

COMP1035 – Lab 02: How to Fork & Clone Repository

Hi, I am Sheldon Cooper. Today, I am going to teach you how to fork and clone the repository into your team repository. First of all, log into <https://www.github.com>. BAZINGA! 😊😊 (it's a joke). You should log into <https://www.gitlab.com>.

Hey, this is my team! (There should be only 1 person in the team that is in the group. That particular team member should have the screen with your team name).

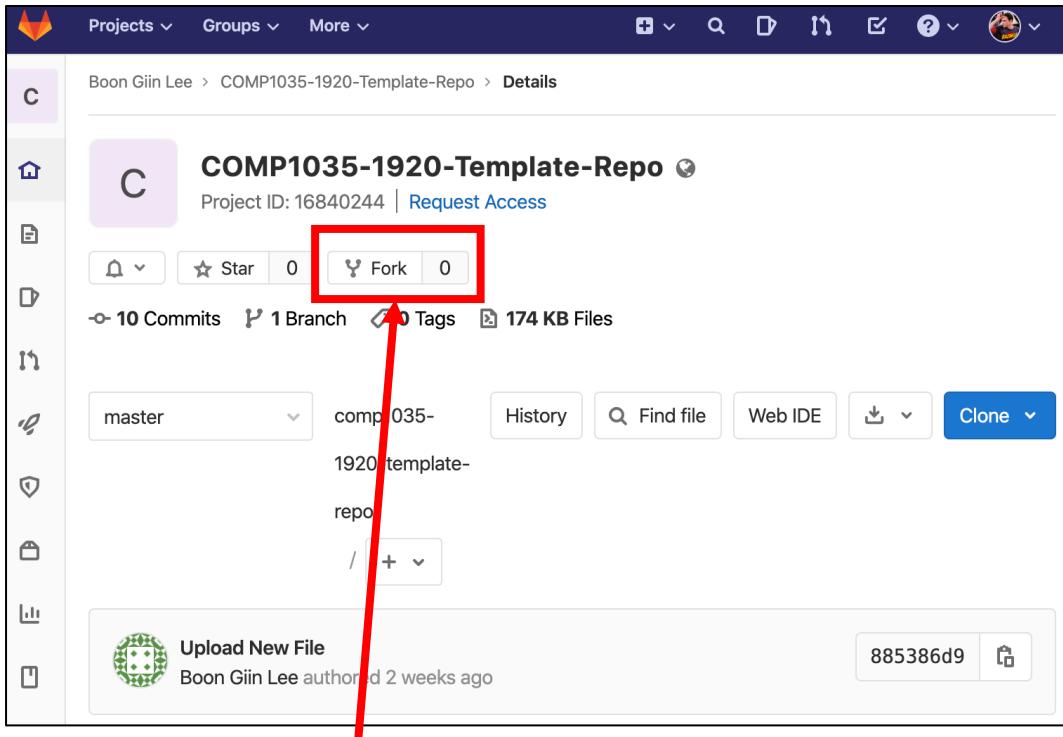
The screenshot shows the GitLab web interface. At the top, there is a navigation bar with 'Projects', 'Groups', and 'More' dropdowns, and various icons for search, refresh, and help. A promotional banner for a 'Free Trial of GitLab.com Gold' is visible. Below the banner, the word 'Projects' is displayed in a large font, with a 'New project' button to its right. A search bar labeled 'Filter by name...' and a dropdown for 'Last updated' are also present. Under the heading 'Your projects', there is a link to 'Starred projects' and a link to 'Explore projects'. A filter section allows switching between 'All' and 'Personal' projects. A single repository is listed: 'COMP1035-1920-All-Groups / Team Sheldon' (Developer), which has 0 stars and was updated 9 minutes ago.

I am lonely here! (Other team members shouldn't see any repository in your screen).

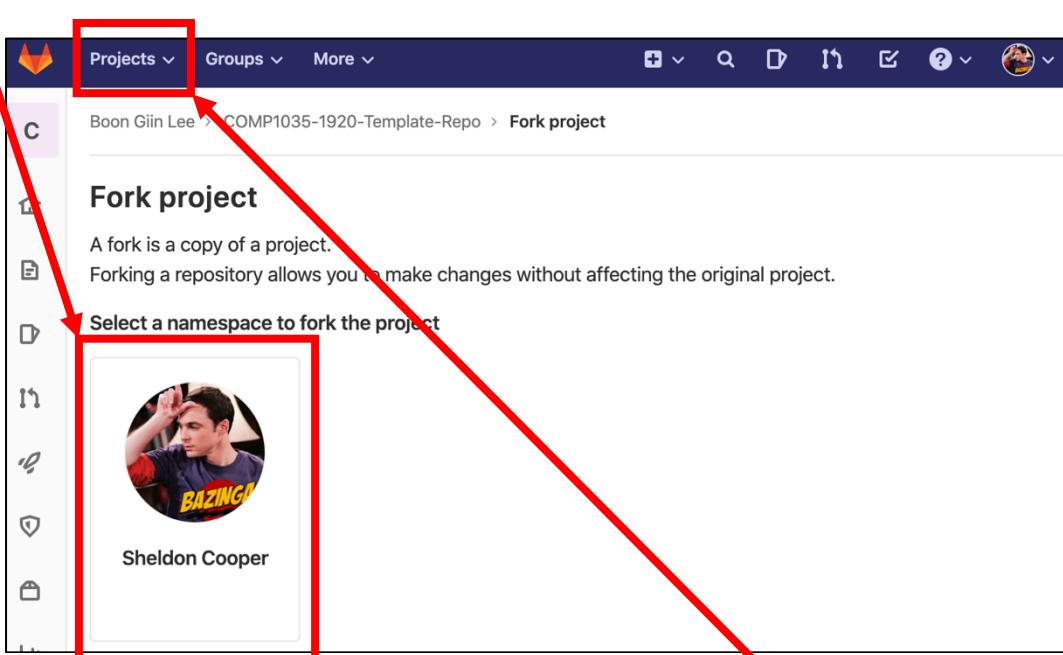
The screenshot shows the 'Welcome to GitLab' page. The top navigation bar is identical to the previous one. The main content features a promotional banner for a 'Free Trial of GitLab.com Gold'. Below the banner, the text 'Welcome to GitLab' and 'Faster releases. Better code. Less pain.' is displayed. Two large call-to-action boxes are shown: 'Create a project' (with a icon of a document inside a circle) and 'Create a group' (with a icon of two people's faces inside a circle). Both boxes provide a brief description of their respective features.

Now I click into my team repository. You should see nothing except a README.md file with the text "Team Sheldon".

Now, I am going to fork the repository to get my lab started. First, I go to gitlab.com/unnc-bglee/comp1035-1920-template-repo.



From here, I click on the “Fork” to create a copy into my repository. Then I select my namespace to fork the project.



OK, I got a message says, “The project was successfully forked.” Good. Now, to verify whether the forked repository is in my team, I will go and click “Projects” on the top and go into my team repository.

Eh, what? The forked repository is not in my team repository! Hm, oh, the reason is that the fork command actually copy the repository from gitlab.com/unnc-bglee/comp1035-1920-template-repo.

[bglee/comp1035-1920-template-repo](#) into [gitlab.com/<username>/comp1035-1920-template-repo](#) my repository with the same structure. So, what should I do now? How can I clone this repository into my team repository? Luckily, you have me! Let me, Sheldon The Flash teach you how to do it!

The screenshot shows the GitLab 'Projects' page. At the top, there is a banner for a 'Free Trial of GitLab.com Gold'. Below the banner, the title 'Projects' is displayed, along with a 'New project' button. Under 'Your projects', there are two items: 'Sheldon Cooper / COMP1035-1920-Template-Repo' (marked as a Maintainer) and 'COMP1035-1920-All-Groups / Team Sheldon' (marked as a Developer). Both projects were updated 3 minutes ago. A red box highlights the first project, and a red arrow points from this box to the 'Clone' button on the detailed project page.

Now, I go into the forked repository and copy the link I need. Make sure you choose the clone with HTTPS!

The screenshot shows the detailed view of the 'COMP1035-1920-Template-Repo' project. The page includes navigation icons, a sidebar with project settings, and a main content area with commit history, branches, and tags. At the bottom right, there is a 'Clone' button with a dropdown menu. The 'Clone with HTTPS' section is highlighted with a red box, showing the URL 'https://gitlab.com/bglee85/c'. A red arrow from the previous screenshot points to this highlighted field.

Then, I go my terminal (you can use command prompt in Windows) and type the necessary command to clone this repository into my local machine.

First, I am going to clone the repository by typing

```
git clone --bare https://gitlab.com/<username>/comp1035-1920-template-repo.git
```

```
aprilzhang@BryanPMB447 ~ % git clone --bare https://gitlab.com/bglee85/comp1035-1920-template-repo.git
Cloning into 'comp1035-1920-template-repo'...
remote: Enumerating objects: 30, done.
remote: Counting objects: 100% (30/30), done.
remote: Compressing objects: 100% (19/19), done.
remote: Total 30 (delta 6), reused 30 (delta 6), pack-reused 0
Unpacking objects: 100% (30/30), done.
aprilzhang@BryanPMB447 ~ %
```

OK. Now I got the message saying cloning successfully. Next I set my path to the git repository I just cloned by typing

```
cd comp1035-1920-template-repo.git
```

Now, I am going to push this cloned repository into my team repository by typing

```
git push --mirror https://gitlab.com/comp1035-1920-all-groups/<team-name>.git
```

You can find the link of your team repository the same way I did just now by copy the link at "Clone with HTTPS".

```
aprilzhang@BryanPMB447 comp1035-1920-template-repo.git % git push --mirror https://gitlab.com/comp1035-1920-all-groups/team-sheldon.git
Username for 'https://gitlab.com': bglee85
Password for 'https://bglee85@gitlab.com':
Everything up-to-date
aprilzhang@BryanPMB447 comp1035-1920-template-repo.git %
```

Type in my username and password. Yeah! "Everything up-to-date!". Let go back to the team repository and have a look.

The screenshot shows the GitLab project page for 'Team Sheldon'. The project details are as follows:

- Project ID: 17137862
- Leaves project
- Commits: 0
- Branches: 1 (team-sheldon)
- Tags: 0
- Size: 369 KB

The repository structure is:

- master
- team-sheldon

Recent activity:

- Upload New File (Boon Gin Lee, 2 weeks ago)
- 885386d9

File actions:

- README
- Add LICENSE
- Add CHANGELOG
- Add CONTRIBUTING
- Set up CI/CD

File list:

Name	Last commit	Last update
contributors	Upload New File	2 weeks ago
docs	Upload New File	2 weeks ago
images	Upload New File	2 weeks ago
src	Upload New File	2 weeks ago
README.md	Update README.md	2 weeks ago

Yes! Seems like everything is in order. A big applause to Sheldon! Now, I can start to work on my repository now. Oh wait, where is my team members?!?! I should add my team member into this project to work with. Click on the “Settings” and follow by “Members” on the left bar.

The screenshot shows the 'Details' page for the 'Team Sheldon' project. The sidebar on the left has several sections: Projects, Groups, More, Home, Team, Settings (highlighted with a red box), General, Members (highlighted with a red box), Integrations, Repository, CI / CD, Operations, Pages, and Audit Events. The main content area displays a file named 'new File' with a commit message 'ee authored 2 weeks ago' and a commit hash '885386d9'. There are also buttons for 'Add LICENSE', 'Add CHANGELOG', 'Add CONTRIBUTING', and 'Enable Auto DevOps'. A red arrow points from the 'Members' button in the sidebar to the 'Members' section in the main content area.

Leonard, I am going to add you into my team and assign the role permission “**Maintainer**” to you.

The screenshot shows the 'Members' page for the 'Team Sheldon' project. The sidebar on the left includes 'Project members' and 'Invite member' buttons. The main content area has a search bar labeled 'GitLab member or Email address' containing 'Leonard Hof'. Below the search bar is a list of users: Leonard Hof (selected), Leonardo Hoffmann (@D3F_4LT), and Leonardo Hofling (@leonardohof). At the bottom of the page are 'Invite' and 'Import' buttons. A red arrow points from the search result 'Leonard Hof' to the main content area.

Leonard: “Oh wait, what?!?! Sheldon, I don't want to be in your team!”.

Sheldon: “You have no choice, is done.”.

Leonard: “...”

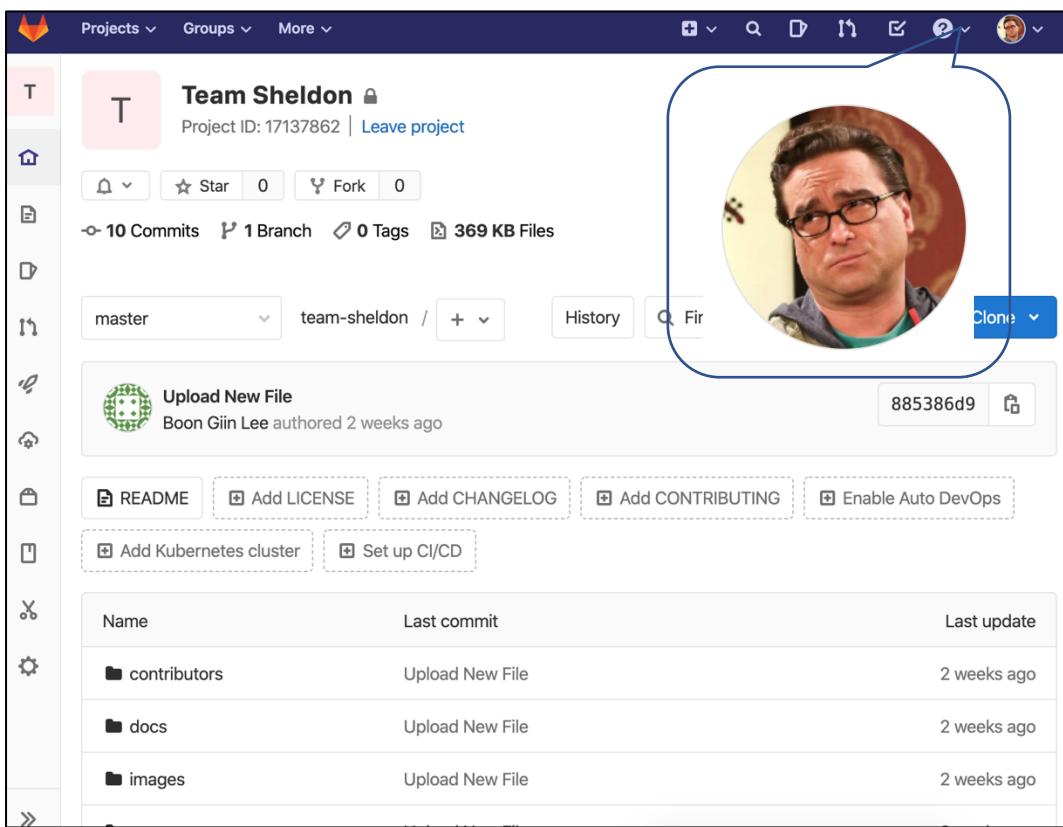
Leonard, here the proof for you. You are officially in Team Sheldon!

Leonard: "Oh gosh ...".

Existing members and groups

Members of Team Sheldon (3)		Find existing members by name	Sort by	Name, ascending
	Boon Giin Lee @unnc-bglee · COMP1035-1920-All-Groups Given access 6 hours ago			Owner
	Leonard Hofstadter @leebgiin Given access just now	Maintainer	Expiration date	
	Sheldon Cooper @bglee85 It's you Given access 2 hours ago	Maintainer		

Leonard: "Let me check my Gitlab repository".



The screenshot shows a GitLab repository named 'Team Sheldon'. The repository ID is 17137862. It has 10 commits, 1 branch, 0 tags, and 369 KB files. The commit history shows a recent upload by Boon Giin Lee. A large circular portrait of Leonard Hofstadter is overlaid on the interface, with a blue oval highlighting it.

Leonard: "Indeed, I am in the team! I wish this is BAZINGA!"

Leonard, now you should clone the repository to your local machine and work on the project. It's my nap time now. Chao!

Leonard: "Sheldon!!! Argghh ... You're XXXX XX XXX XX"

Hi everyone, I am Leonard Hofstadter, I am going to take over from here. I am going to clone the team repository into my local machine. I will go to my terminal by typing

```
git clone https://gitlab.com/comp1035-1920-all-groups/<team-name>.git
```

```
aprilzhang@BryanPMB447 ~ % git clone https://gitlab.com/comp1035-1920-all-groups/team-sheldon.git
Cloning into 'team-sheldon'...
Username for 'https://gitlab.com': leebgiin
Password for 'https://leebgiin@gitlab.com':
remote: Enumerating objects: 30, done.
remote: Counting objects: 100% (30/30), done.
remote: Compressing objects: 100% (25/25), done.
remote: Total 30 (delta 6), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (30/30), done.
aprilzhang@BryanPMB447 ~ % ls
Applications           Music                  anaconda3
Desktop                NetBeansProjects      comp1035-lec06
Documents              Pictures               eclipse
Downloads              Public                 eclipse-workspace
Library                PycharmProjects      opt
Movies                 UNNC                 team-sheldon
aprilzhang@BryanPMB447 ~ % cd team-sheldon
aprilzhang@BryanPMB447 team-sheldon % ls
README.md      docs      src
contributors   images
aprilzhang@BryanPMB447 team-sheldon % ||
```

Type in my username and password. Yes. Unpacking successfully. I am going to verify the folder is successfully cloned in my local machine. Yes, it is there. Let's set the path to the folder and list out the files in the folder by typing.

```
cd team-sheldon
ls
open .
```

Great, I have all I need here. That's all. We are done! Ooppss, I am late for the date. Penny is going to mad at me. Bye for now~!

