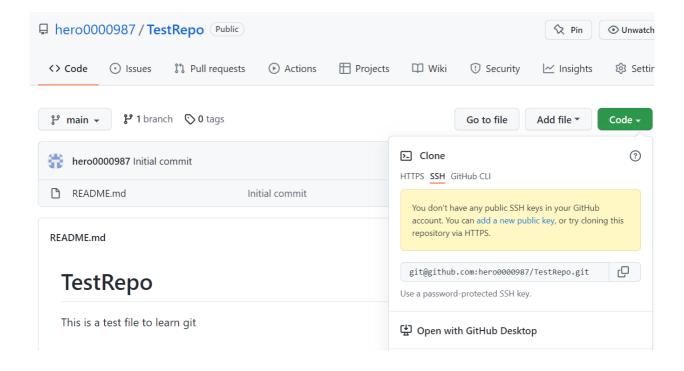
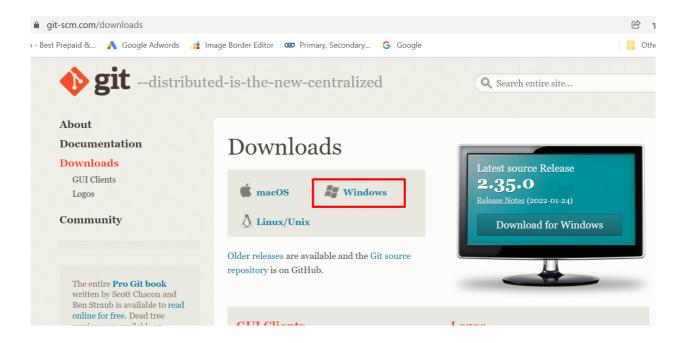


Git-Hub

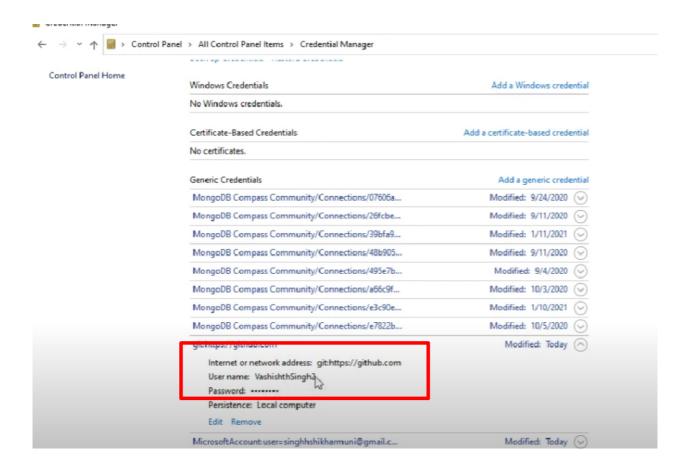
- 1. Create git account
- create a unique Repo for unique project.



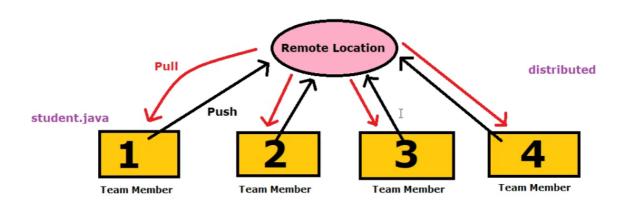
2. Download & install git



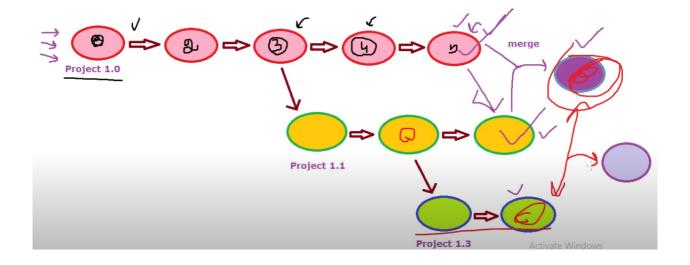
3. Remove the old GIT Credentials if saved [optional]



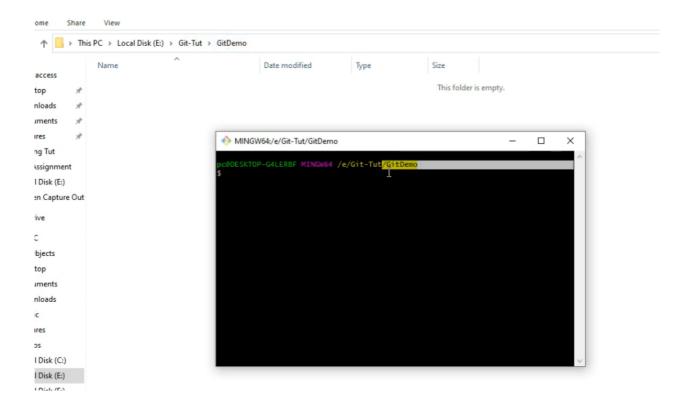
⇒ Distributed Version Control System



Git is a free and open source distributed version control system designed to handle everything from small to very large projects with speed and efficiency.



- 4. Working With Remote Repositories
- open the folder (in git bash) where you want to store the files.



Git config command: to check the git configuration

```
git config --list
```

Setting the git user id & password

```
$ git config --global user.name "ImDwivedi1"
$ git config --global user.email "Himanshudubey481@gmail.com"
```

```
MINGW64:/e/Git-Tut/GitDemo

$ git config --list
diff.astextplain.textconv=astextplain
filter.lfs.clean=git-lfs clean -- %f
filter.lfs.smudge=git-lfs smudge -- %f
filter.lfs.process=git-lfs filter-process
filter.lfs.required=true
http.sslbackend=openssl
http.sslbackend=openssl
http.sslcainfo=C:/Program Files/Git/mingw64/ssl/certs/ca-bundle.crt
core.autocrlf=true
core.symlinks=false
pull.rebase=false
credential.helper=manager-core
credential.https://dev.azure.com.usehttppath=true
init.defaultbranch=master

pc@DESKTOP-G4LERBF MINGw64 /e/Git-Tut/GitDemo
$ git config --global user.name "MuniSingh"

pc@DESKTOP-G4LERBF MINGw64 /e/Git-Tut/GitDemo
$ git config --global user.email "vut7077@veltechuniv.edu.in"

pc@DESKTOP-G4LERBF MINGw64 /e/Git-Tut/GitDemo
$ git config --global user.email "vut7077@veltechuniv.edu.in"
```

 \Rightarrow fire the same command to check if you have properly setted the git hub id and password.

```
pc@DESKTOP-G4LERBF MINGW64 /e/Git-Tut/GitDemo

$ git config --list
diff.astextplain.textconv=astextplain
filter.lfs.clean=git-lfs clean -- %f
filter.lfs.smudge=git-lfs smudge -- %f
filter.lfs.process=git-lfs filter-process
filter.lfs.required=true
http.sslbackend=openssl
http.sslcainfo=C:/Program Files/Git/mingw64/ssl/certs/ca-bundle.crt
core.autocrlf=true
core.symlinks=false
pull.rebase=false
credential.helper=manager-core
credential.https://dev.azure.com.usehttppath=true
init.defaultbranch=master
user.name=Mun1Singh
user.email=Vut7077@veltechuniv.edu.in

pc@DESKTOP-G4LERBF MINGW64 /e/Git-Tut/GitDemo
$
```

or.

```
git config user.name <= to check the id
git config user.email <= to check the email-id
```

```
pc@DESKTOP-G4LERBF MINGW64 /e/Git-Tut/GitDemo
$ git config user.name
MuniSingh

pc@DESKTOP-G4LERBF MINGW64 /e/Git-Tut/GitDemo
$ git config user.email
vut7077@veltechuniv.edu.in
```

Git Init command:

This command is used to create *a local repository*.

→ init command will initialize an empty repository.

```
git init Demo
```

```
HiMaNshU@HiMaNshU-PC MINGW64 ~/Desktop

$ git init Demo
Initialized empty Git repository in C:/Users/HiMaNshU/Desktop/Demo/.git/

HiMaNshU@HiMaNshU-PC MINGW64 ~/Desktop

$ |
```

Git touch command:

The *touch command* is the easiest way to create new file (locally on your computer).

```
his PC > Local Disk (E:) > Git-Tut > GitDemo
                         Date modified
                                      Type
                                                 Size
  file1
                      credential.helper=manager-core
                     credential.https:I//dev.azure.com.usehttppath=tru
init.defaultbranch=master
                      user.name=MuniSingh
                     user.email=vut7077@veltechuniv.edu.in
                       c@DESKTOP-G4LERBF MINGW64 /e/Git-Tut/GitDemo
                       git config user.name
                      MuniSingh
                        @DESKTOP-G4LERBF MINGW64 /e/Git-Tut/GitDemo
                      git config user.email
ut7077@veltechuniv.edu.in
                                              MINGW64 /e/Git-Tut/GitDemo
                        touch file1.txt
                         DESKTOP-G4LERBF
                                            MINGW64 /e/Git-Tut/GitDemo
```

Git status command:

- The status command is used to display the state of the working directory
- It allows you to see which changes have been staged, which haven't, and which files aren?t being **tracked** by Git.

ex.

```
global@DESKTOP-ML4PC6H MINGW64 ~/Music/GIt hub/demo repo 1
$ git status
fatal: not a git repository (or any of the parent directories): .git
global@DESKTOP-ML4PC6H MINGW64 ~/Music/GIt hub/demo repo 1
```

Because currently its not a git hub repo

→ To make it a github repo we will use init command

Git Init command:

This command is used to create a local repository.

```
global@DESKTOP-ML4PC6H MINGW64 ~/Music/GIt hub/demo repo 1
$ git init
Initialized empty Git repository in C:/Users/global/Music/GIt hub/demo repo 1/.g
it/
```

→ After its successfully initialized as git Repo it creates a hidden file in the folder



→ checking again the status of files

```
global@DESKTOP-ML4PC6H MINGW64 ~/Music/GIt hub/demo repo 1 (master)

S git status
on branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        file1.txt

nothing added to commit but untracked files present (use "git add" to track)

global@DESKTOP-ML4PC6H MINGW64 ~/Music/GIt hub/demo repo 1 (master)

S |
```

Git add command:

To add the file for tracking

```
global@DESKTOP-ML4PC6H MINGW64 ~/Music/GIt hub/demo repo 1 (master)

$ git add file1.txt

$ git status
on branch master

No commits yet

Changes to be committed:
    (use "git rm --cached <file>..." to unstage)
    new file: file1.txt
```

green color \Rightarrow for tracked files red color \Rightarrow for un-tracked files

File1

or.

```
git add .
```

→ To track all the files at once

Git commit command:

Commit command is used in two scenarios. They are as follows.

⇒ Git commit -m

- This command changes the head.
- It records or snapshots the file permanently in the version history with a message.

```
$ git commit -m " Commit Message"
```

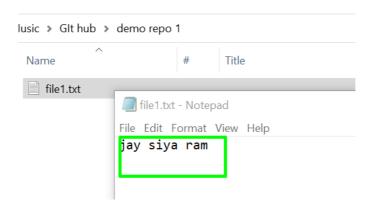
```
global@DESKTOP-ML4PC6H MINGW64 ~/Music/GIt hub/demo repo 1 (master)
$ git commit -m "initial1 commit"
[master (root-commit) 8d7258c] initial1 commit
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 file1.txt

global@DESKTOP-ML4PC6H MINGW64 ~/Music/GIt hub/demo repo 1 (master)
$ git status
On branch master
nothing to commit, working tree clean
```

 \rightarrow EVERYtime u need to commit if u want ur changes to be saved on remote location

Ex.

· made some changes in the file



- If we want to save the changes in the github repo we need to again track the file and add to commit
- → Tracking file1.txt

```
global@DESKTOP-ML4PC6H MINGW64 ~/Music/GIt hub/demo repo 1 (master)
$ git add .

global@DESKTOP-ML4PC6H MINGW64 ~/Music/GIt hub/demo repo 1 (master)
$ git commit -m "Initial2 baby"
[master d4aff88] Initial2 baby
1 file changed, 1 insertion(+)

global@DESKTOP-ML4PC6H MINGW64 ~/Music/GIt hub/demo repo 1 (master)
$ git status
On branch master
nothing to commit, working tree clean

global@DESKTOP-ML4PC6H MINGW64 ~/Music/GIt hub/demo repo 1 (master)
```

⇒ Git commit -a

• This command commits any files added in the repository with git add and also commits any files you've changed since then.

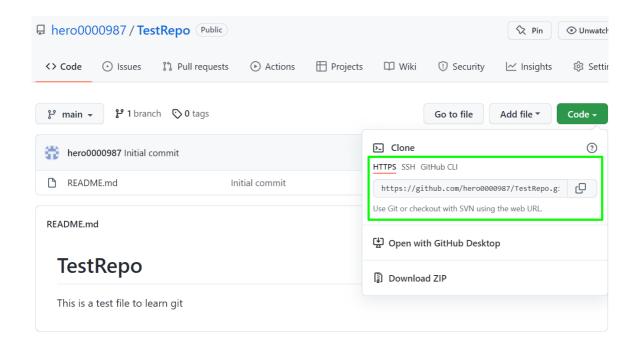
Pushing the file inside the git repo:

→ git repo remote origin

origin ⇒ the git hub repo

Git remote Command:

- Git Remote command is used to connect your local repository to the remote server.
- This command allows you to create, view, and delete connections to other repositories.
- These connections are more like bookmarks rather than direct links into other repositories.
- This command doesn't provide real-time access to repositories.
- ⇒ Copy http of repo

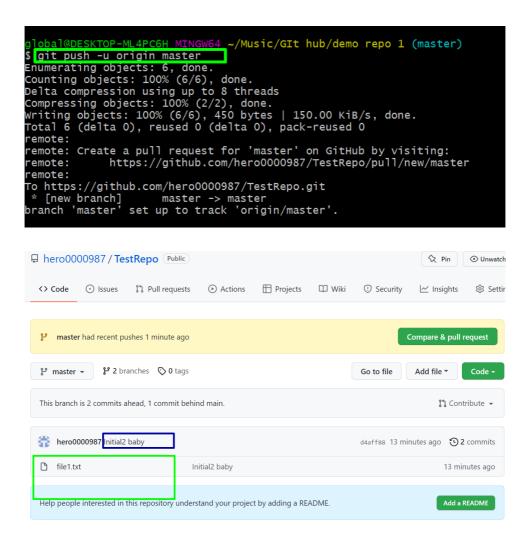


```
global@DESKTOP-ML4PC6H MINGW64 ~/Music/GIt hub/demo repo 1 (master)
$ git remote add origin https://github.com/hero0000987/TestRepo.git
global@DESKTOP-ML4PC6H MINGW64 ~/Music/GIt hub/demo repo 1 (master)
$ git remote
origin
```

⇒ Pushing the files inside the origin [git hub repo]

Git push origin master:

This command sends the changes made on the master branch, to your remote repository.



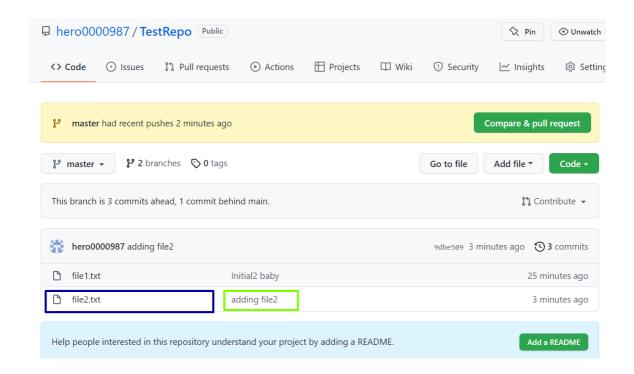
Summarize:

ex. adding file2.txt to origin (git hub repo)

```
$ git status
On branch master
Your branch is up to date with 'origin/master'.
Untracked files:
   (use "git add <file>..." to include in what will be committed)
nothing added to commit but untracked files present (use "git add" to track)
global@DESKTOP-ML4PC6H MINGW64 ~/Music/GIt hub/demo repo 1 (master)
$ git add .
global@DESKTOP-ML4PC6H MINGW64 ~/Music/GIt hub/demo repo 1 (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.
Changes to be committed:

(use "git restore --staged <file>..." to unstage)
          new file:
                          file2.txt
global@DESKTOP-ML4PC6H MINGW64 ~/Music/GIt hub/demo repo 1 (master)
$ git commit -m "adding file2"
[master 9dbe509] adding file2
1 file changed 1 incompines
 1 file changed, 1 insertion(+)
 create mode 100644 file2.txt
global@DESKTOP-ML4PC6H MINGW64 ~/Music/GIt hub/demo repo 1 (master) $ git push -u origin master
$ git push -u origin master
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 289 bytes | 144.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/hero0000987/TestRepo.git
    d4aff88..9dbe509 master -> master
branch 'master' set up to track 'origin/master'.
$ git status
On branch master
Your branch is up to date with 'origin/master'.
nothing to commit, working tree clean
```

 \rightarrow No need to add origin again after commiting the files, as it was add previously.



Concept:

Local repo →



Remote repo →

