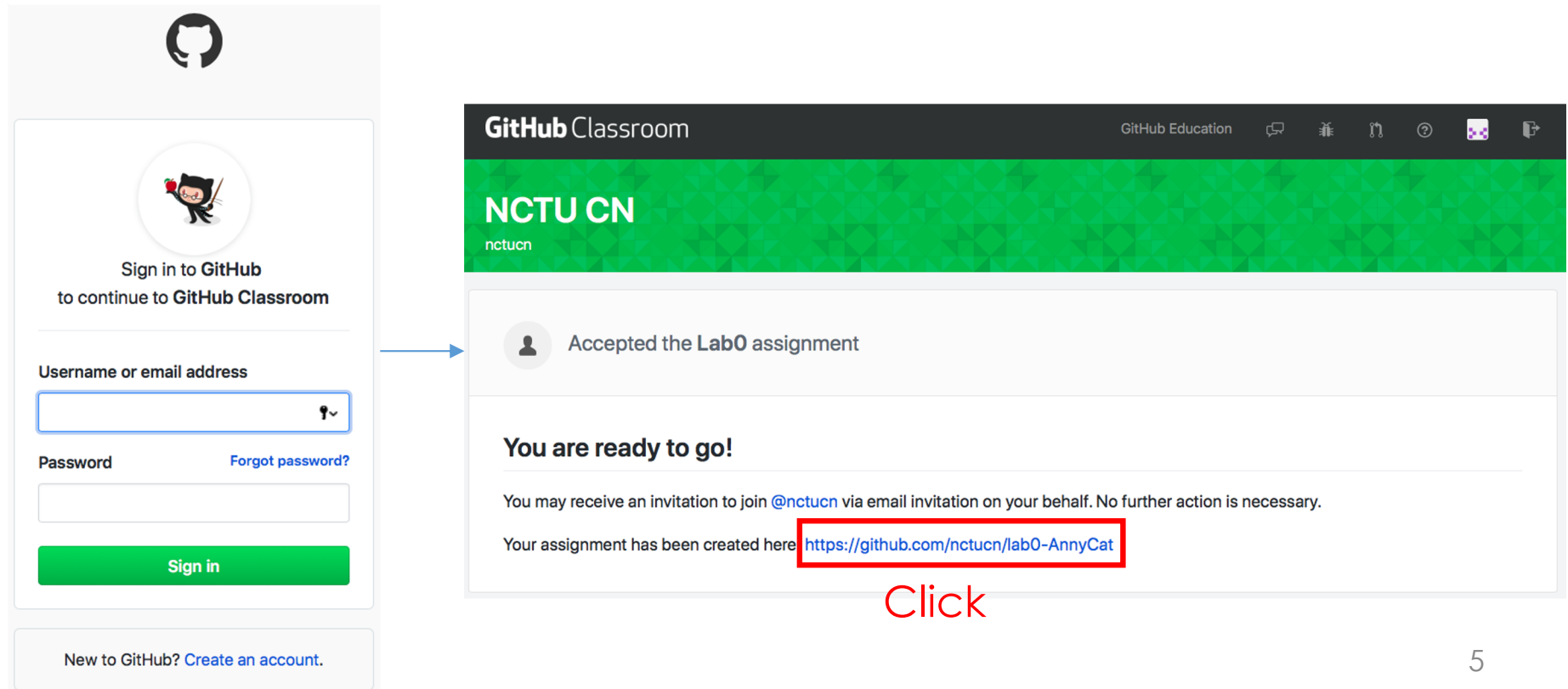
# Git & GitHub

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- **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](#)



The image shows two side-by-side screenshots of the GitHub Classroom interface. The left screenshot is the sign-in page, featuring the GitHub logo at the top, a sign-in button, and a form with fields for 'Username or email address' and 'Password'. A blue arrow points from the sign-in button to the right screenshot. The right screenshot shows the 'Accepted the Lab0 assignment' confirmation page. It features a green header with 'NCTU CN' and 'nctucn'. Below the header, it says 'Accepted the Lab0 assignment' with a user icon. The main content area says 'You are ready to go!' and provides information about receiving an invitation to join @nctucn. A red box highlights the URL 'https://github.com/nctucn/lab0-AnnyCat' in the text 'Your assignment has been created here'. Below the URL, the word 'Click' is written in red.

Sign in to GitHub  
to continue to GitHub Classroom

Username or email address

Password [Forgot password?](#)

[Sign in](#)

New to GitHub? [Create an account.](#)

GitHub Classroom

GitHub Education

NCTU CN  
nctucn

Accepted the Lab0 assignment

**You are ready to go!**

You may receive an invitation to join @nctucn via email invitation on your behalf. No further action is necessary.

Your assignment has been created here <https://github.com/nctucn/lab0-AnnyCat>

Click

# Installation

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- 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

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- 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

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- 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

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- Write a Python function that return the sum of multiples of 3 or 5 between 0 and 100
- Output the value of  $3+5+6+9+10+\dots+99+100$
- 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

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- 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
```