



# **PYTHON**

# **SEMINAR 2018**

Ana Bulović  
Jorin Diemer  
Jens Hahn



# This course

- Versioning (today)
- Python basics
- Special Python packages



# Seminar Structure

- **Discuss homework (code review)**
- **New features**
- **Hands-on tutorial**

# Today



1

•Versioning

2

•Git

3

•Github

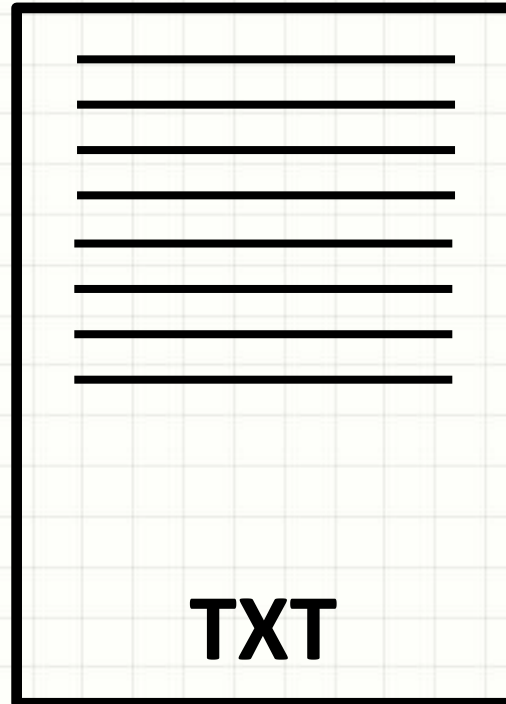
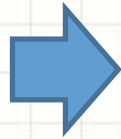
# “Versioning”

 20170105	 20170110	 20170115	 20170205	 20170210	 20170215	 20170305
 20170310	 20170315	 20170405	 20170410	 20170415	 20170505	 20170510
 20170515	 20170605	 20170610	 20170615	 20170705	 20170710	 20170715
 20170805	 20170810	 20170815	 20170905	 20170910	 20170915	 20171005
 20171010	 20171015	 20171105	 20171110	 20171115	 20171205	 20171210
 20171215	 20180105	 20180110	 20180115	 20180205	 20180210	 20180215
 20180305	 20180310	 20180315	 20180405	 20180410	 20180415	 20180505
 20180510	 20180515	 20180605	 20180610	 20180615	 20180705	 20180710
 20180715	 20180805	 20180810	 20180815	 20180905	 20180910	 20180915
 20181005	 20181010	 20181015	 20181105	 20181110	 20181115	 20181205
 20181210	 20181215					

# Cooperation



Ana



Jorin



Jens

# Git



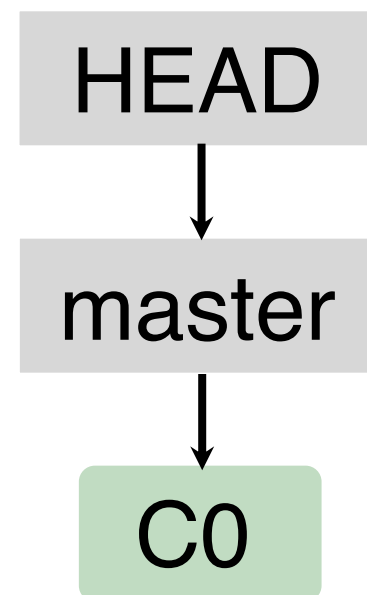
- **Track and save all changes**
- **Made for large software projects**
- **Useful and handy for all projects**

# Basic git

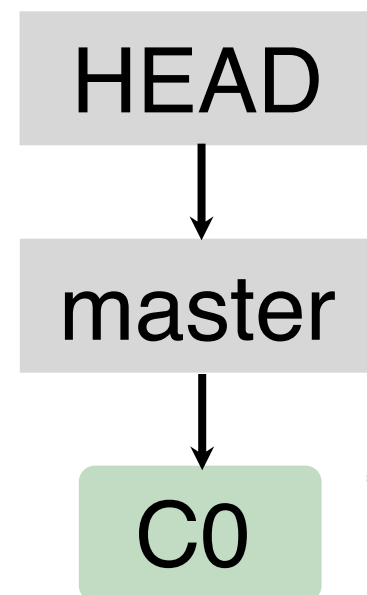


# Create a git repo

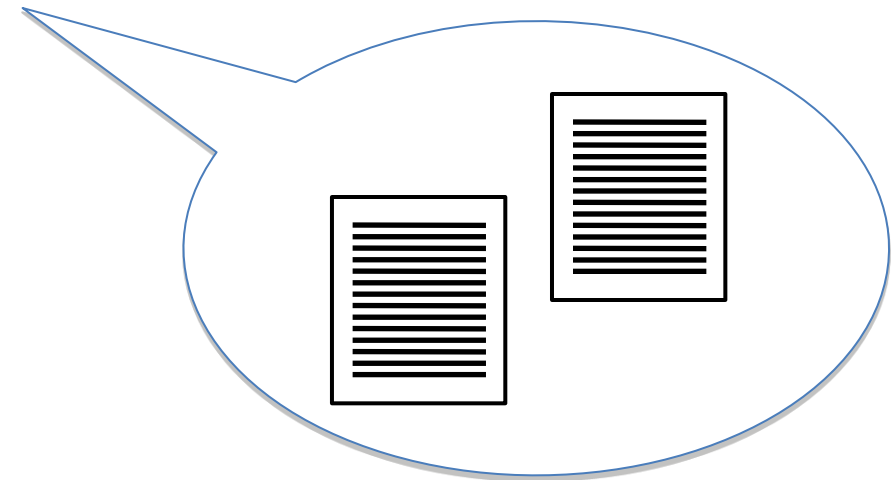
```
mkdir repo  
cd repo  
git init
```

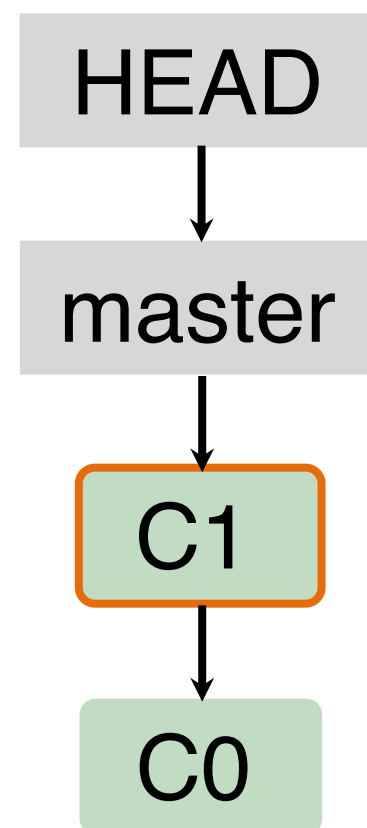


Tell git to “stage”  
changes



```
git add ...
```

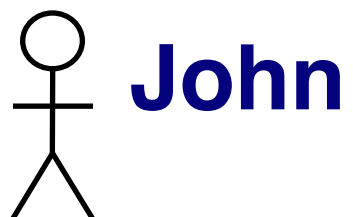




Commit your  
changes

```
git commit ...
```

# Collaborating



Local repo

Public repo

Local repo

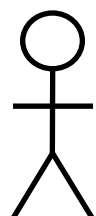
master



C1



C0

 **John**

**Jane** 

Local repo

**git clone ...**

master

C1

C0

Public repo

master

C1

C0

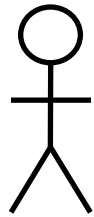
Local repo

master

C1

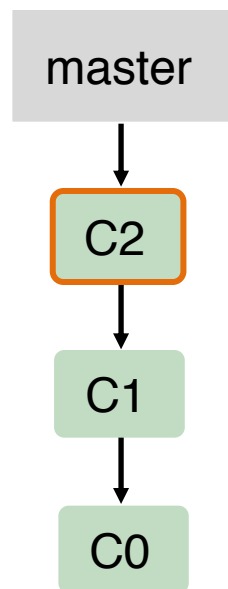
C0

**git clone ...**

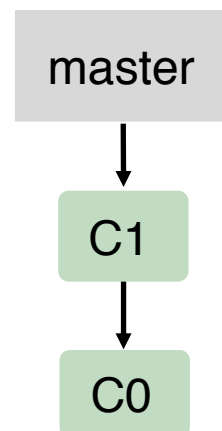
 **John**

**Jane** 

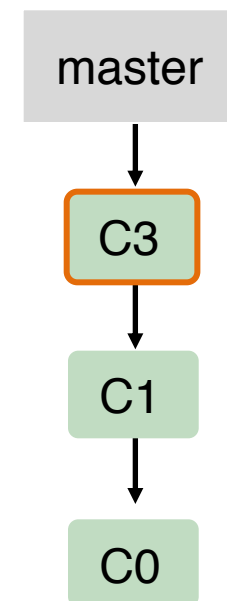
Local repo



Public repo

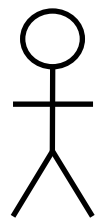


Local repo



**git add ...**  
**git commit ...**

**git add ...**  
**git commit ...**

 **John**

**Jane** 

Local repo

**git pull**

master

C2

C1

C0

Public repo

master

C1

C0

Local repo

master

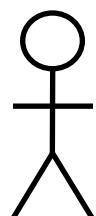
C3

C1

C0

(nothing new to pull)



 **John**

**Jane** 

Local repo

**git push**

master

C2

C1

C0

Public repo

master

C2

C1

C0

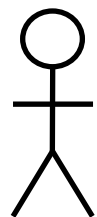
Local repo

master

C3

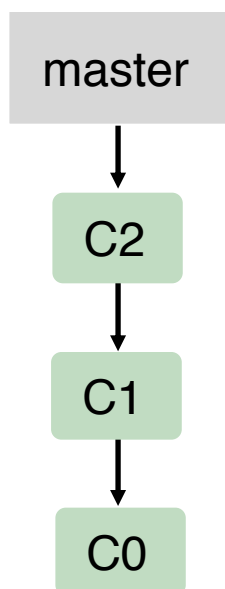
C1

C0

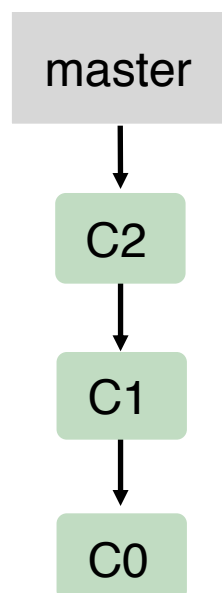
 **John**

**Jane** 

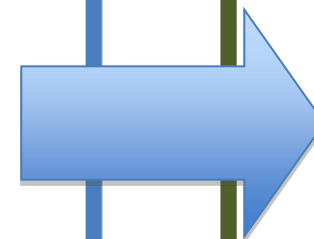
Local repo



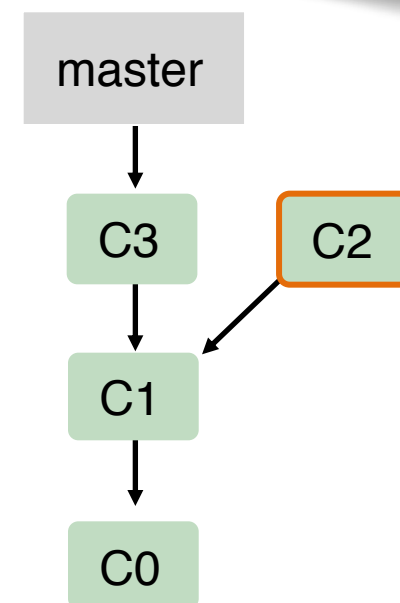
Public repo

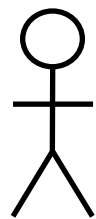


**git fetch**



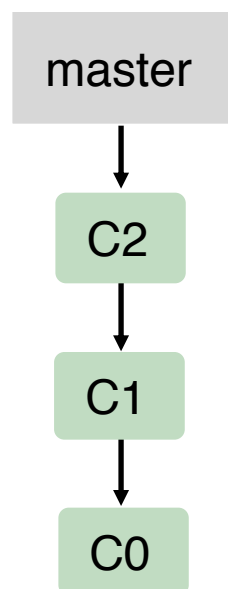
Local repo



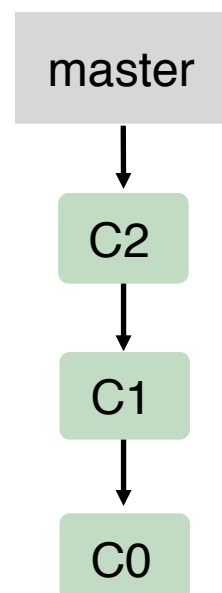
 **John**

**Jane** 

Local repo

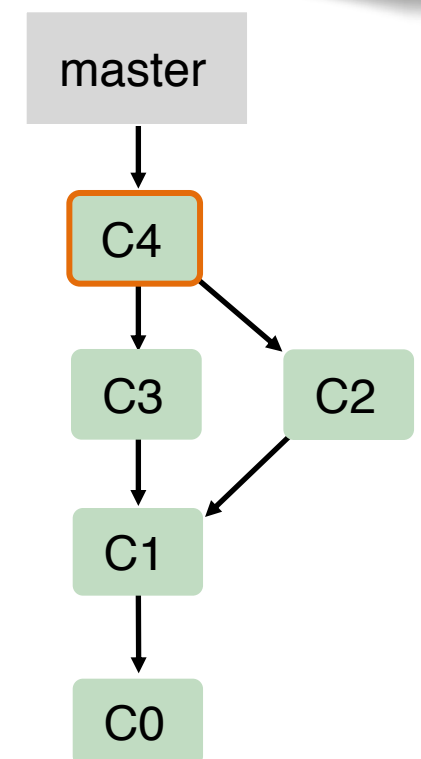


Public repo

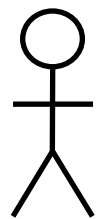


Local repo

**git merge**

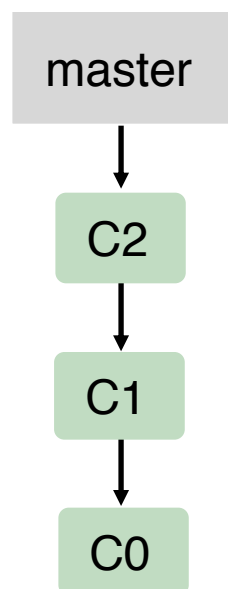


**NB: git pull = fetch + merge**

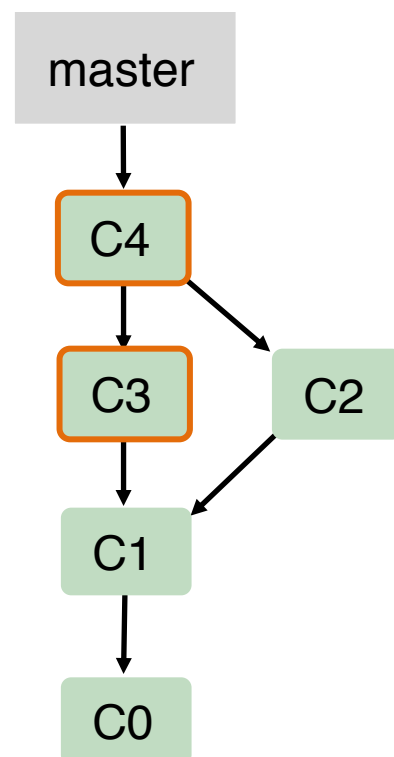
 **John**

**Jane** 

Local repo

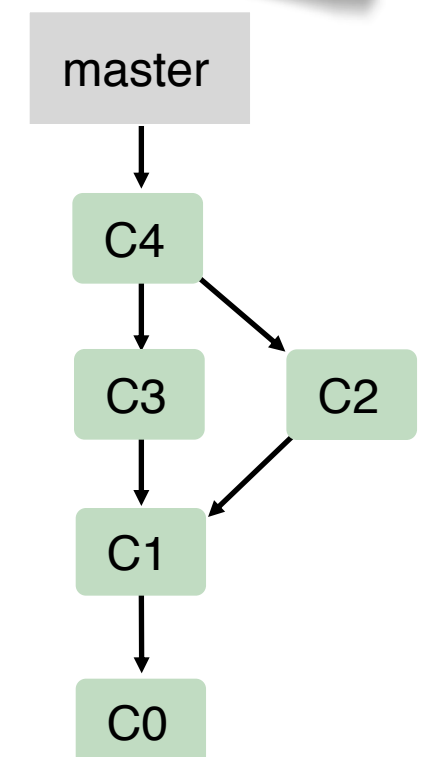
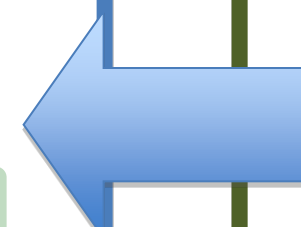


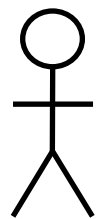
Public repo



Local repo

**git push**

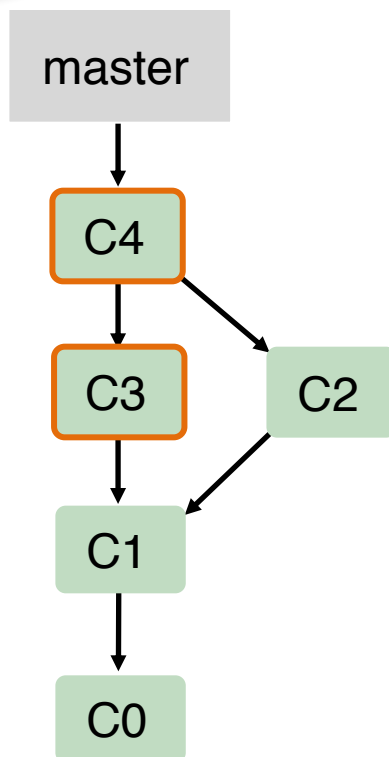


 **John**

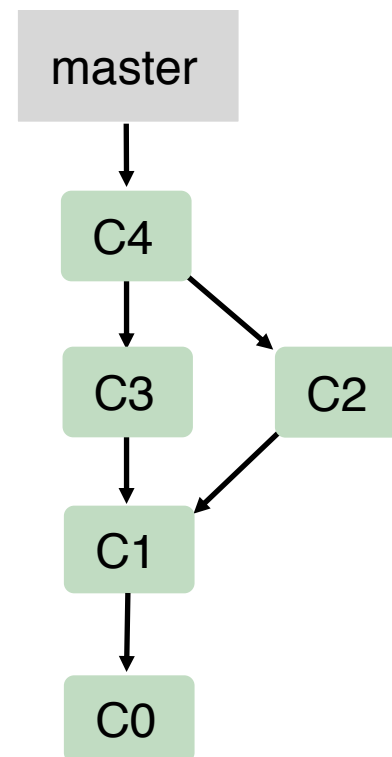
**Jane** 

Local repo

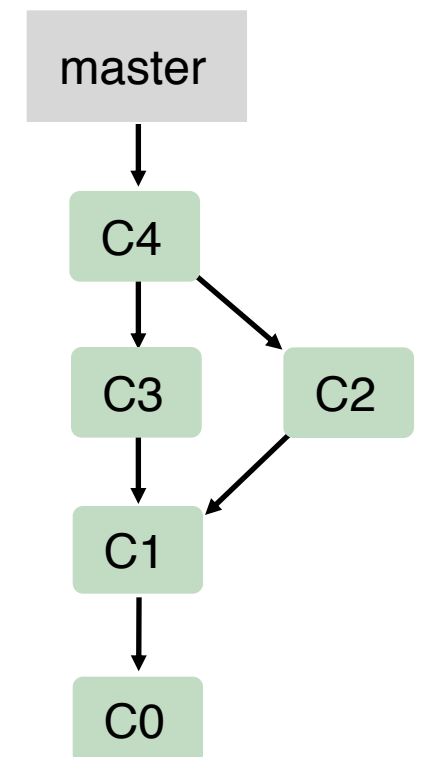
**git pull**



Public repo



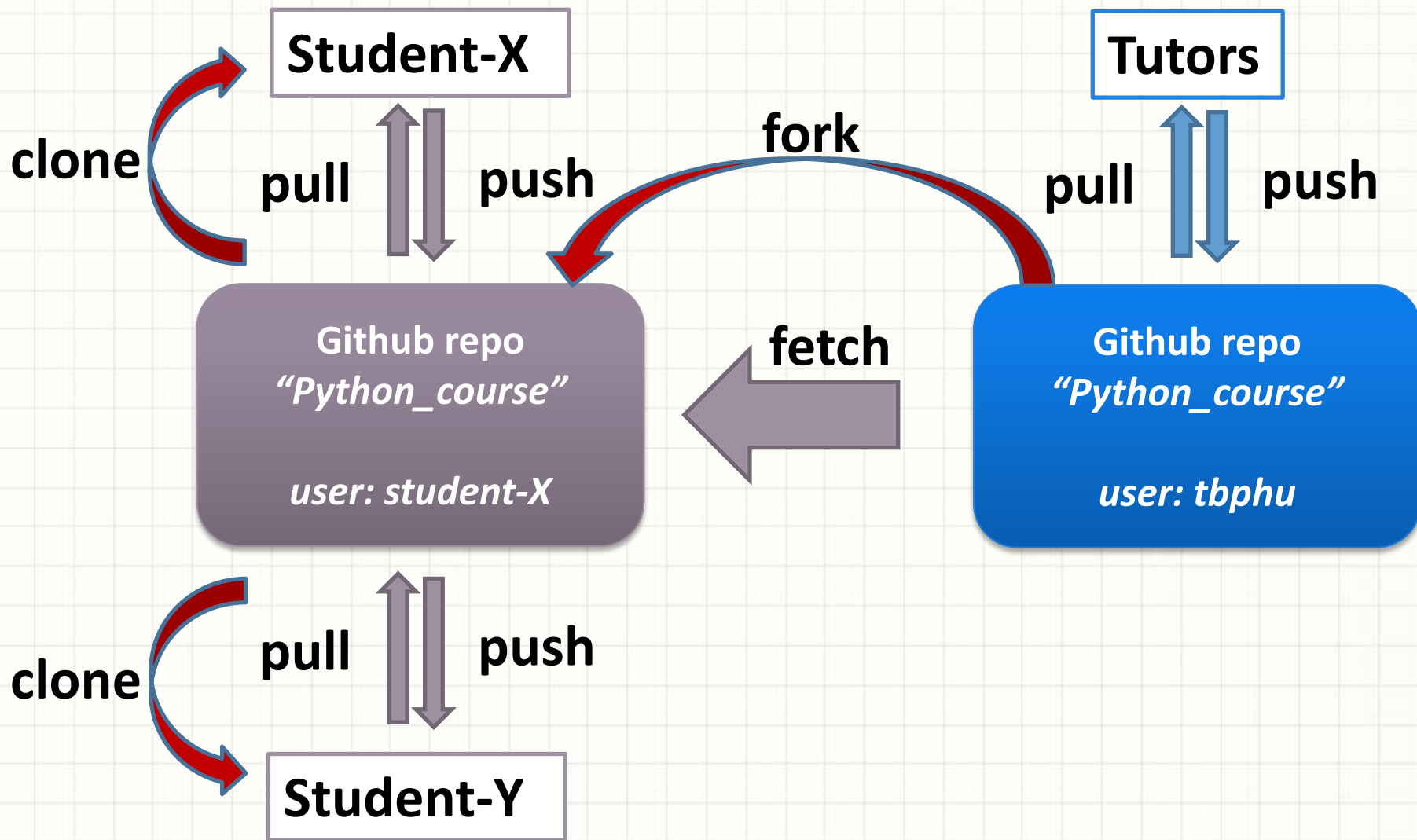
Local repo



# Repositories



- **Remote repo: <http://github.com>**
- **Local repo: On your PC**



# Hands-on – Github account



- **Go to <http://github.com>**
- **Register and get an account**





# Hands-on – Fork our repo

- Go to [http://github.com/tbphu/Python\\_course](http://github.com/tbphu/Python_course)
- Click on FORK

The screenshot shows the GitHub interface for the repository `tbphu / Python_course`. The repository has 10 watchers, 0 stars, and 2 forks. The 'Fork' button is highlighted with a red rectangle. Below the repository name, there are tabs for Code, Issues (0), Pull requests (0), Projects (0), Wiki, Insights, and Settings. A message states 'No description, website, or topics provided.' with an 'Edit' button. At the bottom, there are statistics: 30 commits, 2 branches, 0 releases, and 5 contributors. The bottom bar includes a branch selector (master), a 'New pull request' button, and buttons for 'Create new file', 'Upload files', 'Find file', and 'Clone or download'.

tbphu / Python\_course

Unwatch 10 Star 0 Fork 2

Code Issues 0 Pull requests 0 Projects 0 Wiki Insights Settings

No description, website, or topics provided. Edit

Add topics

30 commits 2 branches 0 releases 5 contributors

Branch: master New pull request Create new file Upload files Find file Clone or download