

# Projects 1

To put all we have learnt together, let's do a little project. Here are the instructions.

## Activity 1

1. Create a folder and name it whatever you want.
2. Run the “Git init” command to initialize the folder as a git repository.
3. Make changes to the folder; you can add whatever file you want.
4. Stage the changes using “git add” command.
5. Commit the changes with git commit.
6. Create a remote repository.
7. Link the local repository and remote repository.

## Solution

1. Note that when you create the folder you have to open the folder before you do "git bash" as shown below; I am stressing this because a lot of people make this mistake, even experienced developers.

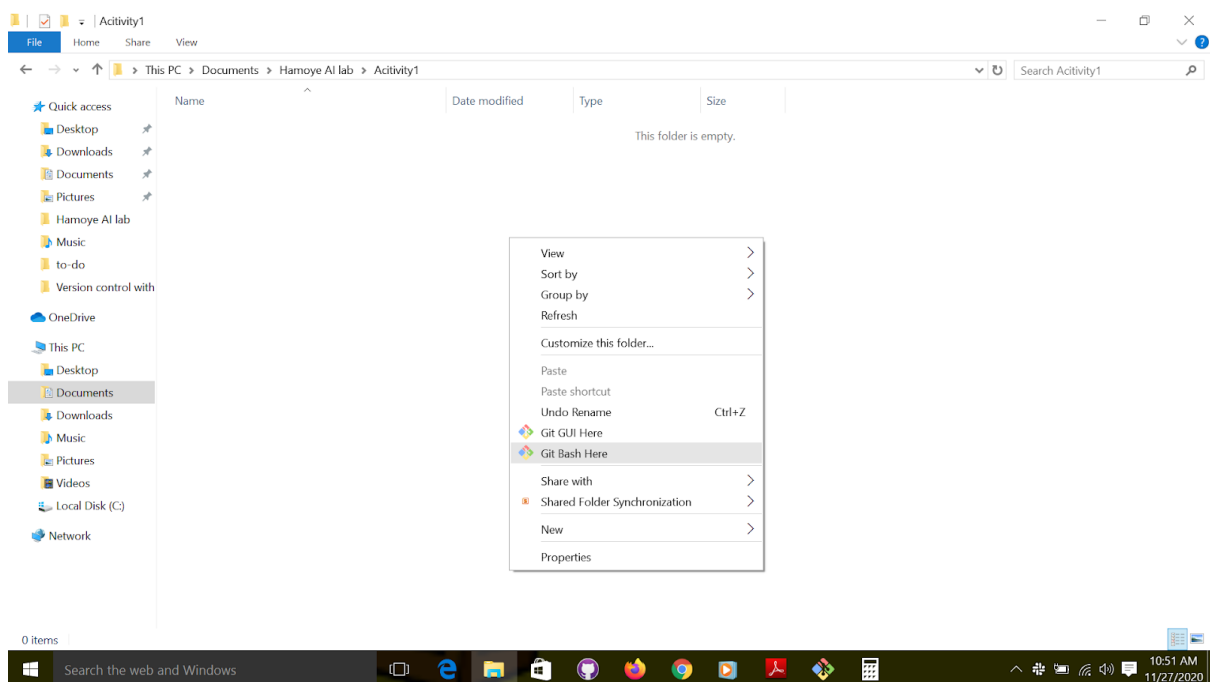


Figure 45: “git bash”

2. Run the git init command

```
MINGW64/c/Users/user/Documents/Hamoye AI lab/Activity1
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1
$ git init
Initialized empty Git repository in C:/Users/user/Documents/Hamoye AI lab/Activity1/.git/
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1 (master)
$
```

Figure 46: run the “git init” command

### 3. Make changes

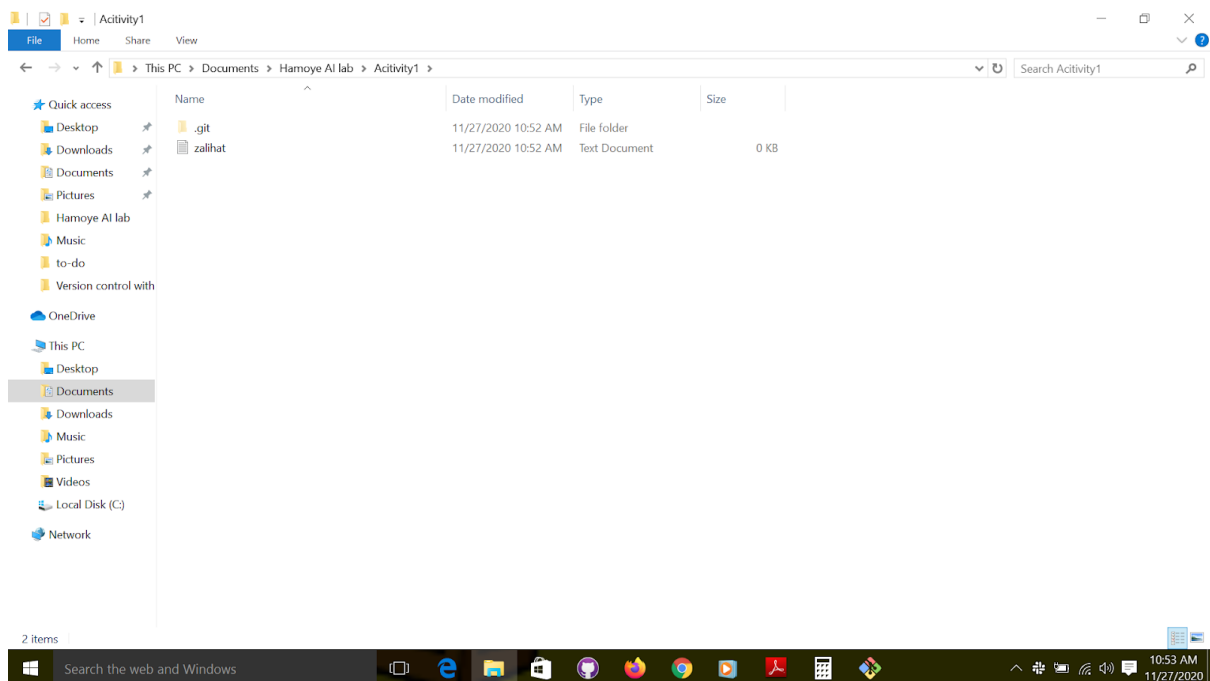


Figure 47: make changes to the repository.

### 4. Git status

```
MINGW64/c/Users/user/Documents/Hamoye AI lab/Activity1
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1
$ git init
Initialized empty Git repository in C:/Users/user/Documents/Hamoye AI lab/Activity1/.git/
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1 (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    zalihat.txt

nothing added to commit but untracked files present (use "git add" to track)
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1 (master)
$
```

Figure 48: check the status of the repository

5. Stage changes, git add filename or git add . to stage all changes,

```
MINGW64/c/Users/user/Documents/Hamoye AI lab/Activity1
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1
$ git init
Initialized empty Git repository in C:/Users/user/Documents/Hamoye AI lab/Activity1/.git/
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1 (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    zalihat.txt

nothing added to commit but untracked files present (use "git add" to track)
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1 (master)
$ git add zalihat.txt
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1 (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   zalihat.txt

user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1 (master)
$
```

Figure 49: stage changes

6. Commit changes;

```
MINGW64/c/Users/user/Documents/Hamoye AI lab/Activity1
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1
$ git init
Initialized empty Git repository in C:/Users/user/Documents/Hamoye AI lab/Activity1/.git/
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1 (master)
$ git status
On branch master
No commits yet
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    zalihat.txt
nothing added to commit but untracked files present (use "git add" to track)
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1 (master)
$ git add zalihat.txt
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1 (master)
$ git status
On branch master
No commits yet
Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   zalihat.txt
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1 (master)
$ git commit -m "Added zalihat.txt"
[master (root-commit) 36c6853] Added zalihat.txt
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 zalihat.txt
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1 (master)
$
```

Figure 50: Commit changes

7. Create a remote repository and name it the folder name.

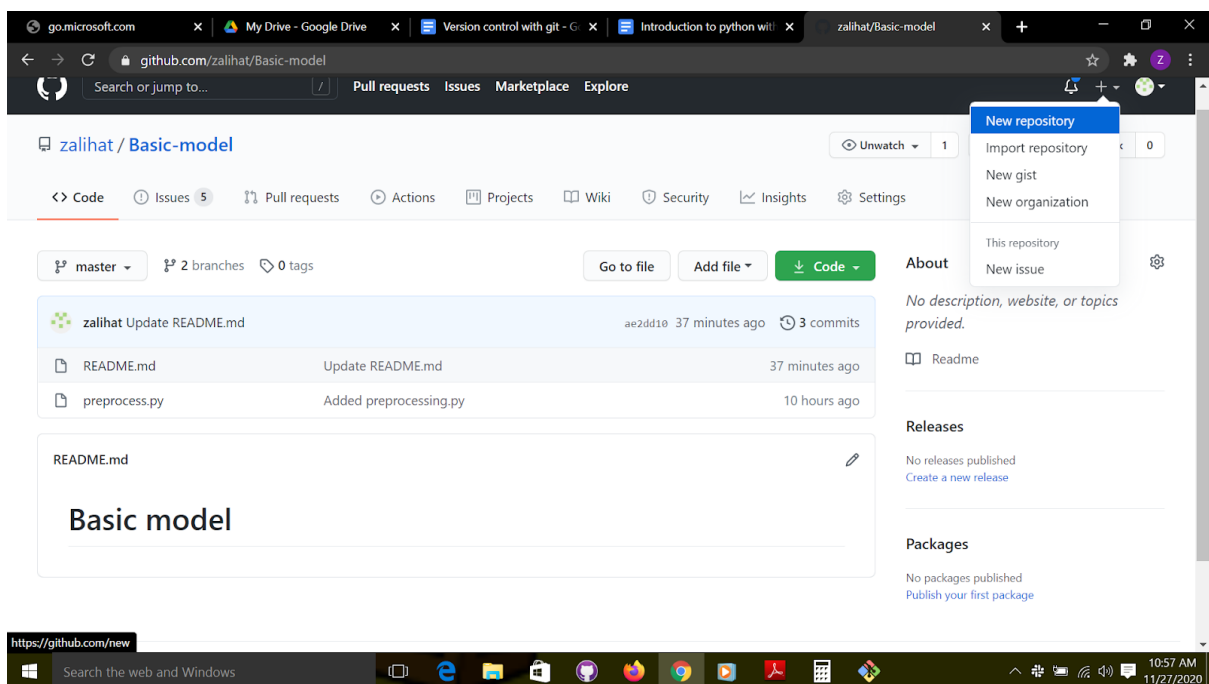


Figure 51: create a remote repository.

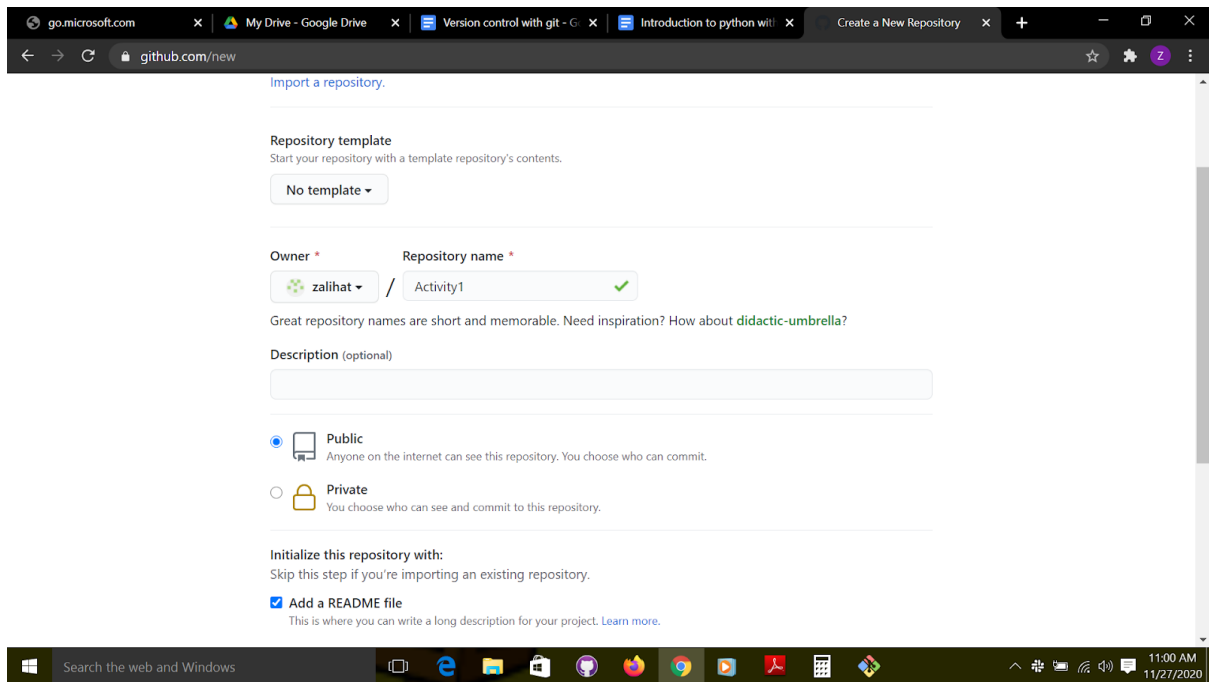


Figure 52: Name the remote repository

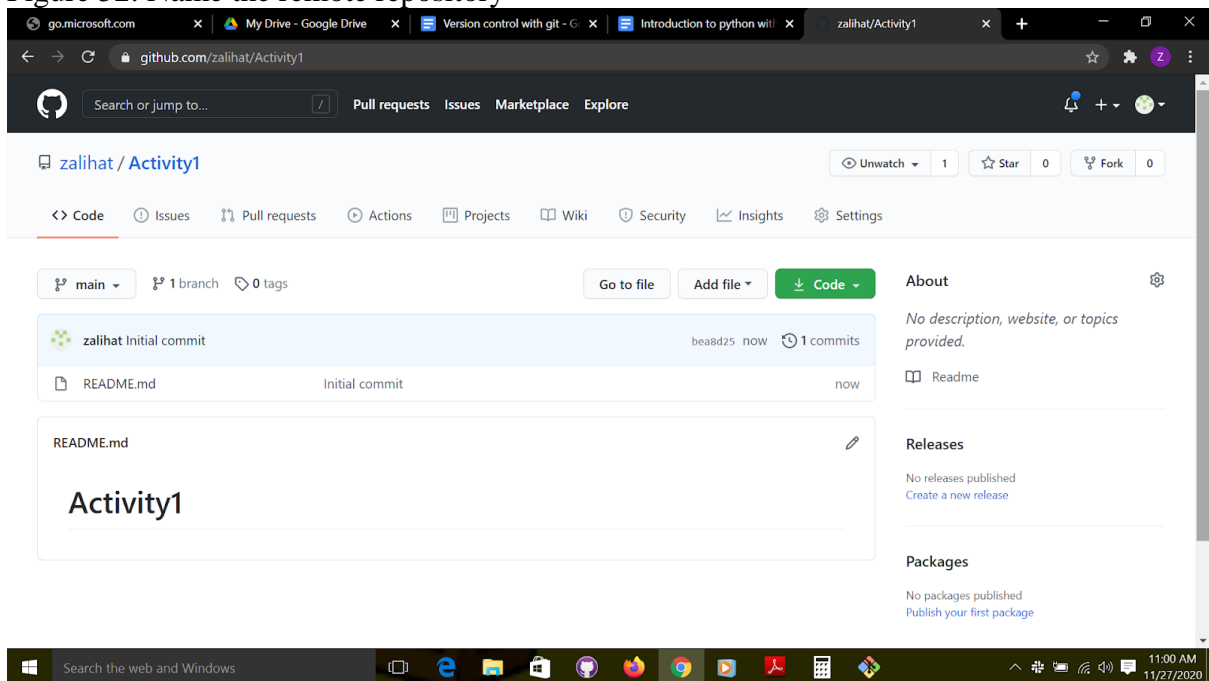


Figure 53: Created repository's page

8. To link both repositories. Copy the remote repository's url. Click on code, and copy the link

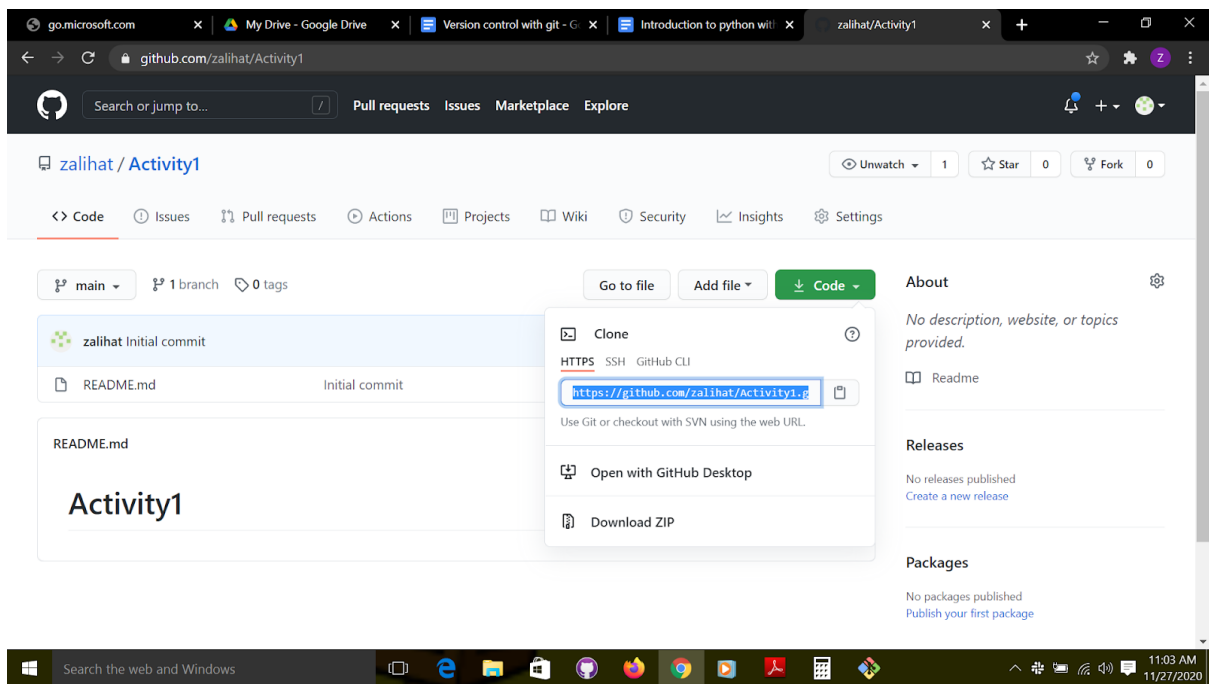


Figure 54: copy remote repository's url  
Go back to "git bash" and run

Git remote

This will return nothing, because we don't have any remote repository linked yet, to link the repository run the command

Git remote add origin [url]

To paste the url, use the insert key on your keyboard.

Make sure you copy the url, then type git remote, add origin, then press insert key.

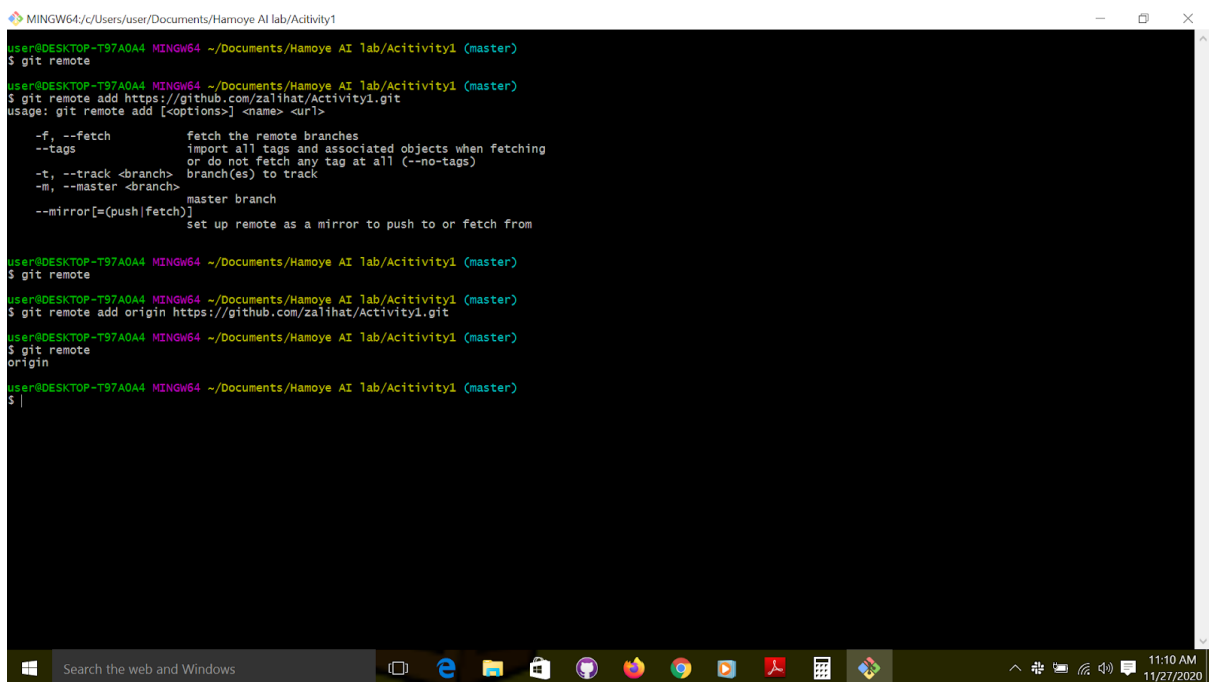
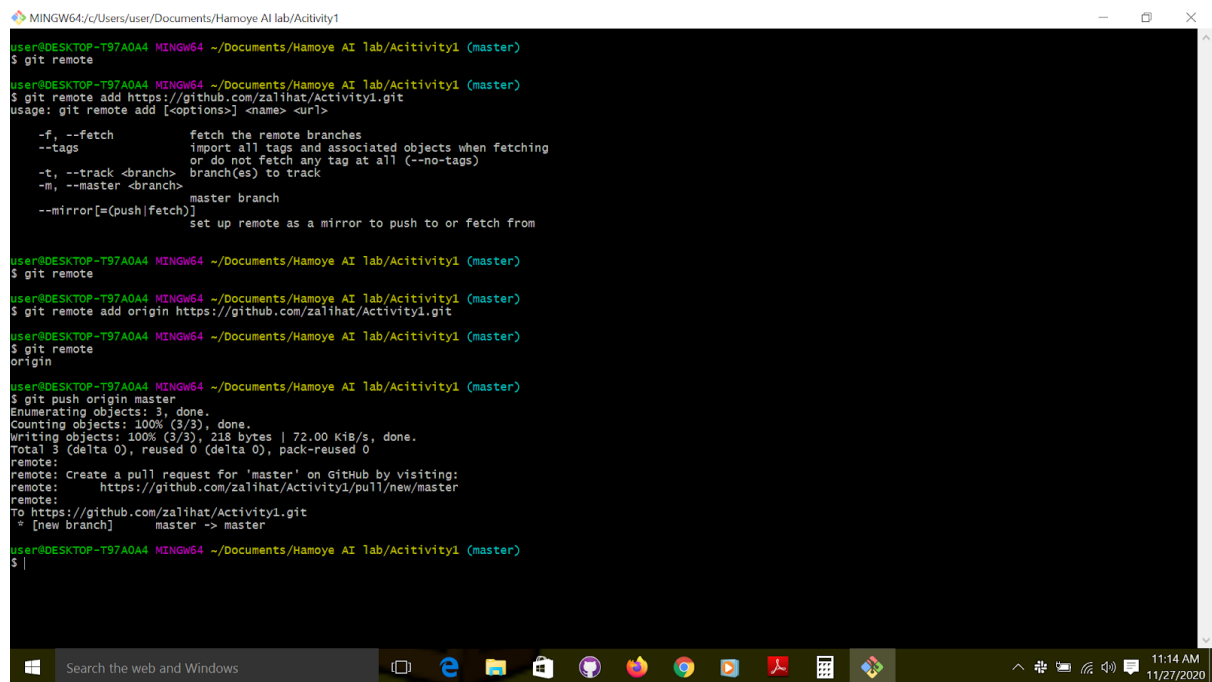


Figure 55: git remote command

9. "Git push" to push changes to the remote repository.

## git push origin master



```
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1 (master)
$ git remote
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1 (master)
$ git remote add https://github.com/zalihat/Activity1.git
usage: git remote add [-<options>] <name> <url>

    -f, --fetch              fetch the remote branches
    --tags                  import all tags and associated objects when fetching
                           or do not fetch any tag at all (--no-tags)
    -t, --track <branch>    branch(es) to track
    -m, --master <branch>   master branch
    --mirror[=(push|fetch)] set up remote as a mirror to push to or fetch from

user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1 (master)
$ git remote
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1 (master)
$ git remote add origin https://github.com/zalihat/Activity1.git
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1 (master)
$ git remote
origin
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1 (master)
$ git push origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 218 bytes | 72.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'master' on GitHub by visiting:
remote:   https://github.com/zalihat/Activity1/pull/new/master
To https://github.com/zalihat/Activity1.git
 * [new branch]      master -> master
user@DESKTOP-T97A0A4 MINGW64 ~/Documents/Hamoye AI lab/Activity1 (master)
$
```

Figure 56: Push changes to the remote repository.

## 10. Compare and pull request;

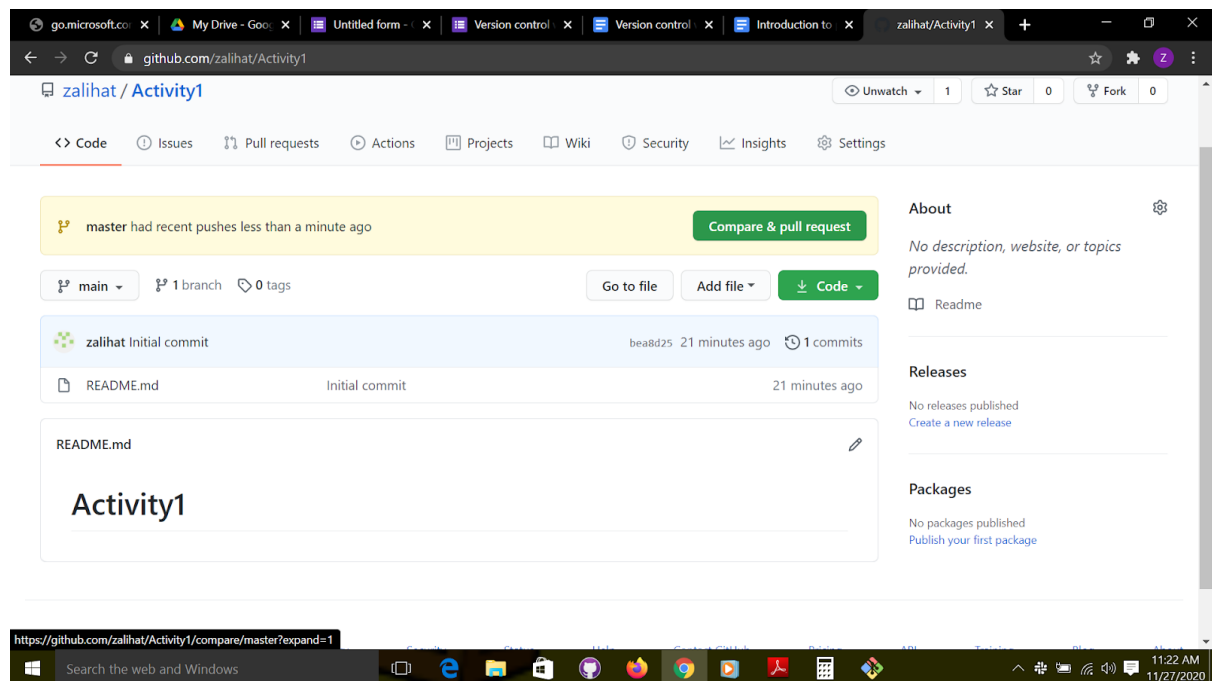


Figure 57: compare changes and create a pull request.

11. As shown above, the changes are not reflecting because the branch we pushed to was master not main. Hence, just click on “main “and change it to “master” as shown below;

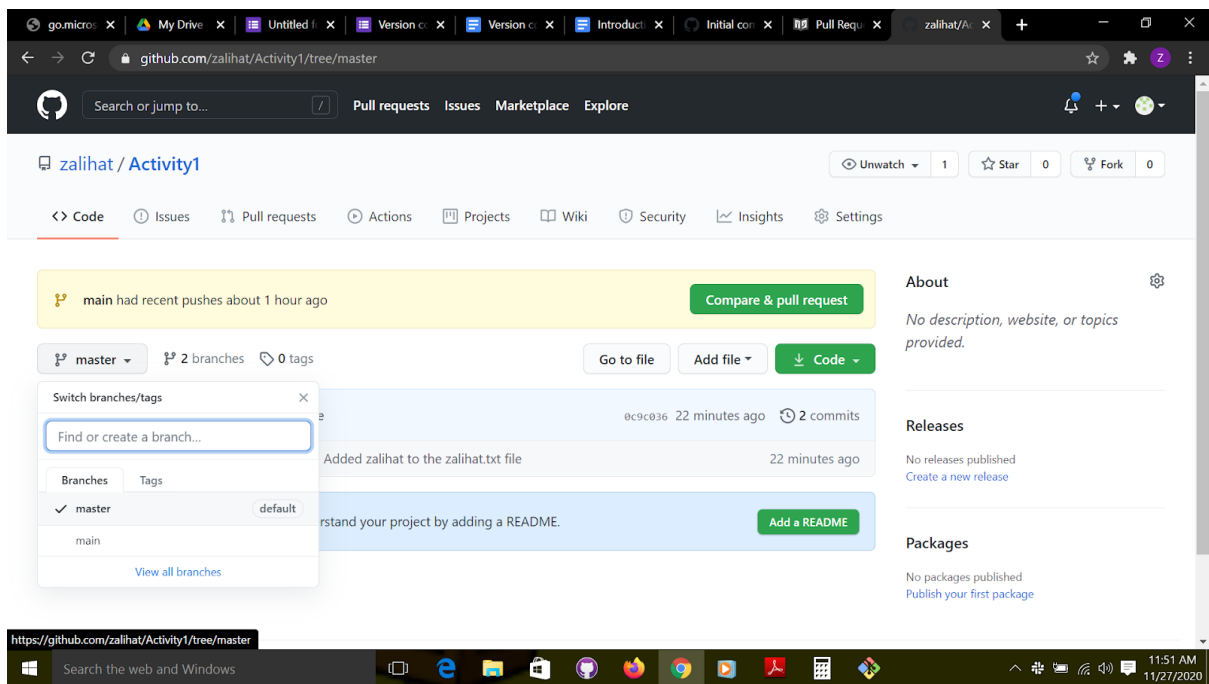


Figure 58: switch from branch “main” to branch “master”  
Copy the link to your repository as shown below;

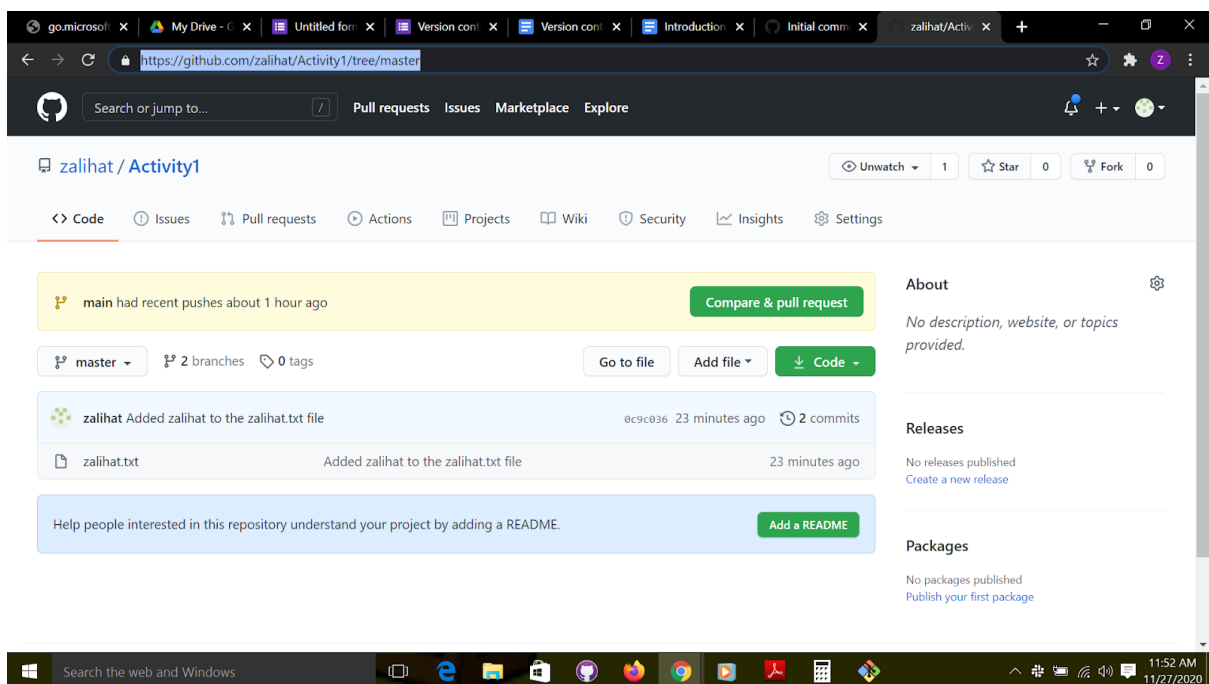


Figure 59: copy remote repository’s url.

Congratulations, You have successfully created a local repository, made changes to it, created a remote repository, linked it to the local repository, and pushed your changes to the remote repository. Now you can share your code with friends by just copying the link to the repository. Easy, yeah?. Copy the link to your repo and share it with me. Note that this is not compulsory.

Link for submission -

<https://forms.gle/sskJwgu2zkeuSkQ37>