Project Day-1

Date:21-02-2023

- **Without Version Control System**

  → No collaboration between the team.
  → Once saved all changes are permanent.
  → Since there is no backup maintained.

- **All these problems can be solved with the help of Version Control System.**
  - Best Version Control Systems are : GitHub,GitLab,etc.

WorkFlow oF Git

1. **Remote Repository:** All the changes that Collaborators make just uploaded to Remote repository.
2. **Local Repository:** Users access all the files to the local Repository and then make changes. Once they have a set of changes, push changes to the remote repository.
3. **Working Copy:** it is a User Active Directory,the user modifies the existing file and creates the new file.
4. **Staging Area:** All the modified files commit a place.Once you make a changes then commit the changes before committing you just put them into a staging area.it is a place between working copy and remote repository.

The Commands that perform these Actions

CLONE: create copy of existing remote repository inside the local repository.
COMMIT: commits all the files in the staging area to the local repository.
PUSH: pushes all the changes made in the local repository to the remote repository.
FETCH: collects the changes made in the remote repository and copies them to the local Repository.
PULL: Similar to fetch.

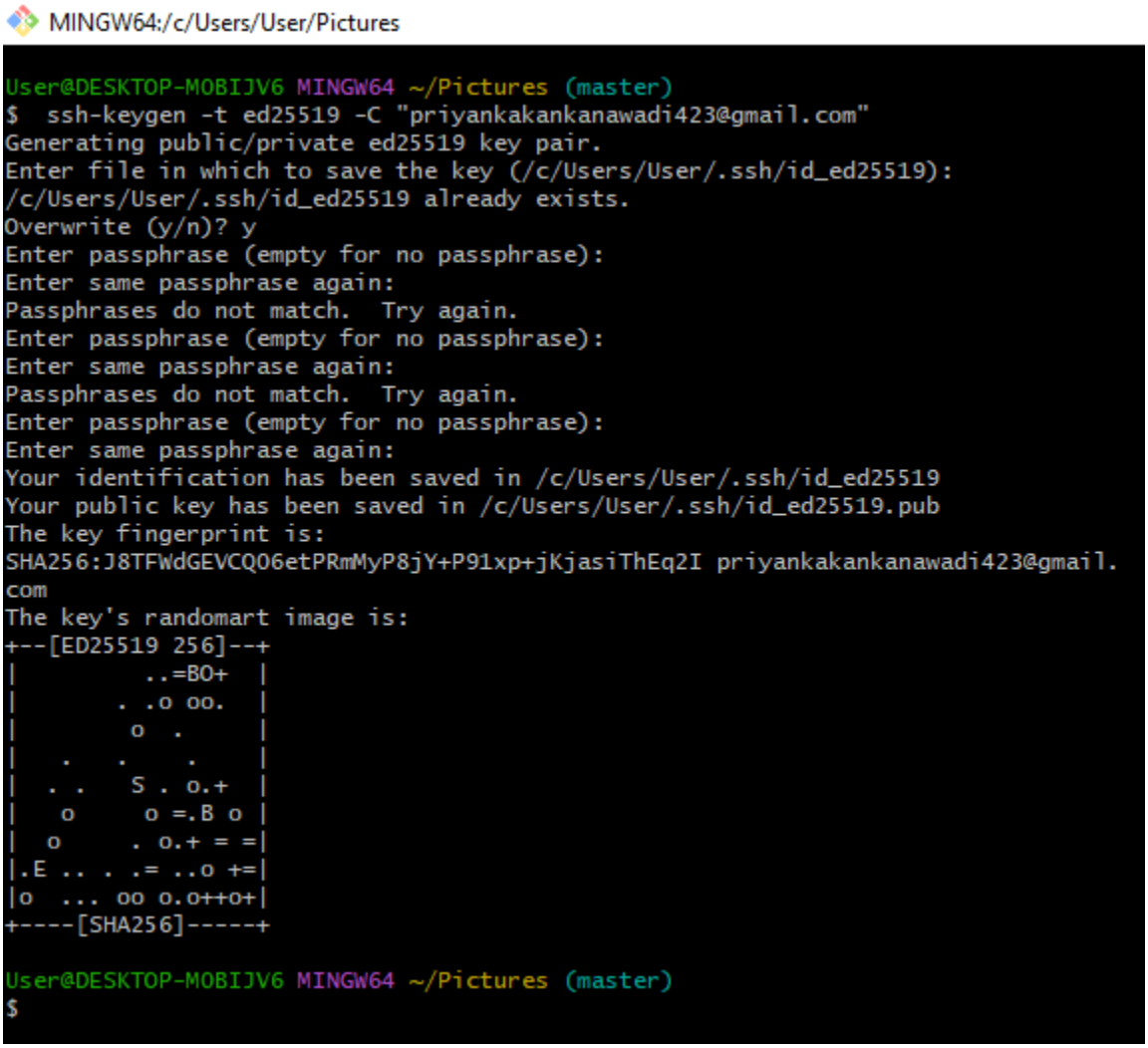
Need to Generate SSH Key

You Can connect github without using supplying username and personal access Token at each visit.

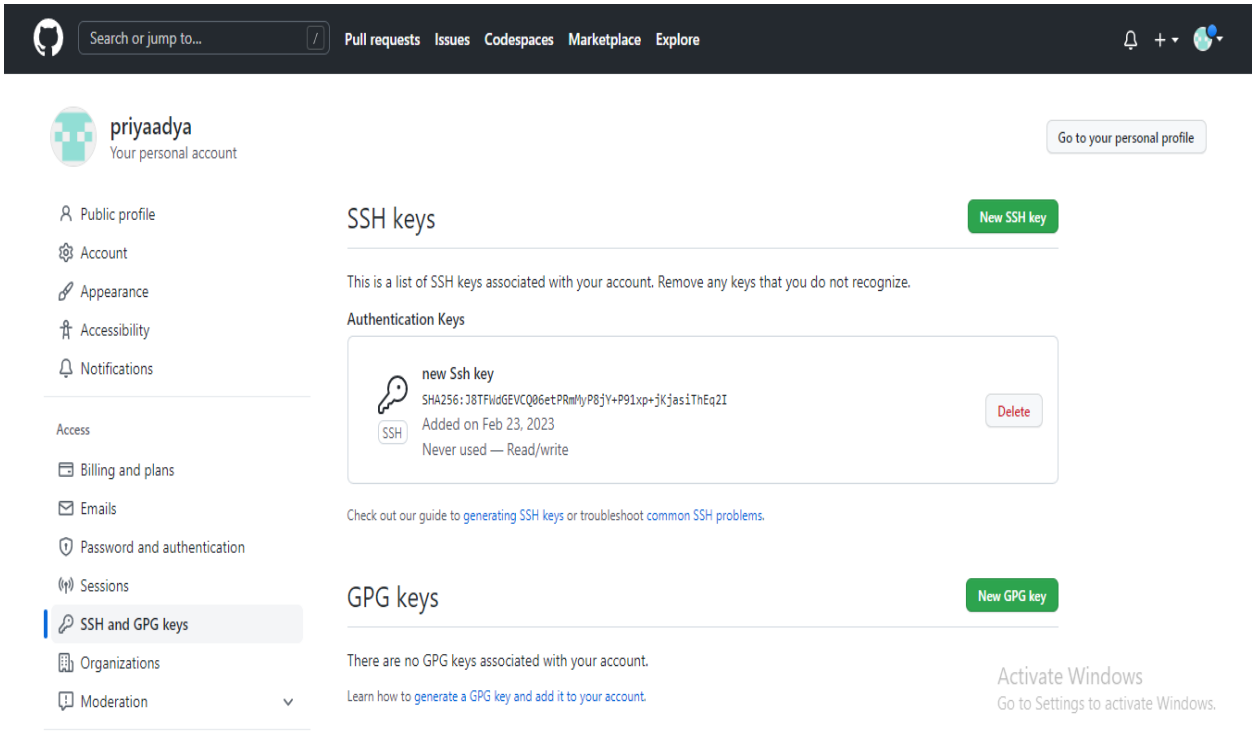
Project Day-2 **Date:22-2-2023**

Steps to be followed:

- ➔ Go to github account
- ➔ select settings
- ➔ Select ssh key and GPG keys
- ➔ Next select new ssh key
- ➔ Search in google Generating ssh key
- ➔ `$ ssh-keygen -t ed25519 -C "your_email@example.com" take this text`
- ➔ Open git bash at anywhere
- ➔ Paste that text you copied
- ➔ Then enter enter
- ➔ One key will be generated and it showing one location



- ➔ Go to the specified location and copy that generated key
- ➔ Go to github select new ssh key
- ➔ Title : anything you want Key: paste that copied key
- ➔ Click on add SSH key
- ➔ Confirm git access password



Cloning from remote to local repository using ssh key

- ➔ Go to github account from which repository you want take that one copy ssh key from code
- ➔ Git Bash anywhere you want
- ➔ Use clone and paste that copied code

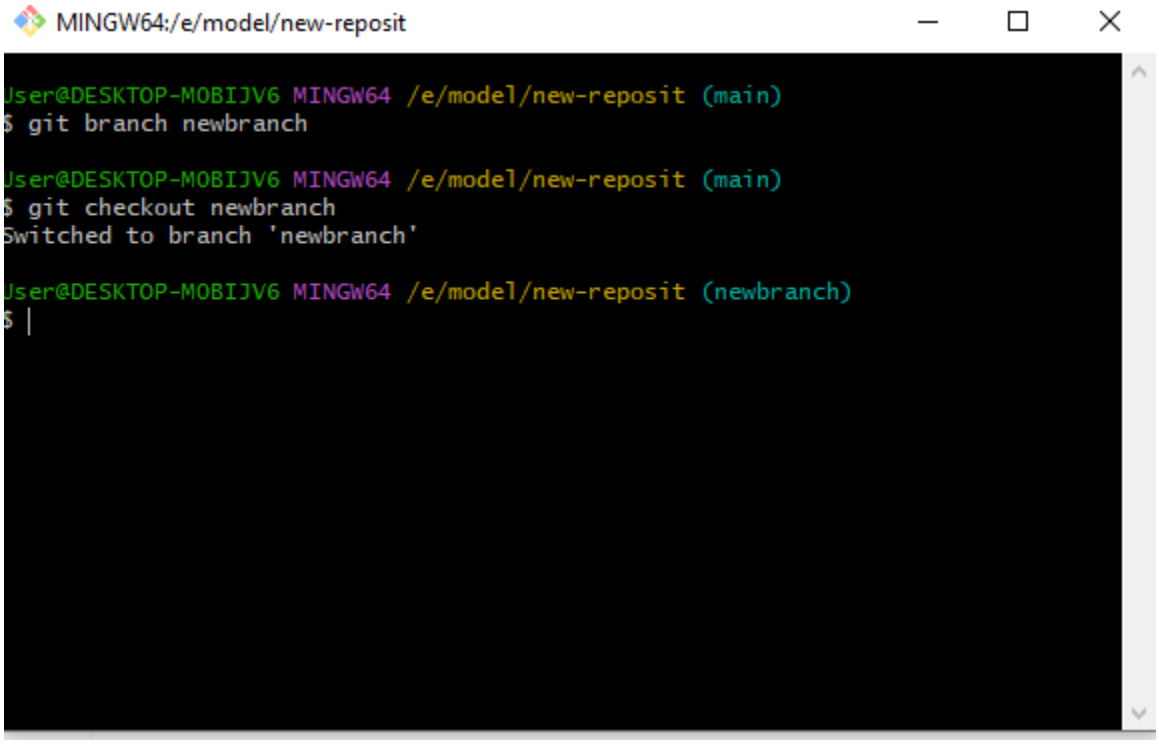
- ➔ After cloning you will get a remote repository in your local repository .If you want to add any new file from the local repository create a new file and git bash from where the file is located.
- ➔ Check git status
- ➔ Git add -A for adding files
- ➔ Git commit -m “message”
- ➔ Git push -u origin master

Project Day-3

Creating new branch,push and pull the request

Steps to be followed:

- ➔ Clone project
- ➔ Create a new branch in local repository
- ➔ Git branch branch name
- ➔ Git checkout branch name

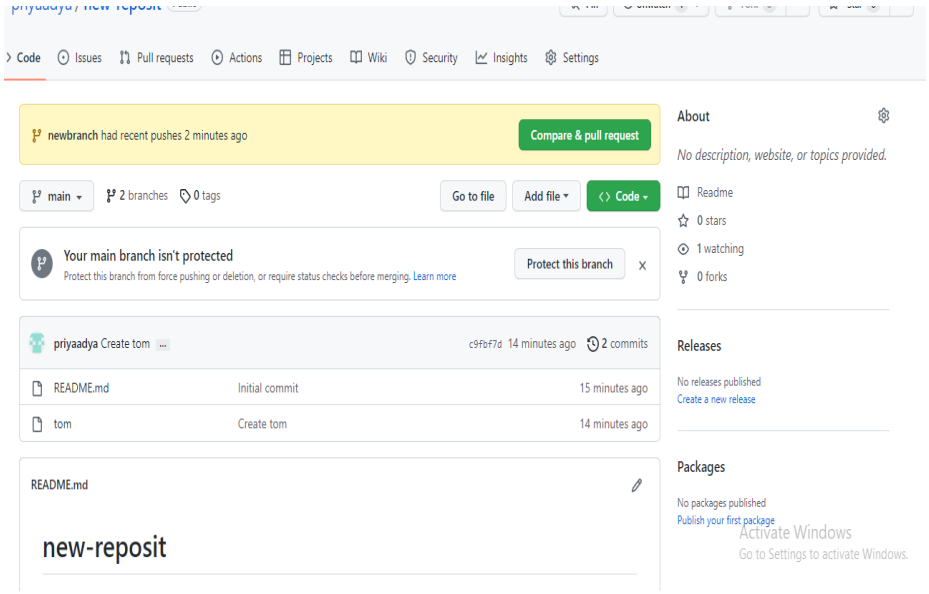


➔ Make some changes in local repository and push

MINGW64:/e/model/new-reposit

```
User@DESKTOP-M0BIJV6 MINGW64 /e/model/new-reposit (newbranch)
$ git add -A

User@DESKTOP-M0BIJV6 MINGW64 /e/model/new-reposit (newbranch)
$ git commit -m "added"
[newbranch 5e68da4] added
 1 file changed, 4 insertions(+)

User@DESKTOP-M0BIJV6 MINGW64 /e/model/new-reposit (newbranch)
$ git push
fatal: The current branch newbranch has no upstream branch.
To push the current branch and set the remote as upstream, use

    git push --set-upstream origin newbranch

To have this happen automatically for branches without a tracking
upstream, see 'push.autoSetupRemote' in 'git help config'.


User@DESKTOP-M0BIJV6 MINGW64 /e/model/new-reposit (newbranch)
$ git ^C

User@DESKTOP-M0BIJV6 MINGW64 /e/model/new-reposit (newbranch)
$ git  git push --set-upstream origin newbranch
git: 'git' is not a git command. See 'git --help'.

The most similar command is
        init

User@DESKTOP-M0BIJV6 MINGW64 /e/model/new-reposit (newbranch)
$ ^C

User@DESKTOP-M0BIJV6 MINGW64 /e/model/new-reposit (newbranch)
$  git push --set-upstream origin newbranch
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 311 bytes | 155.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'newbranch' on GitHub by visiting:
remote:      https://github.com/priyaadya/new-reposit/pull/new/newbranch
remote:
To github.com:priyaadya/new-reposit.git
 * [new branch]      newbranch -> newbranch
branch 'newbranch' set up to track 'origin/newbranch'.

User@DESKTOP-M0BIJV6 MINGW64 /e/model/new-reposit (newbranch)
```

- ➔ Go to remote repo and compare and pull request
  - ◆ Create pull request
  - ◆ Merge pull request
    - Confirm merge



Importing project in eclipse

- ➔ Create one folder
- ➔ Open git bash
- ➔ Git clone https://github.com/Darshan008-pheonix/Emmployee_DB.git

```
User@DESKTOP-MOBIJV6 MINGW64 /e/project folder
$ git clone https://github.com/Darshan008-pheonix/Emmployee_DB.git
Cloning into 'Emmployee_DB'...
remote: Enumerating objects: 45, done.
remote: Counting objects: 100% (45/45), done.
remote: Compressing objects: 100% (33/33), done.
remote: Total 45 (delta 3), reused 35 (delta 1), pack-reused 0
Receiving objects: 100% (45/45), 63.55 KiB | 9.08 MiB/s, done.
Resolving deltas: 100% (3/3), done.

User@DESKTOP-MOBIJV6 MINGW64 /e/project folder
$
```

- ➔ One file is imported in that folder

➔ Go to eclipse => file =>open project from file system=>browse that respective folder from directory=>choose the project finish.