Cloud Computing Lab 3

Submitted To:

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Submitted By:

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Section:

5(A)

Roll Number:

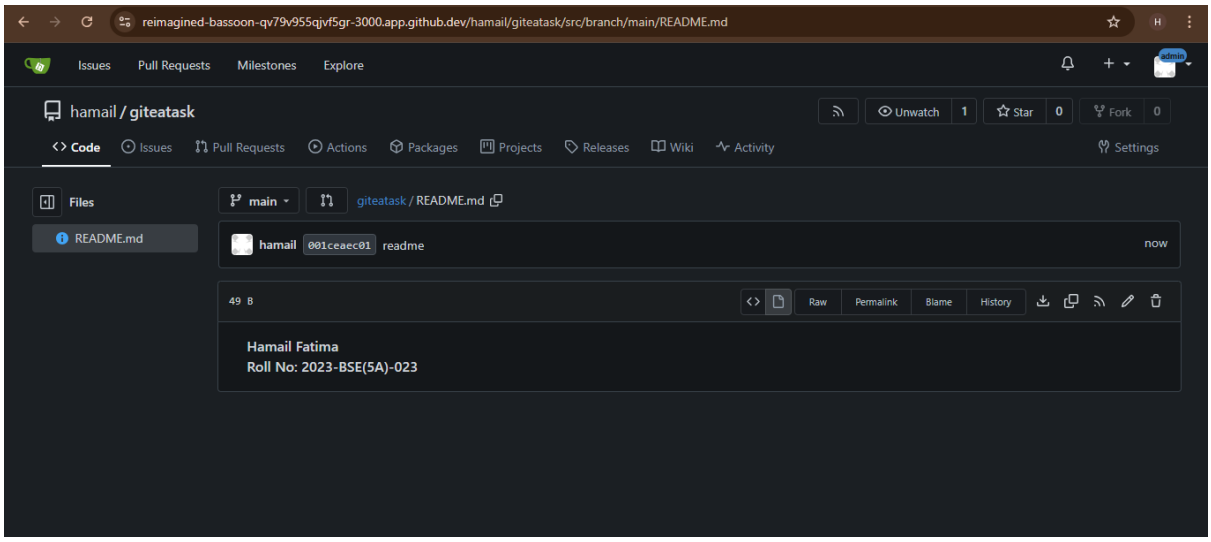
2023-BSE-023

Task 1: Run Gitea in Codespace and Create an Initial Repo

Set up Gitea:

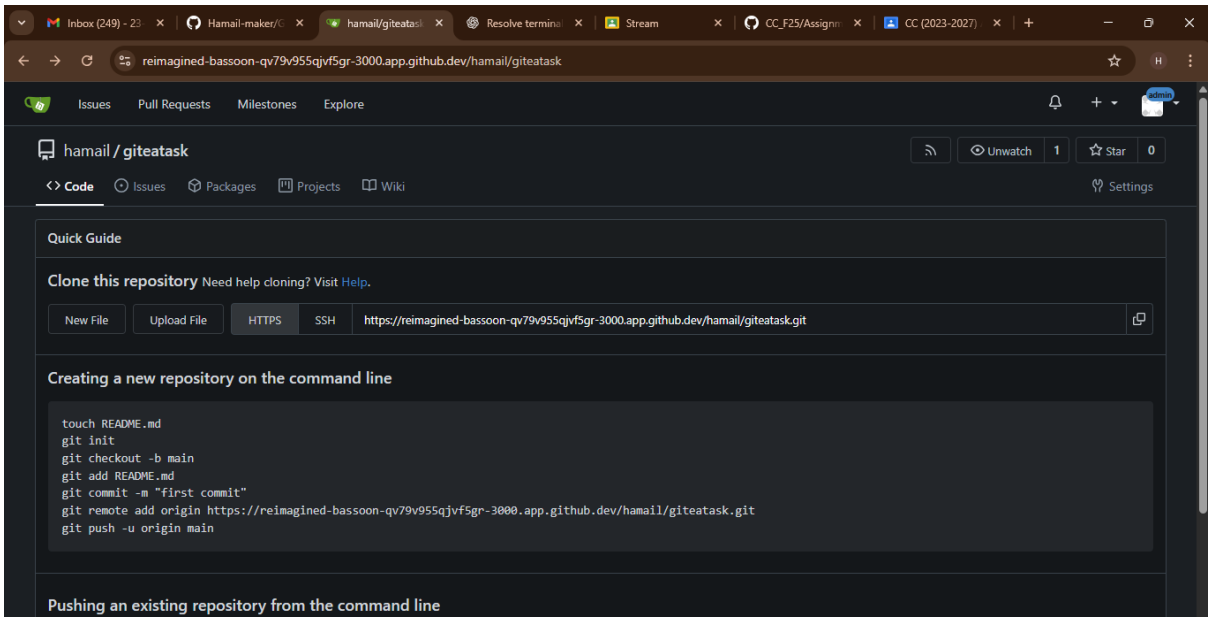
Run a Gitea server inside your Codespace.

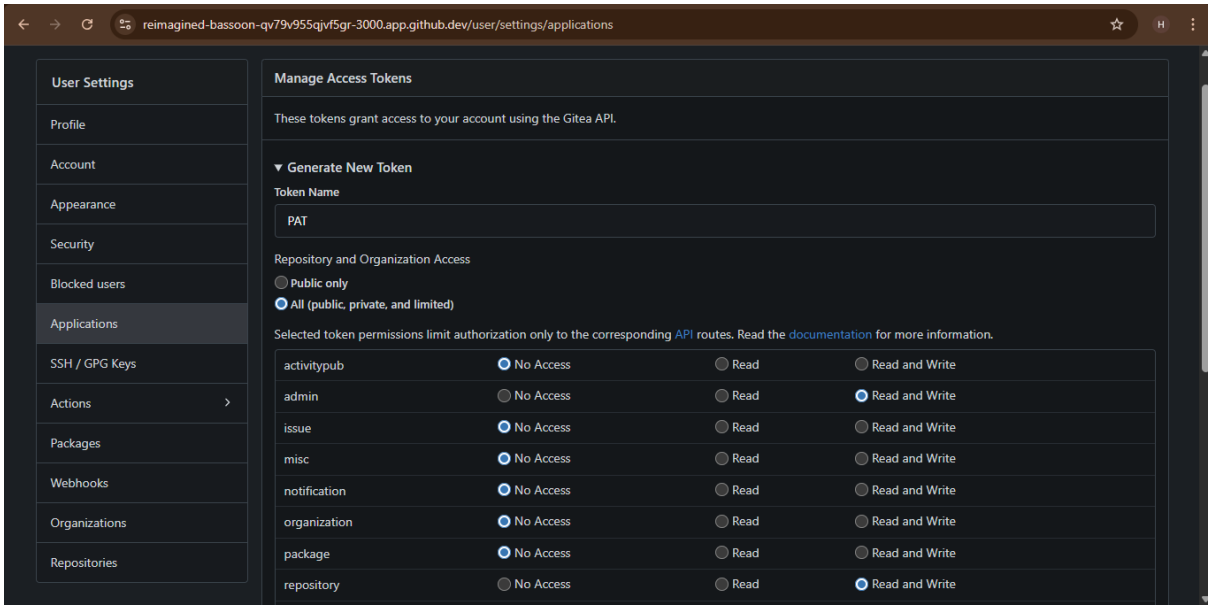
Use HTTPS for communication (SSH is not supported in Codespace).



Create a Repository:

- **Create a new repository on your Gitea server.**
- **Add a README.md file listing each student's name and roll number.**



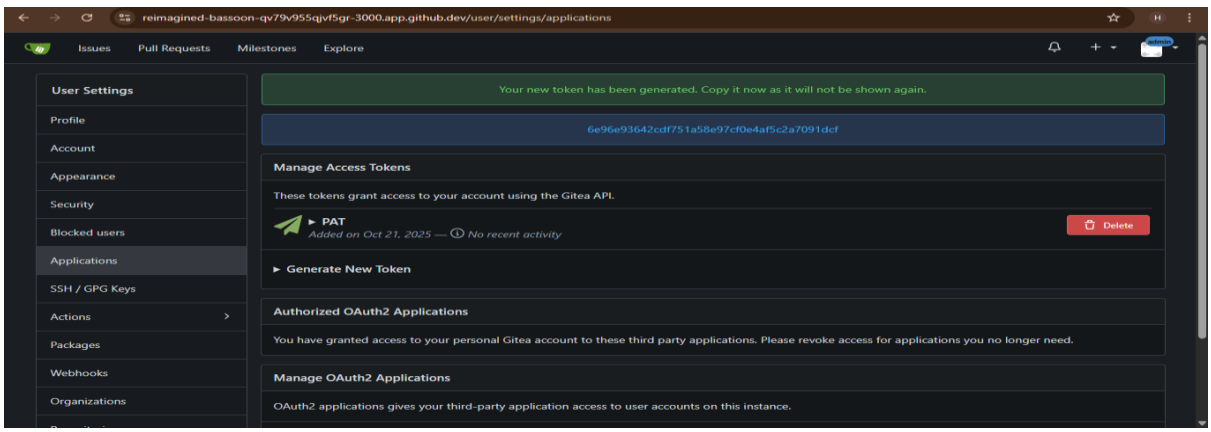


http://hamail:6e96e93642cdf751a58e97cf0e4af5c2a7091dcf@reimagined-bassoon-qv79v955qjvf5gr-3000.app.github.dev/hamail/giteatask.git

6e96e93642cdf751a58e97cf0e4af5c2a7091dcf

Generate a Personal Access Token (PAT) in Gitea

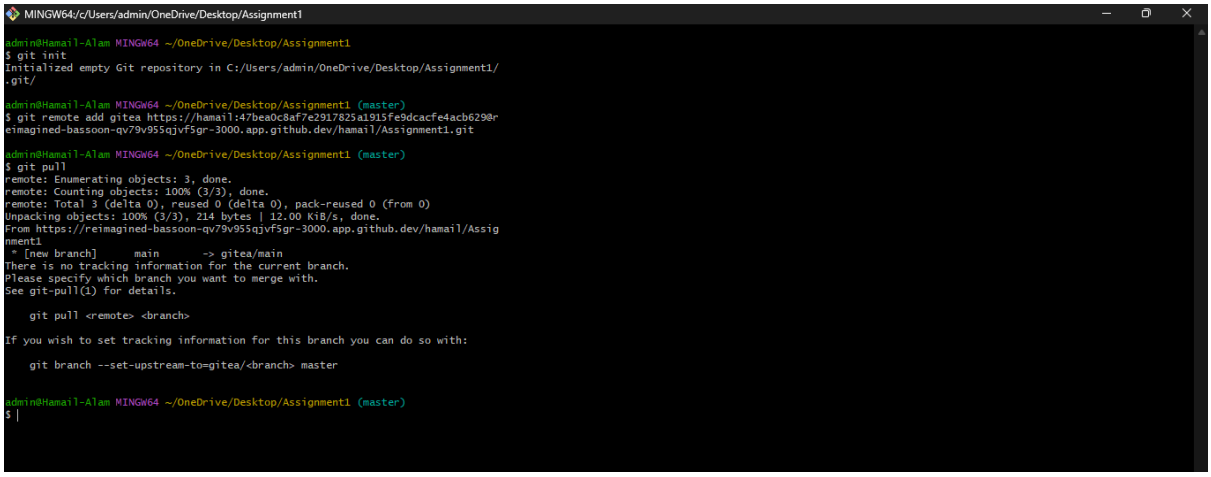
- Click your profile picture → Settings
- Go to Applications → Manage Access Tokens
  - Name: codespace-token
  - Scopes: ✅ repo
- Copy the generated token (you'll need it once below).



1. **Add Remote Repo:**
    - Use the following command to add your Gitea repository as a remote:
    - git remote add gitea https://<user_name>:<new_token>@<your_gitea_repo_https_url>

e.g. git remote add gitea https://Admin:<NEW_TOKEN>@crispy-tribble-wrjwvwjwqpvv25rvg-3000.app.github.dev/Admin/StudentsDemo.git

- Push your initial commit containing the README.md to Gitea.



Task 2: Mirror README.md from Gitea to GitHub

1. **Continue Working with Your Existing Repository:**
    - You will use the same repository that you created and pushed to your Gitea server in Task 1.
2. **Create GitHub Repository:**
    - Create a new GitHub repository named assignment 1.

```
admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (master)
$ git branch -M main

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git pull gitea main
From https://reimagined-bassoon-qv79v955qjvf5gr-3000.app.github.dev/hamail/assignment1a
 * branch            main       -> FETCH_HEAD

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ ls
README.md

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ cat README.md
Name : Hamail Fatima
Roll No: 2023-BSE-023
admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ echo "Assignment #01" >> README.md

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ cat README.md
Name : Hamail Fatima
Roll No: 2023-BSE-023Assignment #01
```

1. **Add GitHub as a Second Remote:**
    - Add your GitHub repository as a remote to your local repository:
    - git remote add github <your_github_repo_https_url>
2. **Push the README.md File to GitHub:**
    - Push the contents (including the README.md) from your local repository to GitHub.

```
admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git add .
warning: in the working copy of 'README.md', LF will be replaced by CRLF the nex
t time Git touches it

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git commit -m "Local commit"
[main 110ac0f] Local commit
 1 file changed, 1 insertion(+), 1 deletion(-)

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git push -u gitea main
fatal: repository 'https://reimagined-bassoon-qv79v955qjvf5gr-3000.app.github.de
v/hamail/assignment1a.git/' not found

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ ^C

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git push -u gitea main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 302 bytes | 302.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote: . Processing 1 references
remote: Processed 1 references in total
To https://reimagined-bassoon-qv79v955qjvf5gr-3000.app.github.dev/hamail/assignment1a.git
   0a3d48c..110ac0f  main -> main
branch 'main' set up to track 'gitea/main'.
```

```
admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git push -u gitea main
fatal: repository 'https://reimagined-bassoon-qv79v955qjvf5gr-3000.app.github.de
v/hamail/assignment1a.git/' not found

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ ^C

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git push -u gitea main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 302 bytes | 302.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote: . Processing 1 references
remote: Processed 1 references in total
To https://reimagined-bassoon-qv79v955qjvf5gr-3000.app.github.dev/hamail/assignment1a.git
   0a3d48c..110ac0f  main -> main
branch 'main' set up to track 'gitea/main'.
```

Verify Remotes:

- Run git remote -v and ensure both remotes (gitea and github) are listed.

```
admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git remote -v
gitea    https://hamail:5b3a4a64283c26ad713c54b02501ffb4f46cf523@reimagined-bassoon-qv79v955qjvf5gr-3000.app.github.dev/hamail/assignment1a.git (fetch)
gitea    https://hamail:5b3a4a64283c26ad713c54b02501ffb4f46cf523@reimagined-bassoon-qv79v955qjvf5gr-3000.app.github.dev/hamail/assignment1a.git (push)
```

Task 3: Use Git LFS for Large Files

1. **Install Git LFS:**

   set up Git LFS in your local repository.

```
admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git lfs install
Updated Git hooks.
Git LFS initialized.
```

   Checking LFS version:

```
admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git lfs version
git-lfs/3.7.1 (GitHub; windows amd64; go 1.25.1; git b84b3384)
```

   Add Large Files:

- Add **three files larger than 100 MB** each to your repository.

```
admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ dd if=/dev/zero of=bigfile1.zip bs=1M count=150
150+0 records in
150+0 records out
157286400 bytes (157 MB, 150 MiB) copied, 0.0664652 s, 2.4 GB/s

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ dd if=/dev/zero of=bigfile2.zip bs=1M count=150
150+0 records in
150+0 records out
157286400 bytes (157 MB, 150 MiB) copied, 0.173698 s, 906 MB/s

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ dd if=/dev/zero of=bigfile3.zip bs=1M count=150
150+0 records in
150+0 records out
157286400 bytes (157 MB, 150 MiB) copied, 0.40462 s, 389 MB/s
```

  - Track them using Git LFS:
  - git lfs track "*.ext"

   Replace .ext with the appropriate file extension.

```
admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git lfs track "*.zip"
Tracking "*.zip"

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git add .gitattributes
```

Stage your big files

```
admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git add bigfile1.zip bigfile2.zip bigfile3.zip
```

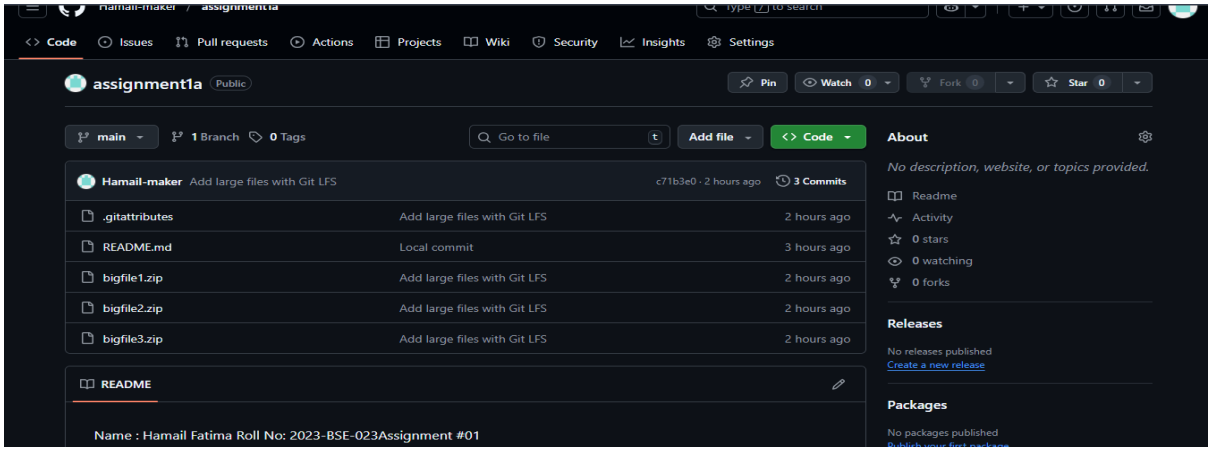
1. **Reference in Assignment Repo:**
   - Commit and push these large files to your GitHub assignment 1 repo.
   - Ensure the files are referenced correctly in your repository history.

```
admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git commit -m "Add large files with Git LFS"
[main c71b3e0] Add large files with Git LFS
 4 files changed, 10 insertions(+)
 create mode 100644 .gitattributes
 create mode 100644 bigfile1.zip
 create mode 100644 bigfile2.zip
 create mode 100644 bigfile3.zip
```

Push to GitHub (assignment1a repo)

```
admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git remote remove github

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git remote add github https://github.com/Hamail-maker/assignment1a.git

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git push -u github main
Uploading LFS objects: 100% (1/1), 157 MB | 49 KB/s, done.
Enumerating objects: 10, done.
Counting objects: 100% (10/10), done.
Delta compression using up to 8 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (10/10), 991 bytes | 198.00 KiB/s, done.
Total 10 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Hamail-maker/assignment1a.git
 * [new branch]      main -> main
branch 'main' set up to track 'github/main'.
```

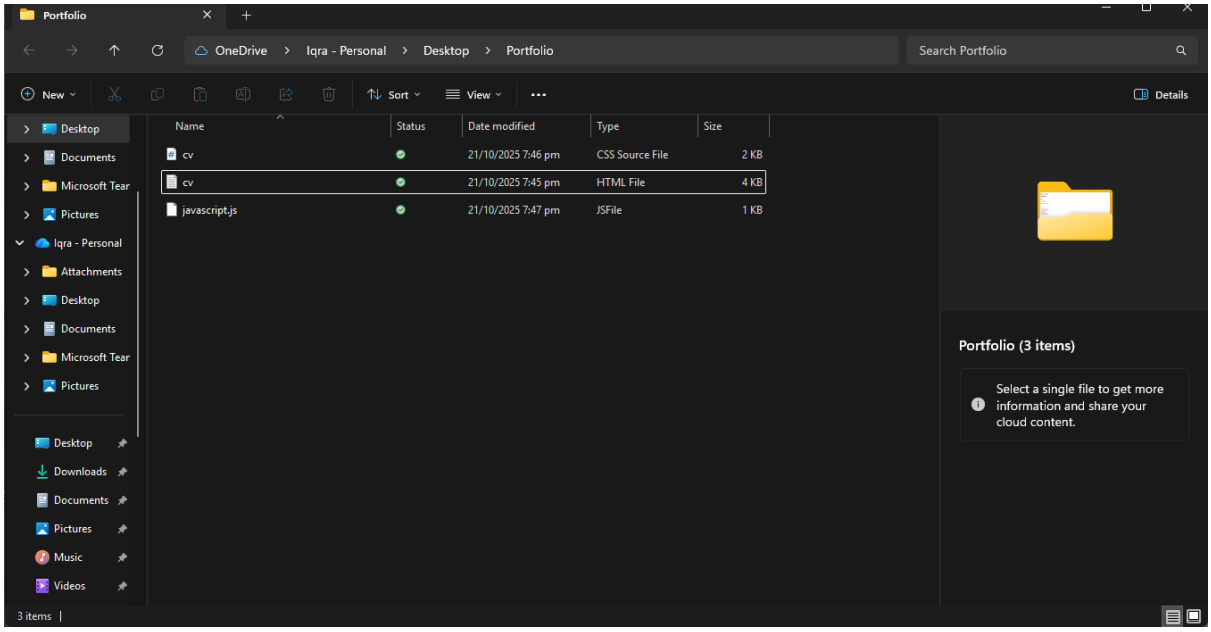
On GitHub after adding those three big files:



Task 4: Create a Portfolio/CV with GitHub Pages

Create folder named portfolio in your computer:

Now create the .html, .css, .js text files and image.png in this folder.



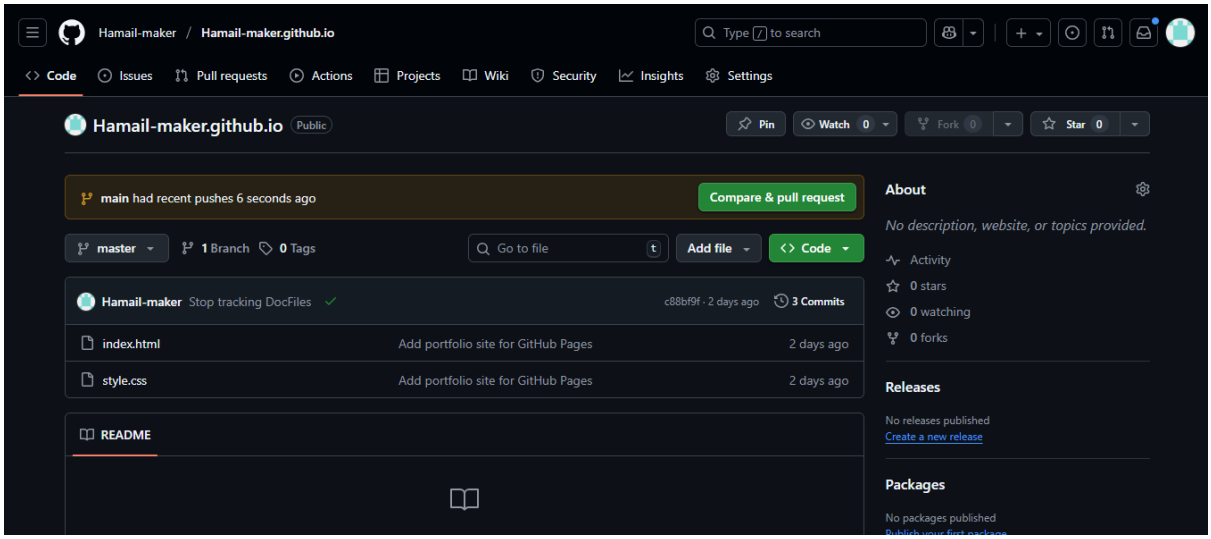
Initialize Git and Commit Files

```
admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git remote remove github

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git remote add github https://github.com/Hamail-maker/assignment1a.git

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git push -u github main
Uploading LFS objects: 100% (1/1), 157 MB | 49 KB/s, done.
Enumerating objects: 10, done.
Counting objects: 100% (10/10), done.
Delta compression using up to 8 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (10/10), 991 bytes | 198.00 KiB/s, done.
Total 10 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Hamail-maker/assignment1a.git
 * [new branch]      main -> main
branch 'main' set up to track 'github/main'.

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ cd C:\Users\admin\OneDrive\Desktop\Portfolio
bash: cd: C:UsersadminOneDriveDesktopPortfolio: No such file or directory

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ cd "/c/Users/admin/OneDrive/Desktop/Portfolio"

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/Portfolio
$ ls
```

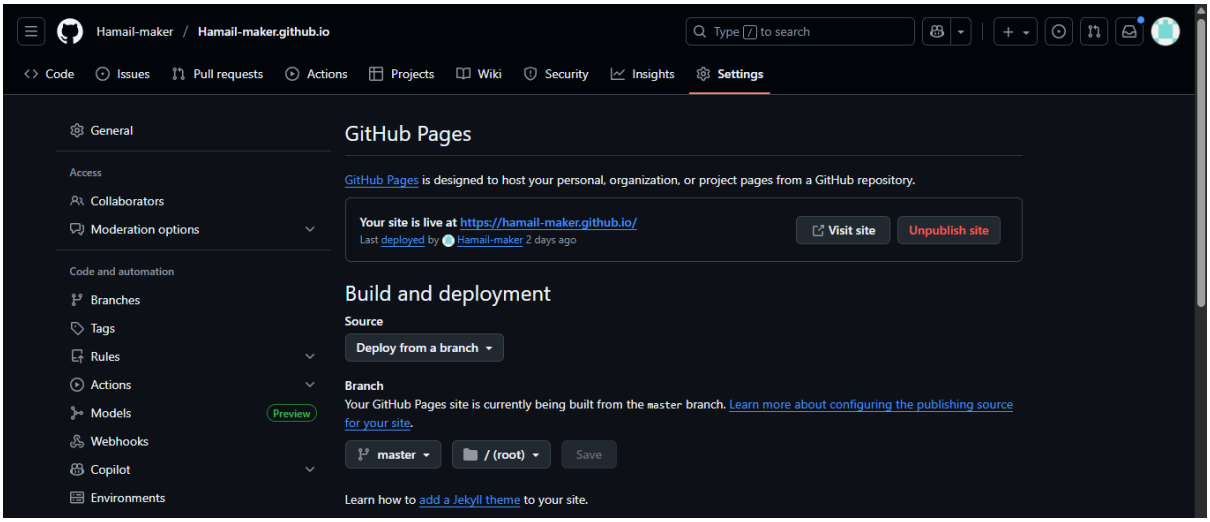
```
admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ cd C:\Users\admin\OneDrive\Desktop\Portfolio
bash: cd: C:UsersadminOneDriveDesktopPortfolio: No such file or directory

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ cd "/c/Users/admin/OneDrive/Desktop/Portfolio"

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/Portfolio
$ ls
cv.css  cv.html  javascript.js

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/Portfolio
$ git init
Initialized empty Git repository in C:/Users/admin/OneDrive/Desktop/Portfolio/.git/

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/Portfolio (master)
$ git add .

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/Portfolio (master)
$ git commit -m "Initial commit of Portfolio/CV"
[master (root-commit) 693e0ef] Initial commit of Portfolio/CV
 3 files changed, 172 insertions(+)
 create mode 100644 cv.css
 create mode 100644 cv.html
 create mode 100644 javascript.js

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/Portfolio (master)
$ git remote add origin https://github.com/Hamail-maker/Hamail-maker.github.io.git

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/Portfolio (master)
$ git push -u origin main
error: src refspec main does not match any
error: failed to push some refs to 'https://github.com/Hamail-maker/Hamail-maker.github.io.git'

admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/Portfolio (master)
$ git push -u origin main --force
error: src refspec main does not match any
error: failed to push some refs to 'https://github.com/Hamail-maker/Hamail-maker.github.io.git'
```

```
admin@Hamail-Alam MINGW64 ~/OneDrive/Desktop/Portfolio (main)
$ git push -u origin main
branch 'main' set up to track 'origin/main'.
Everything up-to-date
```

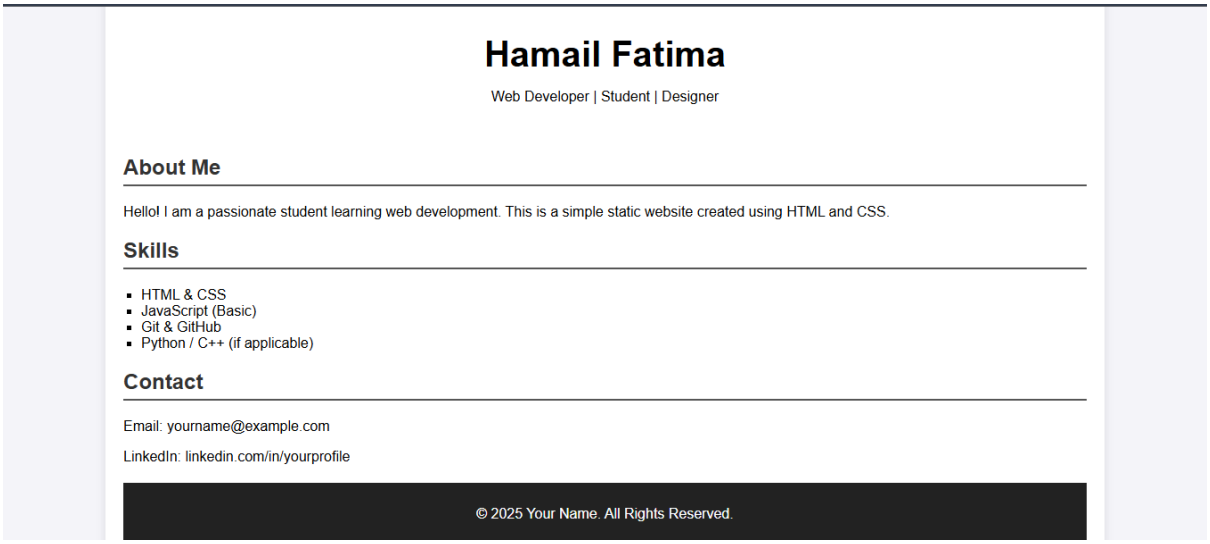
On GitHub:



GitHub Pages:



View link at : https://hamail-maker.github.io/



Hamail Fatima

Web Developer | Student | Designer

About Me

Hello! I am a passionate student learning web development. This is a simple static website created using HTML and CSS.

Skills

- HTML & CSS
- JavaScript (Basic)
- Git & GitHub
- Python / C++ (if applicable)

Contact

Email: yourname@example.com

LinkedIn: linkedin.com/in/yourprofile