

Karthik Koparde

Assignment 1: Initialize a new Git repository in a directory of your choice. Add a simple text file to the repository and make the first commit.

Created a repository named Practice



Added Text file(Hi.txt) in the repository Practice using the commands below

```
Asus@KARTHIK MINGW64 /d/Demo
$ git init
Initialized empty Git repository in D:/Demo/.git/

Asus@KARTHIK MINGW64 /d/Demo (master)
$ git remote add origin https://github.com/Karthikoparde/Practice.git

Asus@KARTHIK MINGW64 /d/Demo (master)
$ git add .

Asus@KARTHIK MINGW64 /d/Demo (master)
$ git status
On branch master

No commits yet

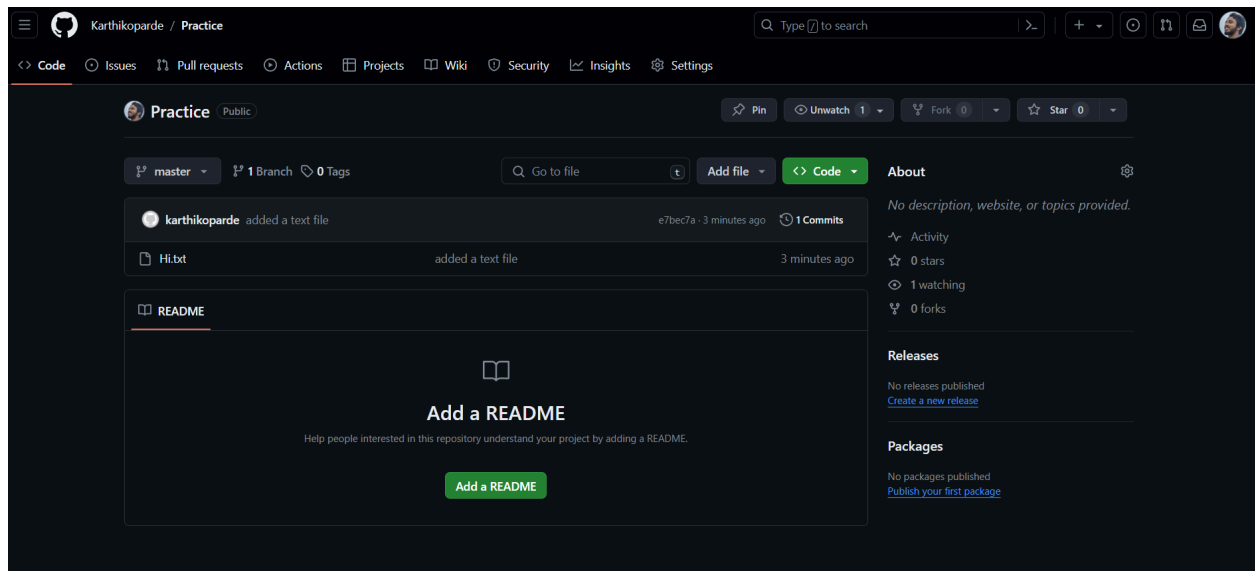
Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   Hi.txt

Asus@KARTHIK MINGW64 /d/Demo (master)
$ git commit -m "added a text file"
[master (root-commit) e7bec7a] added a text file
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 Hi.txt

Asus@KARTHIK MINGW64 /d/Demo (master)
$ git push origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 210 bytes | 105.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Karthikoparde/Practice.git
 * [new branch]      master -> master

Asus@KARTHIK MINGW64 /d/Demo (master)
$ |
```

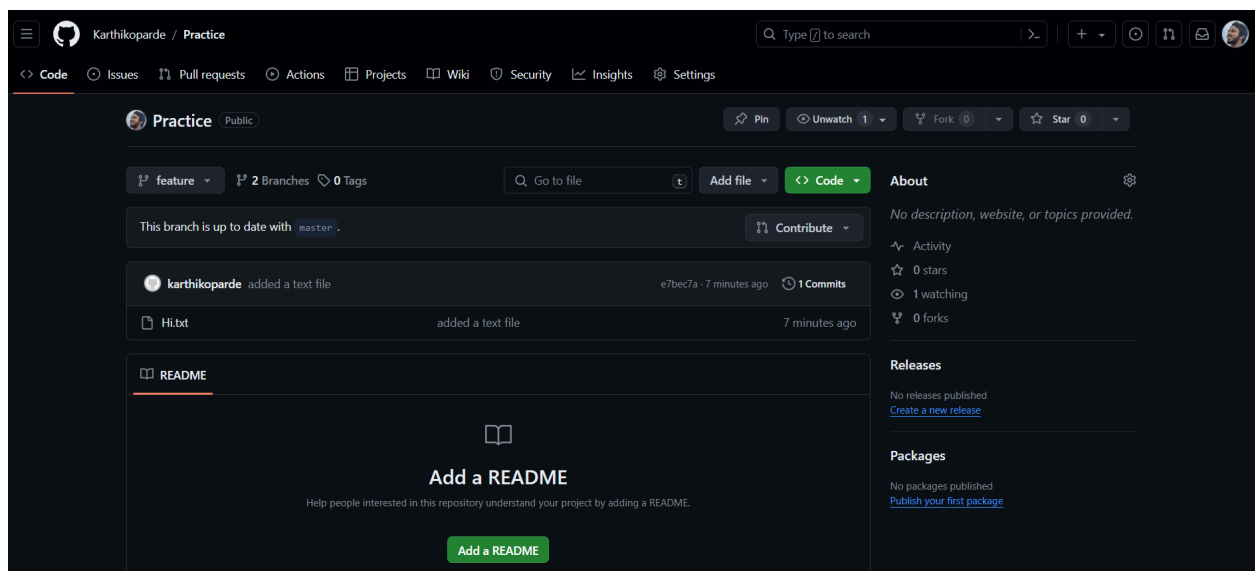
Reflected file in the repository



Assignment 2: Branch Creation and Switching

Create a new branch named 'feature' and switch to it. Make changes in the 'feature' branch and commit them.

Created new branch feature, switched to it, and added a file from master to feature branch



Commands Used:

```
Asus@KARTHIK MINGW64 /d/Demo (master)
$ git branch feature

Asus@KARTHIK MINGW64 /d/Demo (master)
$ git checkout feature
Switched to branch 'feature'

Asus@KARTHIK MINGW64 /d/Demo (feature)
$ git fetch

Asus@KARTHIK MINGW64 /d/Demo (feature)
$ git push origin feature
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'feature' on GitHub by visiting:
remote:   https://github.com/Karthikoparde/Practice/pull/new/feature
remote:
To https://github.com/Karthikoparde/Practice.git
 * [new branch]      feature -> feature

Asus@KARTHIK MINGW64 /d/Demo (feature)
$ |
```

Assignment 3: Feature Branches and Hotfixes

Create a 'hotfix' branch to fix an issue in the main code. Merge the 'hotfix' branch into 'main' ensuring that the issue is resolved.

Adding a file USER in feature branch

```
Asus@KARTHIK MINGW64 /d/Demo (master)
$ git branch
  feature
  hotfix
* master

Asus@KARTHIK MINGW64 /d/Demo (master)
$ git checkout feature
Switched to branch 'feature'

Asus@KARTHIK MINGW64 /d/Demo (feature)
$ git add User.txt

Asus@KARTHIK MINGW64 /d/Demo (feature)
$ git status
On branch feature
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   User.txt

Asus@KARTHIK MINGW64 /d/Demo (feature)
$ git commit -m "User data added"
[feature 1cf30ce] User data added
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 User.txt

Asus@KARTHIK MINGW64 /d/Demo (feature)
$ git push origin feature
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 240 bytes | 240.00 KiB/s, done.
Total 2 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Karthikoparde/Practice.git
 e7bec7a..1cf30ce feature -> feature

Asus@KARTHIK MINGW64 /d/Demo (feature)
$ |
```

Adding a file PRODUCT in hotfix branch

```
Asus@KARTHIK MINGW64 /d/Demo (feature)
$ git checkout hotfix
Switched to branch 'hotfix'

Asus@KARTHIK MINGW64 /d/Demo (hotfix)
$ git add Product.txt

Asus@KARTHIK MINGW64 /d/Demo (hotfix)
$ git status
On branch hotfix
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   Product.txt

Asus@KARTHIK MINGW64 /d/Demo (hotfix)
$ git commit -m "Product data added"
[hotfix 9e8cee2] Product data added
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 Product.txt

Asus@KARTHIK MINGW64 /d/Demo (hotfix)
$ git push origin hotfix
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 242 bytes | 242.00 KiB/s, done.
Total 2 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'hotfix' on GitHub by visiting:
remote:   https://github.com/Karthikoparde/Practice/pull/new/hotfix
remote:
To https://github.com/Karthikoparde/Practice.git
 * [new branch]      hotfix -> hotfix

Asus@KARTHIK MINGW64 /d/Demo (hotfix)
$ |
```

Commands used for merging

\$git checkout master

\$git merge feature

\$git merge hotfix

Approving pull requests

Approving merging of feature

The screenshot shows a GitHub pull request titled "User data added #1". At the top, a green banner indicates it is "Merged", with the text "Karthikoparde merged 1 commit into master from feature now". Below this, a summary bar shows "Conversation 0", "Commits 1", "Checks 0", and "Files changed 1". The main content area features a comment by Karthikoparde stating "No description provided." with a commit hash of 1cf30ce. A commit history section shows the commit "User data added" merged into master. A green box at the bottom of the commit history states "Pull request successfully merged and closed" and "You're all set—the feature branch can be safely deleted.", with a "Delete branch" button. At the bottom, there is an "Add a comment" section with a text input field and a rich text editor toolbar.

Approving merging of hotfix

The screenshot shows a GitHub pull request titled "Product data added #2". At the top, a green banner indicates it is "Merged", with the text "Karthikoparde merged 1 commit into master from hotfix now". Below this, a summary bar shows "Conversation 0", "Commits 1", "Checks 0", and "Files changed 1". The main content area features a comment by Karthikoparde stating "No description provided." with a commit hash of 9e8cee2. A commit history section shows the commit "Product data added" merged into master. A green box at the bottom of the commit history states "Pull request successfully merged and closed" and "You're all set—the hotfix branch can be safely deleted.", with a "Delete branch" button. At the bottom, there is an "Add a comment" section with a text input field and a rich text editor toolbar.

Merging both branches into master

The screenshot displays the GitHub interface for a repository named 'Practice' owned by 'Karthikoparde'. The repository is public and has 3 branches and 0 tags. The main content area shows a merge pull request #2 from Karthikoparde/hotfix, which includes 5 commits. The commit history is as follows:

File	Commit Message	Time Ago
Hi.txt	added a text file	38 minutes ago
Product.txt	Product data added	11 minutes ago
User.txt	User data added	15 minutes ago

Below the commit history, there is a section for the README file, which is currently empty. A button labeled 'Add a README' is visible. The right sidebar contains sections for 'About' (no description provided), 'Releases' (no releases published), and 'Packages' (no packages published).