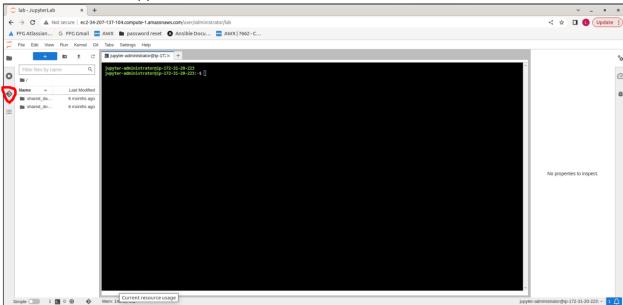
Using GIT with JupyterHub:

A. Git Clone:

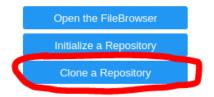
1. Press the GIT icon in JupyterLabs:



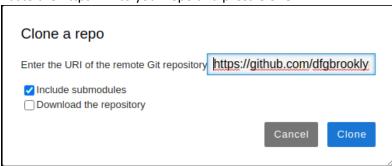
2. Press Clone a Repository:

You are not currently in a Git repository.

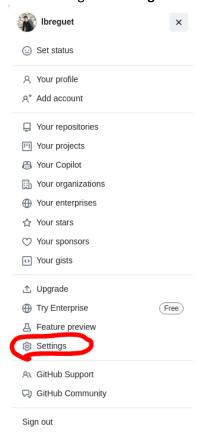
To use Git, navigate to a local repository, initialize a repository here, or clone an existing repository.



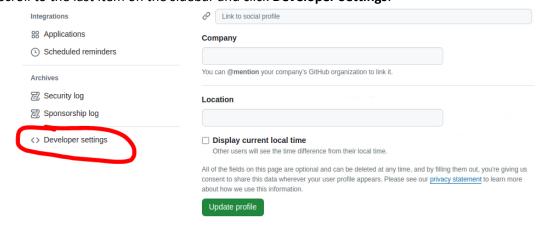
3. Paste the https link to your repo and press Clone:



4. In this next window you need to generate a **Personal Access Token** from Github, so go to Github and go to **Settings** located when clicking your profile photo:



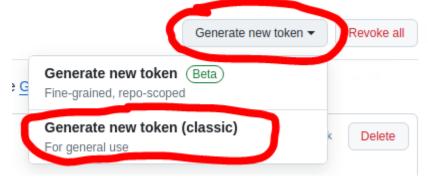
5. Scroll to the last item on the sidebar and click **Developer Settings**:



6. Click on Personal Access Tokens and then on Tokens (Classic):



7. At the top, click on Generate new token and then click on Generate new token (classic):



8. Give your token an arbitrary name and give it full repo access:

New personal access token (classic)

Personal access tokens (classic) function like ordinary OAuth access tokens. They can be used instead of a password for Git over HTTPS, or can be used to authenticate to the API over Basic Authentication. Note token-jupyter What's this token for? Expiration * 7 days The token will expire on Fri, Apr 26 2024 Select scopes Scopes define the access for personal tokens. Read more about OAuth scopes. repo Full control of private repositories repo:status Access commit status repo_deployment Access deployment status

Access public repositories

Access repository invitations

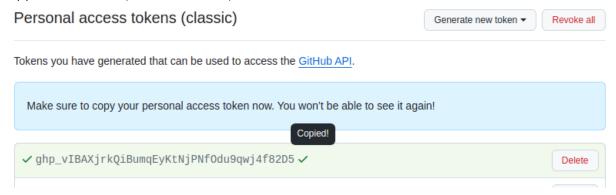
Read and write security events

- 9. Scroll all the way to the bottom and press Generate Token
- 10. Copy the new token (save in a text file):

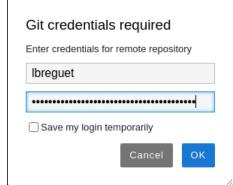
public_repo

repo:invite

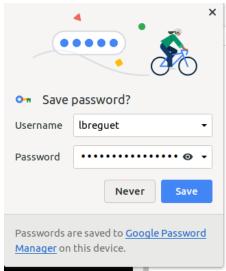
security events



11. Go back to JupyerLab and input your Github username, paste your token, and press OK:



12. Save the credentials to our browser, it make it easier to use git commands for later:

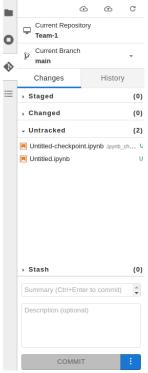


13. The repo has been cloned:



B. Committing:

1. After making a change, go to the git icon, you'll notice a version control dashboard:

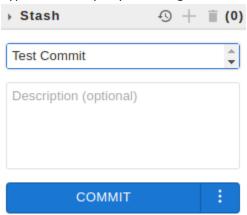


2. Hover over **Untracked** and press the + sign:

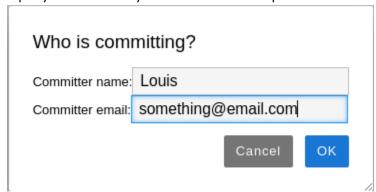




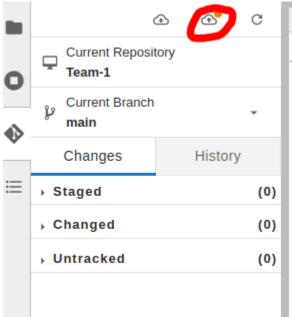
3. Type a summary of your changes at the bottom then press **Commit**:



4. Input your name and your Github email and press Ok:



5. There will now be an icon with an orange dot indicating to push to your repo:



C. Pushing and Pulling:

1. Periodically, you will have to push your changes and pull your teammates changes from your repo. The cloud with the arrow pointing down is the **git pull** command while the other cloud with the arrow pointing up is the **git push** command:



2. Both pushing and pulling utilize the same UI behavior, so get that Personal Access Token we generated earlier handy. Input your credentials and press **OK**:

3. You will get a success message on the bottom right if everything was successful:

