

# Assignment-1 Git

Task-1

Task-2

Task-3

## ▼ Task-1

- Demonstrate minimum of 15 basic Git command with explanation and screenshot.

### Solution:

#### 1. git init

- Initializes the git repository

```
PS C:\Naveen\DataScienceProjects\gitAssignment> git init
Initialized empty Git repository in C:/Naveen/DataScienceProjects/gitAssignment/.git/
```

#### 2. git config —global <<config\_name>> <<config\_value>>

- Configures the user name/user email for git

```
PS C:\Naveen\DataScienceProjects\gitAssignment> git config --global user.name Naveen Karanth
PS C:\Naveen\DataScienceProjects\gitAssignment>
```

#### 3. git remote add origin <<url>>

- Adds the remote repository URL to the git as 'origin'.

```
PS C:\Naveen\DataScienceProjects\gitAssignment> git remote add origin https://github.com/nav52/gitAssignment.git
PS C:\Naveen\DataScienceProjects\gitAssignment>
```

#### 4. git remote -v

- Verifies the origin to see if the fetch and push URLs are correctly configured.

```
PS C:\Naveen\DataScienceProjects\gitAssignment> git remote -v
origin https://github.com/nav52/gitAssignment.git (fetch)
origin https://github.com/nav52/gitAssignment.git (push)
```

#### 5. git pull origin main

- Pulls the remote repository to the local repository.

```
PS C:\Naveen\DataScienceProjects\gitAssignment> git pull origin main
From https://github.com/nav52/gitAssignment
* branch      main      -> FETCH_HEAD
```

#### 6. git status

- Show the status of the files (tracked and untracked)

```
PS C:\Naveen\DataScienceProjects\gitAssignment> git status
On branch main
Changes not staged for commit:
  (use "git add/rm <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   README.md
        deleted:    src/README.nd

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

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

#### 7. git add .

- Adds all the untracked files to the staging area.

```
PS C:\Naveen\DataScienceProjects\gitAssignment> git add .
PS C:\Naveen\DataScienceProjects\gitAssignment> git status
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   README.md
        renamed:    src/README.nd -> src/README.md
```

8. `git commit -m <<Commit_message>>`

- Commits the staged files to the local repository.

```
PS C:\Naveen\DataScienceProjects\gitAssignment> git commit -m "Modified README.md"
[main dd39dac] Modified README.md
2 files changed, 1 insertion(+), 2 deletions(-)
rename src/{README.nd => README.md} (100%)
```

9. `git push origin main`

- Pushes the recent commits to the remote repository from the main branch.

```
PS C:\Naveen\DataScienceProjects\gitAssignment> git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 337 bytes | 168.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/nav52/gitAssignment.git
6d828d4..dd39dac main -> main
```

10. `git branch`

- Displays the branches in the repository.

```
PS C:\Naveen\DataScienceProjects\gitAssignment> git branch
* main
```

11. `git branch <<branch_name>>`

- Creates a new branch with the given <<branch\_name>>

```
PS C:\Naveen\DataScienceProjects\gitAssignment> git branch readmeUpdater
PS C:\Naveen\DataScienceProjects\gitAssignment> git branch
* main
  readmeUpdater
```

## 12. git checkout <<branch\_name>>

- Switches to the <<branch\_name>> from the current branch.

```
PS C:\Naveen\DataScienceProjects\gitAssignment> git checkout readmeUpdater
Switched to branch 'readmeUpdater'
```

## 13. git merge <<branch\_name>>

- Merges the <<branch\_name>> to the current branch.

```
PS C:\Naveen\DataScienceProjects\gitAssignment> git merge readmeUpdater
Updating dd39dac..931b1f0
Fast-forward
 README.md | 2 ++
 1 file changed, 2 insertions(+)
```

## 14. git branch -d <<branch\_name>>

- Deletes the branch <<branch\_name>>

```
PS C:\Naveen\DataScienceProjects\gitAssignment> git branch -d readmeUpdater
Deleted branch readmeUpdater (was 931b1f0).
```

## 15. git log

- Displays the history of commits with commit hash, Author name and email, Timestamp and commit message.

```

PS C:\Naveen\DataScienceProjects\gitAssignment> git log
commit 931b1f0a1f0ab6ffd9454e452439df88acf13659 (HEAD -> main, readmeUpdater)
Author: Naveen <naveenfaster@gmail.com>
Date: Sat Oct 1 15:25:58 2022 +0530

    Updated README from readmeUpdater branch

commit dd39dacde82acbeef6121d455c9ba0f9f5e0bbb3 (origin/main)
Author: Naveen <naveenfaster@gmail.com>
Date: Sat Oct 1 15:19:41 2022 +0530

    Modified README.md

commit 6d828d45c5ffa07bc53ecc2916457647d78af868
Author: Naveen Karanth <37159044+nav52@users.noreply.github.com>
Date: Sat Oct 1 15:02:43 2022 +0530

    Initial commit

```

## 16. git stash

Moves the current staged files into a stack and restores to the directory to previous commit.

```

PS C:\Naveen\DataScienceProjects\gitAssignment> git stash
Saved working directory and index state WIP on main: 4eff08a Page for Github pages

```

## 17. git stash pop

Pops from the stack the last stashed workspace and allows you to continue with its development.

```

PS C:\Naveen\DataScienceProjects\gitAssignment> git stash pop
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   requirements.txt

Dropped refs/stash@{0} (0f7913dd702724feb62945d5759f558b76474f34)

```

## ▼ Task-2

Consider that you want to start an open-source project in your organization. Perform all the standard operation to create a repository with minimal permission for all the users. It should contain.

1. Proper open source structure
2. Proper Readme
3. Add 2 collaborator
4. Host GitHub Pages using settings (Designed to host your personal, organization, or project pages from a GitHub repository)

**Solution:**

1. Proper open source structure

<https://github.com/nav52/gitAssignment>

2. Proper Readme

<https://github.com/nav52/gitAssignment>

3. Add 2 collaborator

## Who has access


**PUBLIC REPOSITORY**  
This repository is public and visible to anyone.  
[Manage](#)

**DIRECT ACCESS**  
2 have access to this repository. 2 collaborators.


## Manage access

☐ Select all

Type ▾

☐  **nav43een**  
Collaborator

Remove


☐  **nav725**  
Collaborator

Remove

4. Host GitHub Pages using settings (Designed to host your personal, organization, or project pages from a GitHub repository)

## GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

Your site is live at <https://nav52.github.io/gitAssignment/>  
Last deployed by  github-pages 6 minutes ago

[Visit site](#) [...](#)


## Build and deployment


### Source

Deploy from a branch ▾

### Branch

Your GitHub Pages site is currently being built from the `/docs` folder in the `main` branch. [Learn more.](#)

 main ▾

 /docs ▾

Save

Learn how to [add a Jekyll theme](#) to your site.

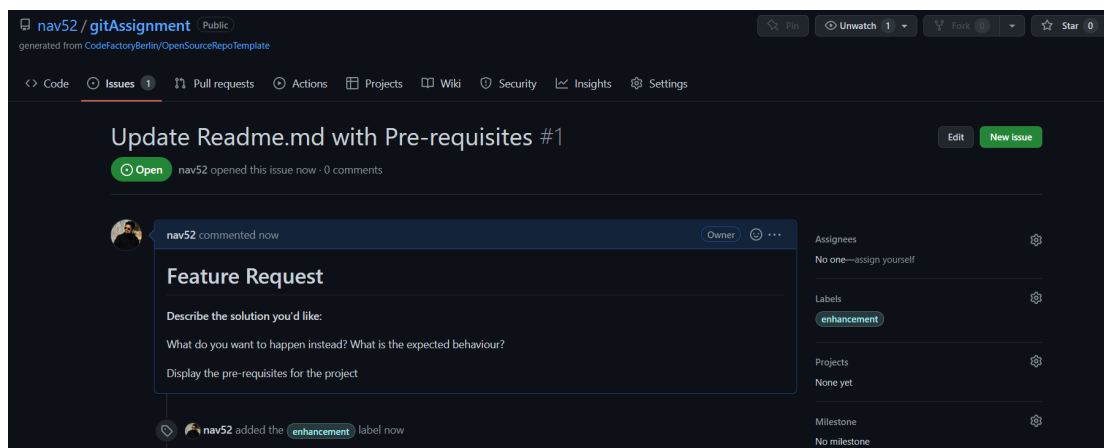
Your site was last deployed to the `github-pages` environment by the `pages build and deployment` workflow.

## ▼ Task-3

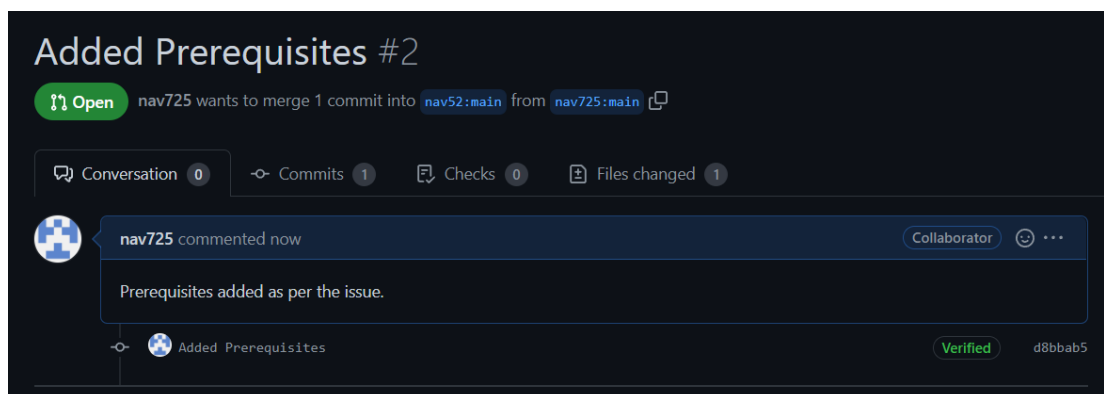
1. Create a Issue in your GitHub repository.
2. Raise a pull request.
3. Merge A pull request.
4. Reject a pull request with proper comments.
5. Add a Dependabot alerts in your GitHub.(for above cases)
6. Stash changes
7. Create a release your package
8. Setup a Projects Board for your project.

### Solution:

1. Create a Issue in your GitHub repository

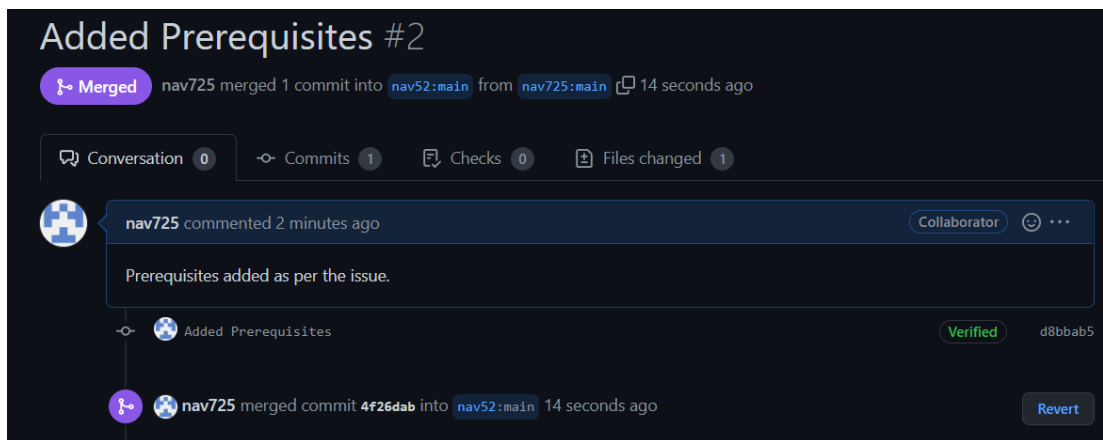


2. Raise a pull request.

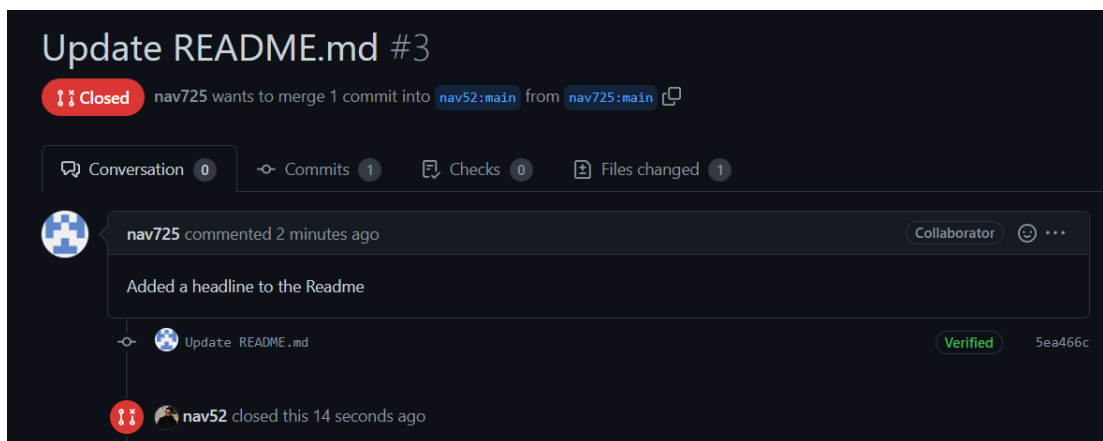




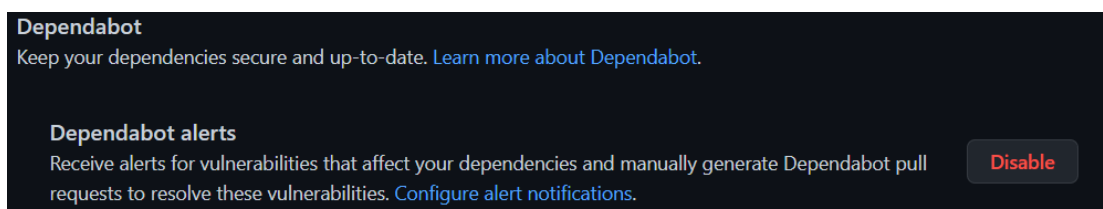
### 3. Merge A pull request.



### 4. Reject a pull request with proper comments.



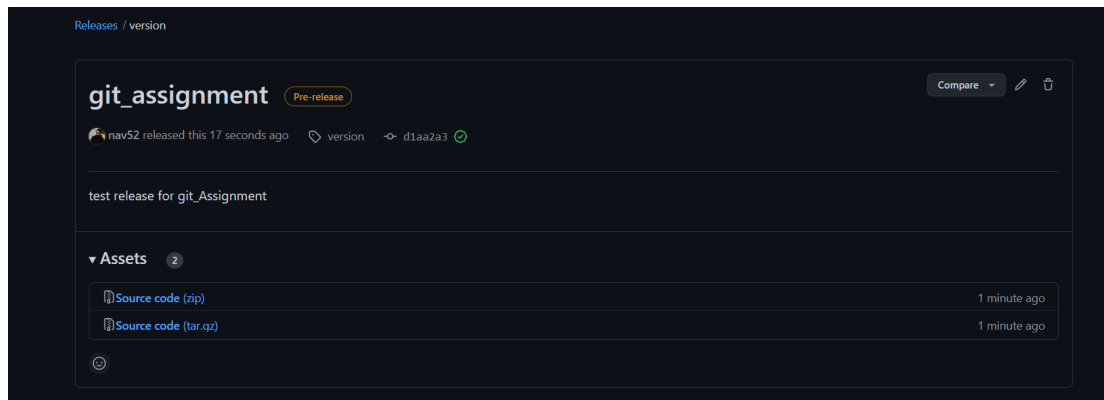
### 5. Add a Dependabot alerts in your GitHub.(for above cases)



### 6. Stash changes

```
PS C:\Naveen\DataScienceProjects\gitAssignment> git stash
Saved working directory and index state WIP on main: 4eff08a Page for Github pages
```

## 7. Create a release your package



## 8. Setup a Projects Board for your project.

