Using GIT as local VCS. Steps to follow:

Step:

Create a directory 'project_dir' & cd to 'project_dir'

2. Initialize git version database. (git init)

```
MINGW64:/e/Assignments/git and GitHub/project_dir — — X

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir

$ git init
Initialized empty Git repository in E:/Assignments/git and GitHub/project_dir/.g

it/

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)

$
```

3. Create a new file index.html.

```
MINGW64:/e/Assignments/git and GitHub/project_dir — — X

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)

$ touch index.html

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)

$
```

4. Check the git status. You should find index.html as untracked file.

5. Stage the index.html file.

6. Commit index.html

```
MINGW64:/e/Assignments/git and GitHub/project_dir — 

shrav@DESKTOP-PPNSUHQ MINGw64 /e/Assignments/git and GitHub/project_dir (master)

git add index.html

shrav@DESKTOP-PPNSUHQ MINGw64 /e/Assignments/git and GitHub/project_dir (master)

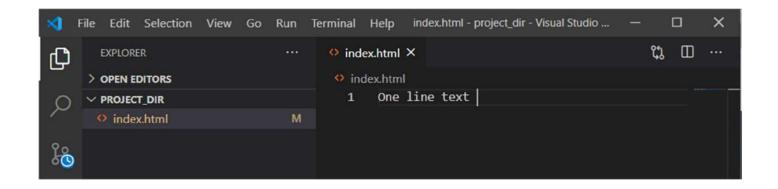
git commit -m 'Initial commit'
[master (root-commit) 950e061] Initial commit

1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 index.html

shrav@DESKTOP-PPNSUHQ MINGw64 /e/Assignments/git and GitHub/project_dir (master)

$
```

7. Make few changes in index.html & create a new file info.txt file



```
MINGW64:/e/Assignments/git and GitHub/project_dir — — X

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)

$ code .

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)

$ touch info.txt

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)

$ |
```

8. Check git status. You should find index.html & info.txt as untracked files.

```
**MINGW64:/e/Assignments/git and GitHub/project_dir  

**shrav@DESKTOP-PPNSUHQ MINGw64 /e/Assignments/git and GitHub/project_dir (master)

**sgit status

On branch master

Changes not staged for commit:

(use "git add <file>..." to update what will be committed)

(use "git restore <file>..." to discard changes in working directory)

modified: index.html

Untracked files:

(use "git add <file>..." to include in what will be committed)

info.txt

no changes added to commit (use "git add" and/or "git commit -a")

**shrav@DESKTOP-PPNSUHQ MINGw64 /e/Assignments/git and GitHub/project_dir (master)

**shrav@DESKTOP-PPNSUHQ MINGw64 /e/Assignments/git and GitHub/project_dir (master)

**shrav@DESKTOP-PPNSUHQ MINGw64 /e/Assignments/git and GitHub/project_dir (master)
```

9. Configure GIT to ignore all txt files.

```
MINGW64:/e/Assignments/git and GitHub/project_dir — — X

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)
$ touch .gitignore

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)
$
```



 Again check the git status. You should find only index.html as untracked file.

```
MINGW64:/e/Assignments/git and GitHub/project_dir — X

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)

sit status
On branch master
Changes not staged for commit:
    (use "git add <file>..." to update what will be committed)
    (use "git restore <file>..." to discard changes in working directory)
    modified: index.html

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

no changes added to commit (use "git add" and/or "git commit -a")

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)

$ |
```

11. State & commit index.html

```
MINGW64:/e/Assignments/git and GitHub/project_dir — 

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)

git add index.html

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)

git commit -m 'One line text added in file'

[master 0f0819e] One line text added in file

1 file changed, 1 insertion(+)

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)

$ |
```

12. Log all your comments so far.

```
MINGW64:/e/Assignments/git and GitHub/project_dir — X

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)

$ git log
commit 0f0819ec324230bd75e503b833958bc791f3be35 (HEAD -> master)
Author: Shravan Kumar S Bagewadi <shravansb1234@gmail.com>
Date: Sat Jan 9 21:00:14 2021 +0530

One line text added in file

commit 950e06151d801962d3769dbe444cfaf4fae1bfe2
Author: Shravan Kumar S Bagewadi <shravansb1234@gmail.com>
Date: Sat Jan 9 20:50:12 2021 +0530

Initial commit

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)

$ |
```

13. Make some changes in index.html



14. Revert the change made in the previous step using git command.

```
MINGW64:/e/Assignments/git and GitHub/project_dir — — X

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)

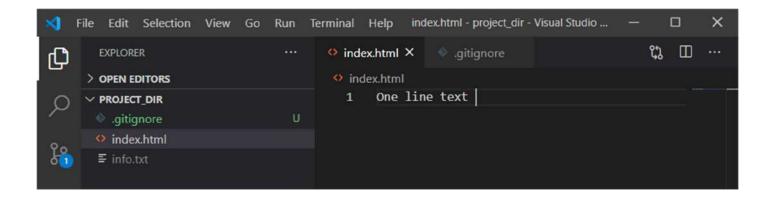
$ git checkout -- .

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)

$ code .

shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)

$
```



15. Again change index.html



16. Stage index.html

```
shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)
$ git add index.html
shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)
$ |
```

17. Revert back the last stage.

18. Rename 'add' command to 'my-add'.

19. Using my add command Stage index.html again & commit the changes.

```
×
 MINGW64:/e/Assignments Implementation/git and GitHub/project_dir
                                                                                              shrav@DESKTOP-PPNSUHQ MINGw64 /e/Assignments Implementation/git and GitHub/proje
$ git my-add index.html
 hrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments Implementation/git and GitHub/proje
ct_dir (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)

modified: index.html
Untracked files:
(use "git add <file>..." to include in what will be committed)
 hrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments Implementation/git and GitHub/proje
 t_dir (master)
 MINGW64:/e/Assignments/git and GitHub/project_dir
                                                                                              ×
shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)
$ git commit -m "Two line text in file"
[master ff5745d] Two line text in file
1 file changed, 2 insertions(+), 1 deletion(-)
 hrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master) \
 MINGW64:/e/Assignments/git and GitHub/project_dir
                                                                                              X
                              INGW64 /e/Assignments/git and GitHub/project_dir (master) A
$ git log
commit ff5745d4502e82c06037cea866e5d49cfd260d89 (HEAD -> master)
Author: Shravan Kumar S Bagewadi <shravansb1234@gmail.com>
Date: Sat Jan 9 21:12:39 2021 +0530
     Two line text in file
    mit 0f0819ec324230bd75e503b833958bc791f3be35
Author: Shravan Kumar S Bagewadi <shravansb1234@gmail.com>
Date: Sat Jan 9 21:00:14 2021 +0530
     One line text added in file
commit 950e06151d801962d3769dbe444cfaf4fae1bfe2
Author: Shravan Kumar S Bagewadi <shravansb1234@gmail.com>
Date: Sat Jan 9 20:50:12 2021 +0530
     Initial commit
 hrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)
```

20. Revert the last commit.

```
MINGW64:/e/Assignments/git and GitHub/project_dir
                                                                             X
shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master) ^
$ git log
commit ff5745d4502e82c06037cea866e5d49cfd260d89 (HEAD -> master)
Author: Shravan Kumar S Bagewadi <shravansb1234@gmail.com>
Date: Sat Jan 9 21:12:39 2021 +0530
    Two line text in file
commit 0f0819ec324230bd75e503b833958bc791f3be35
Author: Shravan Kumar S Bagewadi <shravansb1234@gmail.com>
        Sat Jan 9 21:00:14 2021 +0530
Date:
    One line text added in file
commit 950e06151d801962d3769dbe444cfaf4fae1bfe2
Author: Shravan Kumar S Bagewadi <shravansb1234@gmail.com>
Date: Sat Jan 9 20:50:12 2021 +0530
    Initial commit
shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)
 MINGW64:/e/Assignments/git and GitHub/project_dir
                                                                             X
shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)
$ git reset --hard HEAD~1
HEAD is now at Of0819e One line text added in file
shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)
                                                                                    X
 MINGW64:/e/Assignments/git and GitHub/project_dir
                                                                             П
shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)
$ git log
commit 0f0819ec324230bd75e503b833958bc791f3be35 (HEAD -> master)
Author: Shravan Kumar S Bagewadi <shravansb1234@gmail.com>
        Sat Jan 9 21:00:14 2021 +0530
    One line text added in file
commit 950e06151d801962d3769dbe444cfaf4fae1bfe2
Author: Shravan Kumar S Bagewadi <shravansb1234@gmail.com>
        Sat Jan 9 20:50:12 2021 +0530
Date:
    Initial commit
shrav@DESKTOP-PPNSUHQ MINGW64 /e/Assignments/git and GitHub/project_dir (master)
```

Remote repository:

```
MINGW64:/e/Assignments/git and GitHub/project_dir

shrav@DESKTOP-PPNSUHQ MINGw64 /e/Assignments/git and GitHub/project_dir (master)

$ git remote add origin https://github.com/shravansb7040/git1.git

shrav@DESKTOP-PPNSUHQ MINGw64 /e/Assignments/git and GitHub/project_dir (master)

$ git push -u origin master
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (6/6), 479 bytes | 479.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0

To https://github.com/shravansb7040/git1.git

* [new branch] master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.

shrav@DESKTOP-PPNSUHQ MINGw64 /e/Assignments/git and GitHub/project_dir (master)

$
```

GitHub Link:

https://github.com/shravansb7040/git1