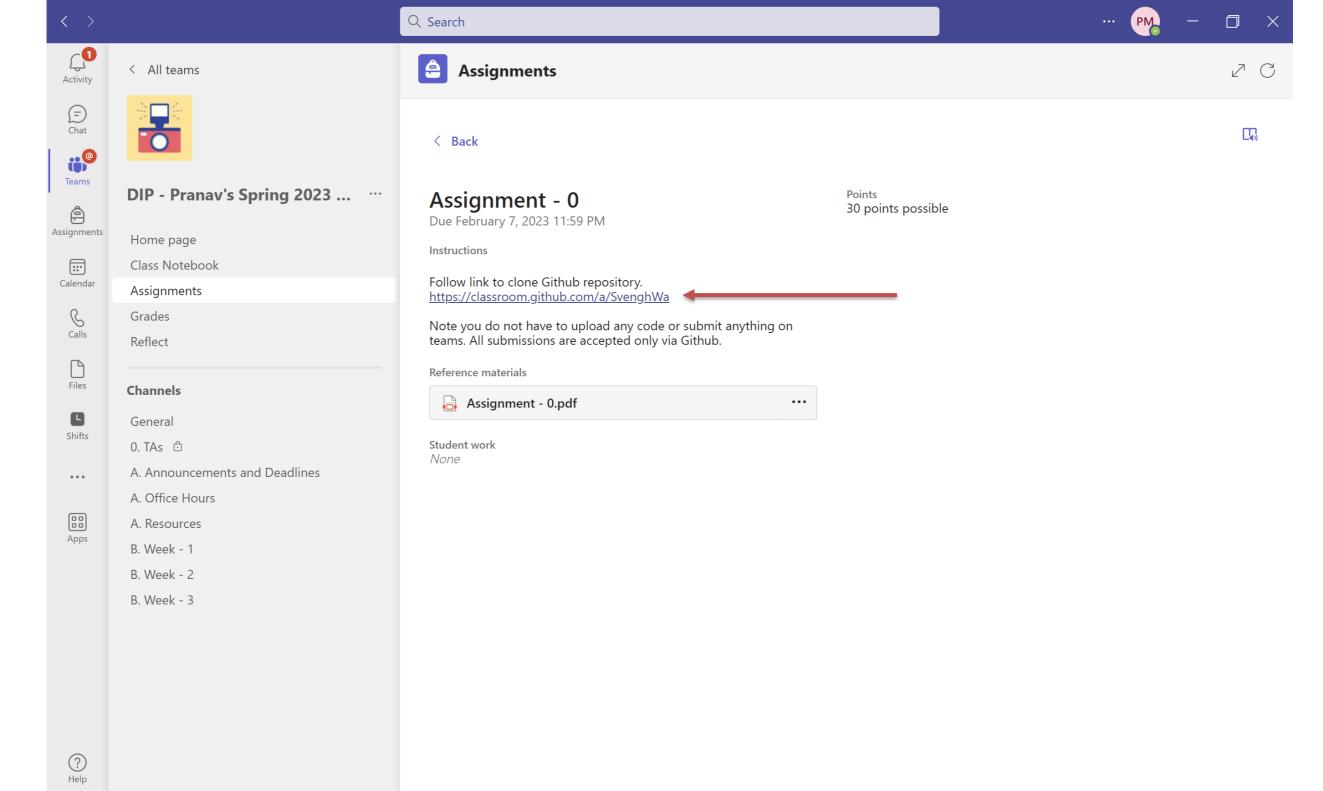
# Getting started with Github

#### Prerequisite:

- Check teams, a Github classroom link is provided in the assignment description
- Follow the link and login/sign up for github
  - You will automatically be added to classroom
  - A repository with the starter code will be automatically created for you
- Install Git https://git-scm.com/downloads

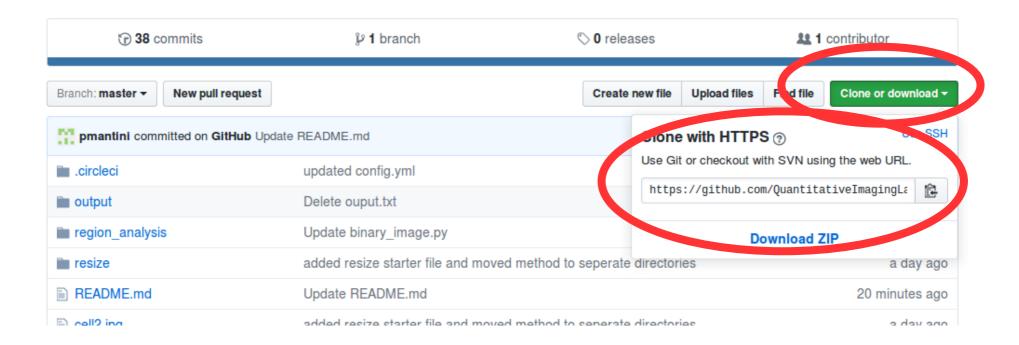


# Steps

- 1. Checkout Code (pull from github repo)
- 2. Write Code
- 3. Commit changes
- 4. Push (to github repo)

## Checkout Starter Code

- Login to Github and goto <> code
- Click clone or download
- Copy URL (yourURL)



## Checkout Starter Code

- Goto terminal or command prompt
- Create a local folder
- Initialize git with command:
  - > git init
- Add a remote repository
  - > git remote add <repo\_name> <yourURL>
  - Repo\_name can be anything (eg: diphw0)
- Pull or checkout starter code
  - > git pull <repo\_name> main
- Enter your github credentials
- This should create a local copy

# Authentication (git version: 2.33.0)

# Either Sign in with your browser (Or) Create PAT (Personal Access Token

- 1. <a href="https://docs.github.com/en/github/authenticating-to-github/keeping-your-account-and-data-secure/creating-a-personal-access-token">https://docs.github.com/en/github/authenticating-to-github/keeping-your-account-and-data-secure/creating-a-personal-access-token</a>
- 2. Copy paste the token

The details will be stored in windows credentials



# Git older version and Linux based OS users

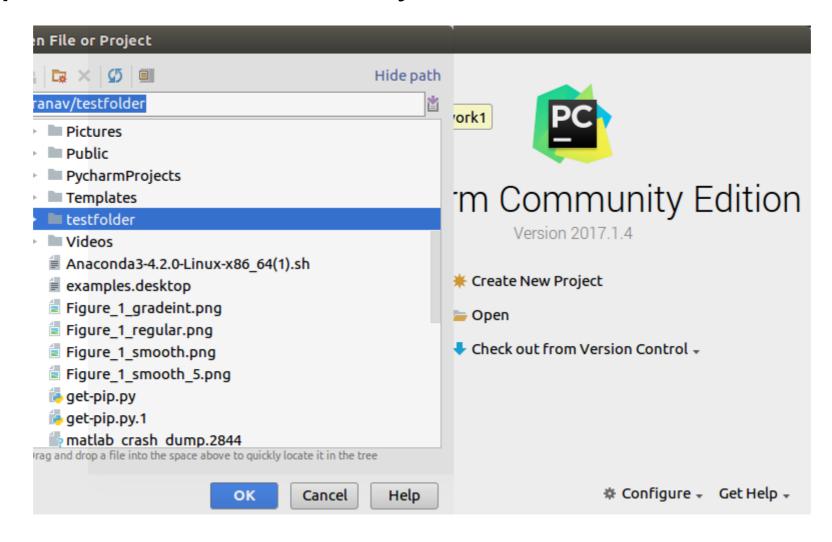
- 1. Please note that gihub does not support password authentication anymore.
- 2. If you are using an older version or linux based system.
  - 1. When asked for credentials in command line
    - 1. Username: same as github username
    - 2. Password: Use the generated token instead of github password

# Checkout Starter Code

```
pranav@pranav-M11x-R2:~$ mkdir testfolder
pranav@pranav-M11x-R2:~$ cd testfolder/
pranav@pranav-M11x-R2:~/testfolder$ git init
Initialized empty Git repository in /home/pranav/testfolder/.git/
pranav@pranav-M11x-R2:~/testfolder$ git remote add dipAsgn1 https://github.com/QuantitativeImagingLaboratory/Homework-1.git
pranav@pranav-M11x-R2:~/testfolder$ git pull dipAsgn1 master
Username for 'https://github.com': m_pranav@yahoo.com
Password for 'https://m pranav@yahoo.com@github.com':
remote: Counting objects: 147, done.
remote: Compressing objects: 100% (105/105), done.
remote: Total 147 (delta 65), reused 69 (delta 22), pack-reused 0
Receiving objects: 100% (147/147), 150.89 KiB | 0 bytes/s, done.
Resolving deltas: 100% (65/65), done.
From https://github.com/QuantitativeImagingLaboratory/Homework-1
 * branch
                               -> FETCH HEAD
                    master
 * [new branch]
                               -> dipAsgn1/master
                    master
pranav@pranav-M11x-R2:~/testfolder$
```

## Write code

Open this folder with Pycharm



# Commit changes

- Commit your local code.
- > git commit -am "message"
- Commit as often as possible
- This will allow stepwise versions, in case you have to revert to previous version of code

### Push

- Push you local changes back to Github
- > git push <repo\_name> master
- Enter your github credentials (Older git versions and Linux based users)

## **General Instructions**

- You can add new files to the code using
- > git add <filename>
- In general push your code everytime you are done working
- You can follow the same procedure every time you want to continue work.
- Remember to pull your code before you start working, even though you already have the code in you directory. This will merge any changes at Github with your code. It will not over write your code.
- In-general use pull every time you start working and push code everytime you are done working