

CLOUD COMPUTING

ASSIGNMENT NO. 1



SUBMITTED TO:

Waqas Saleem

SUBMITTED BY:

Name: Amina Noor

Reg No. 2023-BSE-007

Semester: V-A

CLOUD COMPUTING

ASSIGNMENT NO. 1

Task List:

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

Step A: Run Gitea inside Codespace

```
@23-22411-007-oss → /workspaces/Gitea (main) $ docker run -d --name gitea \
  -p 3000:3000 \
  -p 22:22 \
  gitea/gitea:latest
Unable to find image 'gitea/gitea:latest' locally
latest: Pulling from gitea/gitea
9824c27679d3: Pull complete
307c463a9ebe: Pull complete
89986d54bad9: Pull complete
e7ea2b7110b2: Pull complete
dc71ac9fe925: Pull complete
a4ebd224fde1: Pull complete
3b7dba00267e: Pull complete
Digest: sha256:2edc102cbb636ae1ddac5fa0c715aa5b03079dee13ac6800b2cef6d4e912e718
Status: Downloaded newer image for gitea/gitea:latest
5dad430453655990cf5d27e5bebaa0fcc0242f7ec97f4515ba541870ea35da74
@23-22411-007-oss → /workspaces/Gitea (main) $
```

Step B: Forward the port to access Gitea:

The screenshot shows the VS Code interface with the 'PORTS' tab active. It displays two forwarded ports: 222 and 3000, both mapped to the local host IP 0.0.0.0. Below the table is an 'Add Port' button. At the bottom, a browser window is open to a GitHub dev page, and a loading spinner is visible with the text 'Connecting to the forwarded port...'.

Port	Forwarded Address	Running Process	Visibility	Origin
222	https://effective-spa...	/usr/bin/docker-proxy -proto tcp -host-ip 0.0...	Private	Auto Forwarded
3000	https://effective-spa...	/usr/bin/docker-proxy -proto tcp -host-ip 0.0...	Private	Auto Forwarded

→ effective-space-garbanzo-wrq7x7vvr9jcgqj4.github.dev/pf-signin?id=neat-mountain-4xpg4c&cluster=usw3&name=effective-space-garbanzo-wrq7x7vvr9jcgqj4...

Connecting to the forwarded port...

Step C: Set up Gitea in the browser:

Initial Configuration

If you run Gitea inside Docker, please read the [documentation](#) before changing any settings.

Database Settings

Gitea requires MySQL, PostgreSQL, MSSQL, SQLite3 or TiDB (MySQL protocol).

Database Type *

Path *

File path for the SQLite3 database.
Enter an absolute path if you run Gitea as a service.

General Settings

Site Title *

You can enter your company name here.

Repository Root Path *

Remote Git repositories will be saved to this directory.

Git LFS Root Path

Files tracked by Git LFS will be stored in this directory. Leave empty to disable.

Create an **admin** account.

Issues Pull Requests Milestones Explore

admin

amina

Account was successfully created. Welcome!

Repository Organization

Repositories +

No Activity

You are currently not following any repositories or users, so there is no content to display. You can explore repositories or users of interest from the links below.

Explore repositories · Explore users

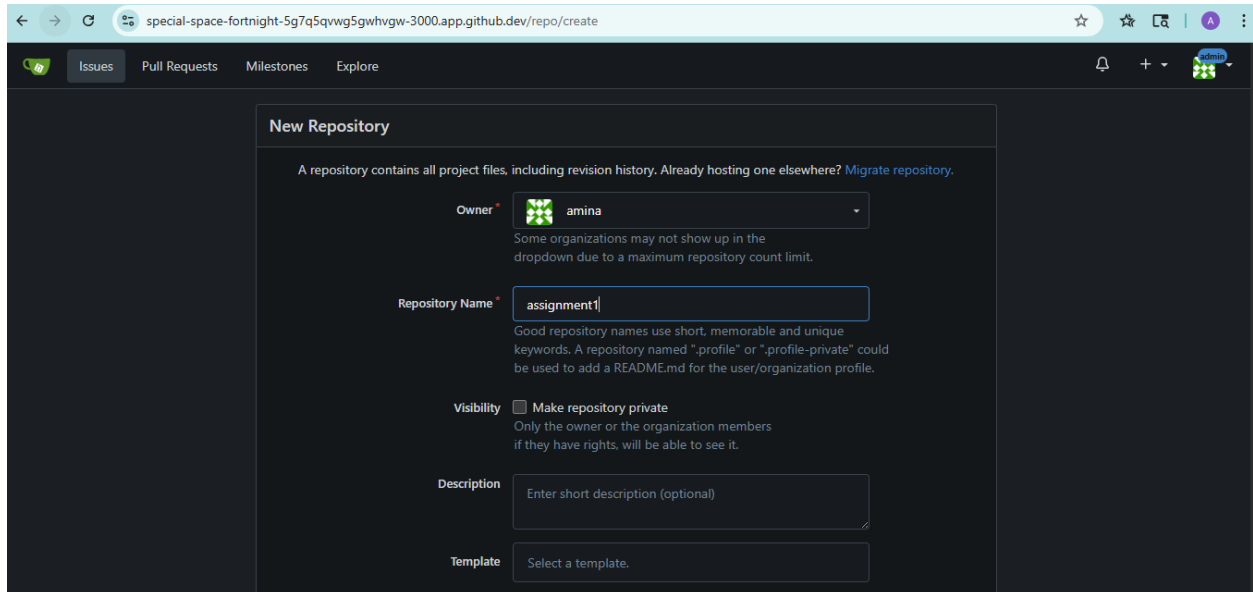
There are no repositories yet.

Powered by Gitea Version: 1.24.6 Page: 30ms Template: 26ms

English Licenses API

Step D: Create a new repository in Gitea:

Click **New Repository** → name it assignment1.




special-space-fortnight-5g7q5qvwg5gwhvgw-3000.app.github.dev/repo/create

Issues Pull Requests Milestones Explore

New Repository

A repository contains all project files, including revision history. Already hosting one elsewhere? [Migrate repository.](#)

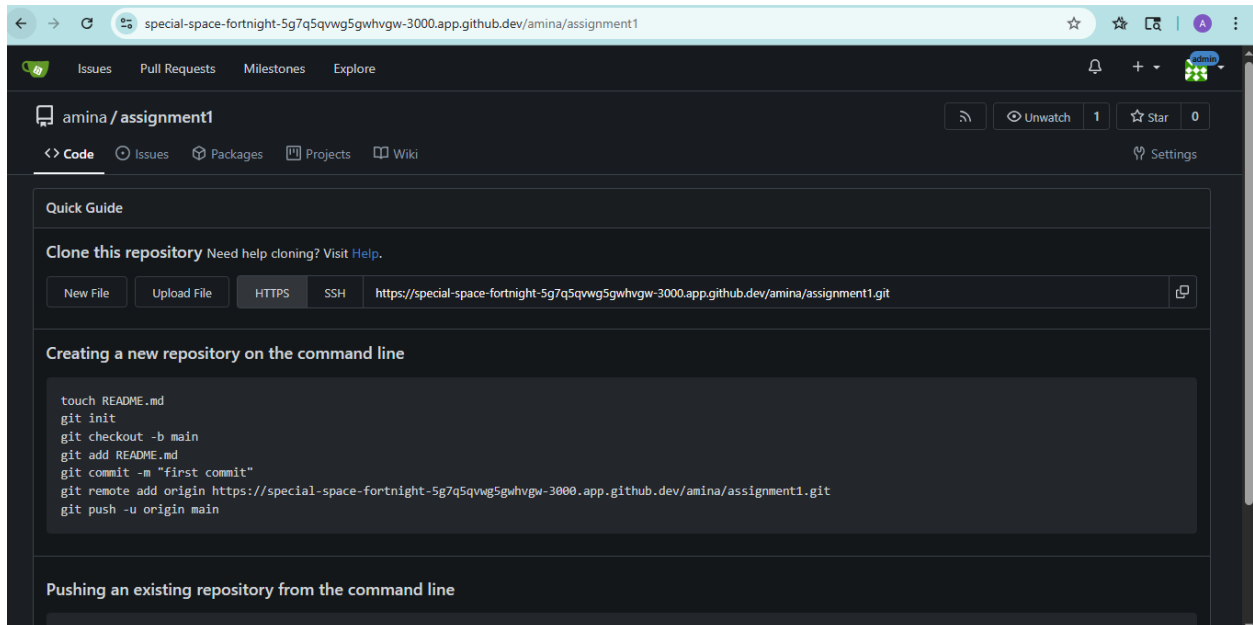
Owner  amina
Some organizations may not show up in the dropdown due to a maximum repository count limit.

Repository Name
Good repository names use short, memorable and unique keywords. A repository named ".profile" or ".profile-private" could be used to add a README.md for the user/organization profile.

Visibility ☐ Make repository private
Only the owner or the organization members if they have rights, will be able to see it.

Description

Template



special-space-fortnight-5g7q5qvwg5gwhvgw-3000.app.github.dev/amina/assignment1

Issues Pull Requests Milestones Explore

amina / assignment1

Unwatch 1 Star 0

Code Issues Packages Projects Wiki Settings

Quick Guide

Clone this repository Need help cloning? Visit [Help](#).

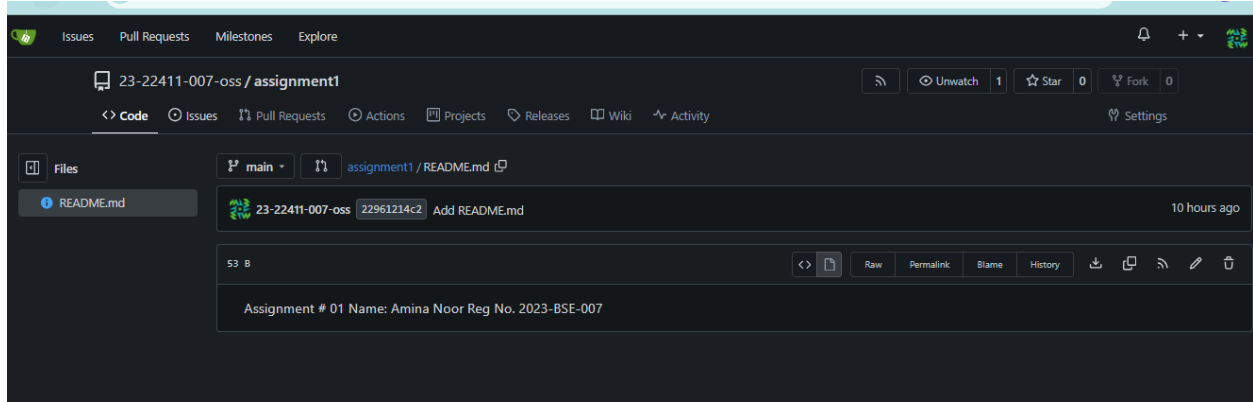
New File Upload File HTTPS SSH <https://special-space-fortnight-5g7q5qvwg5gwhvgw-3000.app.github.dev/amina/assignment1.git>

Creating a new repository on the command line

```
touch README.md
git init
git checkout -b main
git add README.md
git commit -m "first commit"
git remote add origin https://special-space-fortnight-5g7q5qvwg5gwhvgw-3000.app.github.dev/amina/assignment1.git
git push -u origin main
```

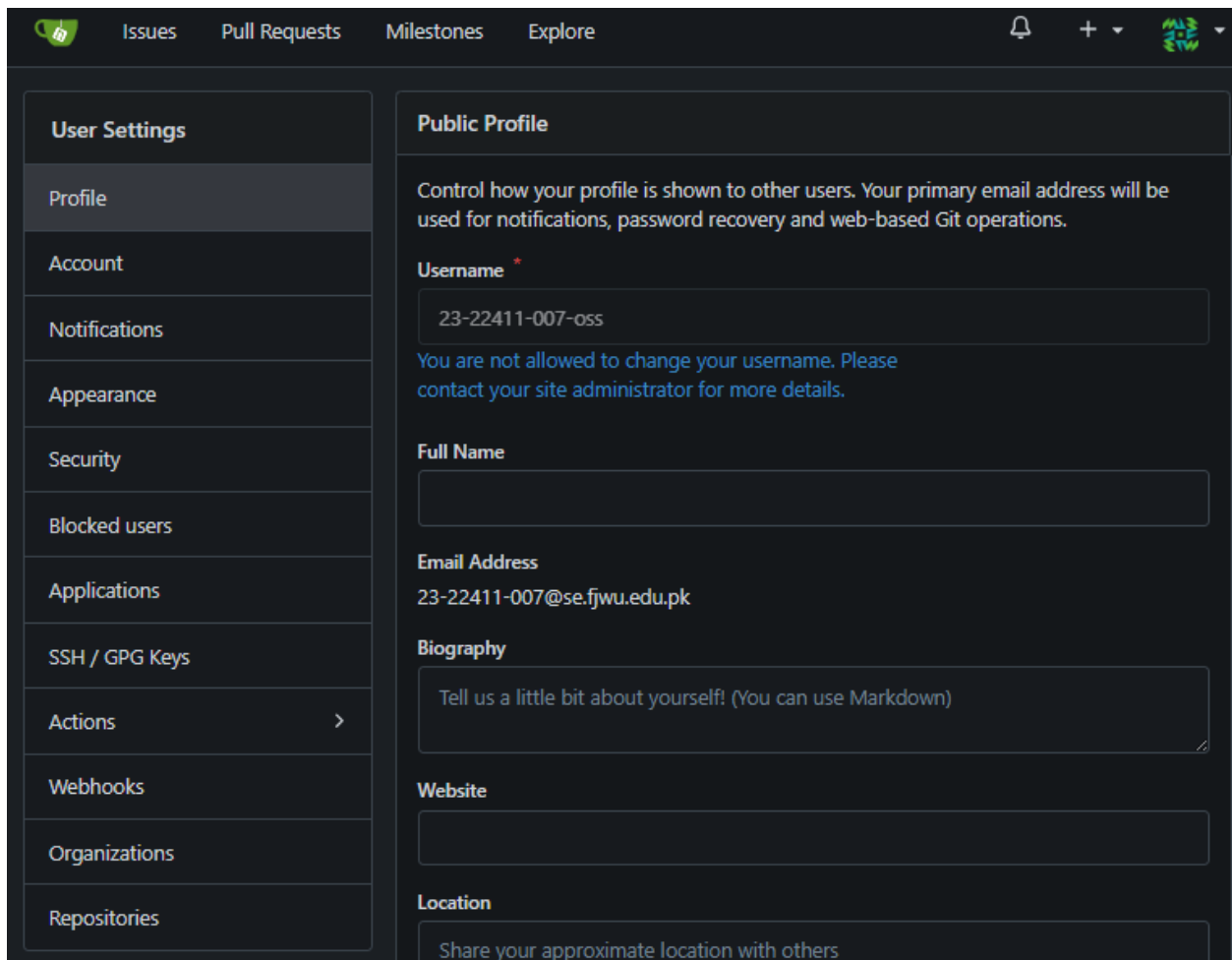
Pushing an existing repository from the command line

Add a **README.md** listing student names & roll numbers.



Connect Codespace to Gitea:

Open Settings in Gitea :



Generating Token:

Appearance

Security

Blocked users

Applications

SSH / GPG Keys

Actions >

Webhooks

Organizations

Repositories

PAT

Repository and Organization Access

☐ Public only

☒ All (public, private, and limited)

Selected token permissions limit authorization only to the corresponding [API](#) routes.

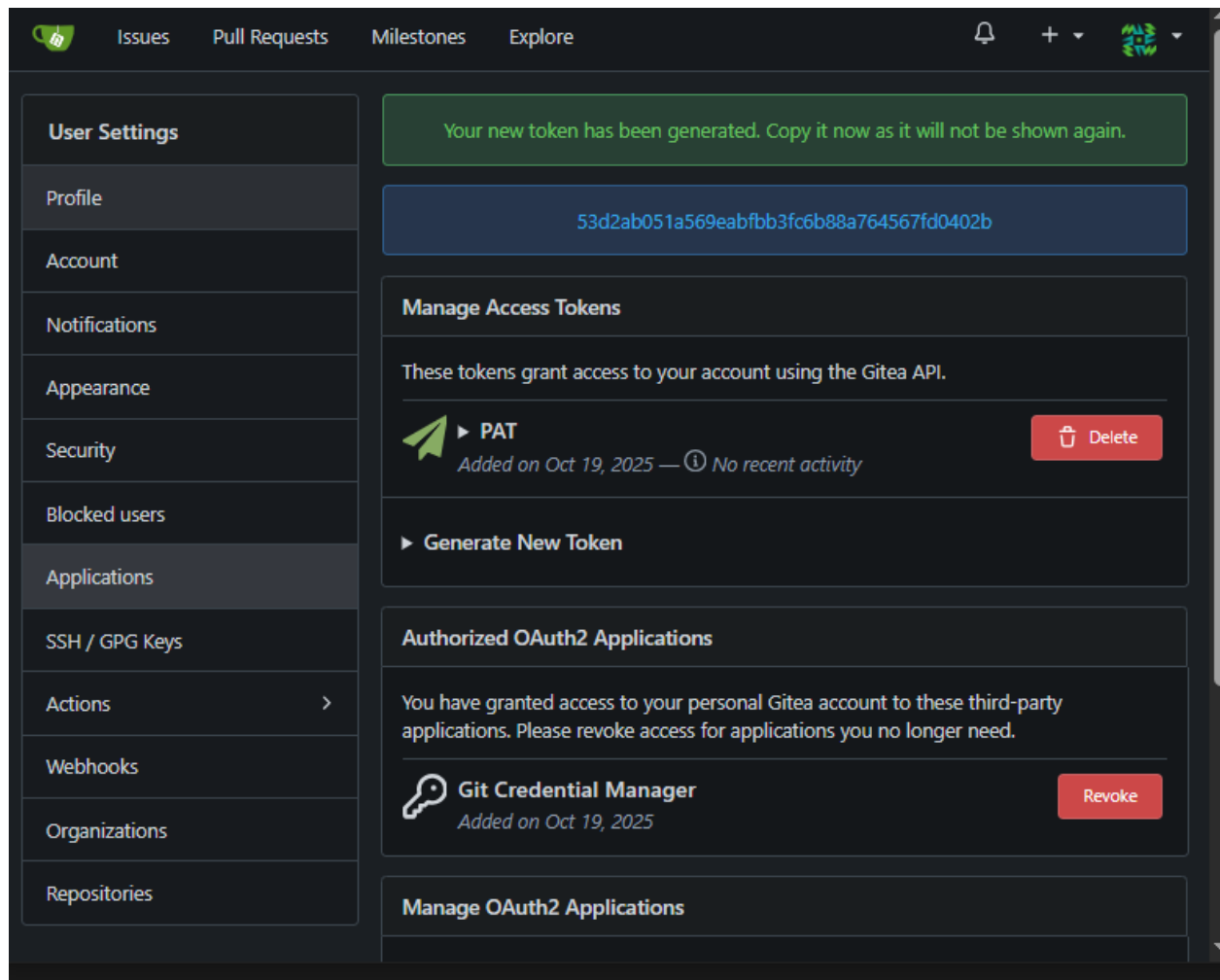
Read the [documentation](#) for more information.

activitypub	<input checked="" type="radio"/> No Access	<input type="radio"/> Read	<input type="radio"/> Read and Write
issue	<input checked="" type="radio"/> No Access	<input type="radio"/> Read	<input type="radio"/> Read and Write
misc	<input checked="" type="radio"/> No Access	<input type="radio"/> Read	<input type="radio"/> Read and Write
notification	<input checked="" type="radio"/> No Access	<input type="radio"/> Read	<input type="radio"/> Read and Write
organization	<input checked="" type="radio"/> No Access	<input type="radio"/> Read	<input type="radio"/> Read and Write
package	<input checked="" type="radio"/> No Access	<input type="radio"/> Read	<input type="radio"/> Read and Write
repository	<input type="radio"/> No Access	<input type="radio"/> Read	<input checked="" type="radio"/> Read and Write
user	<input checked="" type="radio"/> No Access	<input type="radio"/> Read	<input type="radio"/> Read and Write

Generate Token

Authorized OAuth2 Applications

You have granted access to your personal Citea account to these third-party



Running commands on Git Bash:

```

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git init
Reinitialized existing Git repository in C:/Users/lenovo/Documents/CC-AminaNoor-007/.git/

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git remote add gitea http://23-22411-007-oss:53d2ab051a569eabfbb3fc6b88a764567fd0402b@gitea.com/23-22411-007-oss/assignment1.git

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git pull
remote: Enumerating objects: 11, done.
remote: Counting objects: 100% (11/11), done.
remote: Compressing objects: 100% (5/5), done.
remote: Total 10 (delta 0), reused 1 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (10/10), 900 bytes | 15.00 KiB/s, done.
From https://gitea.com/23-22411-007-oss/assignment1
  6438cde..2296121  main      -> origin/main
There is no tracking information for the current branch.
Please specify which branch you want to merge with.
See git-pull(1) for details.

    git pull <remote> <branch>

If you wish to set tracking information for this branch you can do so with:

    git branch --set-upstream-to=<remote>/<branch> main

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git branch -M main

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git pull gitea main
warning: redirecting to https://gitea.com/23-22411-007-oss/assignment1.git/
From http://gitea.com/23-22411-007-oss/assignment1
  * branch          main      -> FETCH_HEAD
  * [new branch]    main      -> gitea/main
Updating 6438cde..2296121
Fast-forward
 README.md | 3 +++
 1 file changed, 3 insertions(+)
 create mode 100644 README.md

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ ls
README.md

```



```

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ cat README.md
Assignment # 01
Name: Amina Noor
Reg No. 2023-BSE-007
lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ echo "Semester: 5-A" >> README.md

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ cat README.md
Assignment # 01
Name: Amina Noor
Reg No. 2023-BSE-007Semester: 5-A

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git add .
warning: in the working copy of 'README.md', LF will be replaced by CRLF the next time Git touches it

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git commit -m "local commit"
[main a394912] local commit
1 file changed, 1 insertion(+), 1 deletion(-)

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git push -u gitea main
remote: Unauthorized
fatal: Authentication failed for 'http://gitea.com/23-22411-007-oss/assignment1.git/'

```

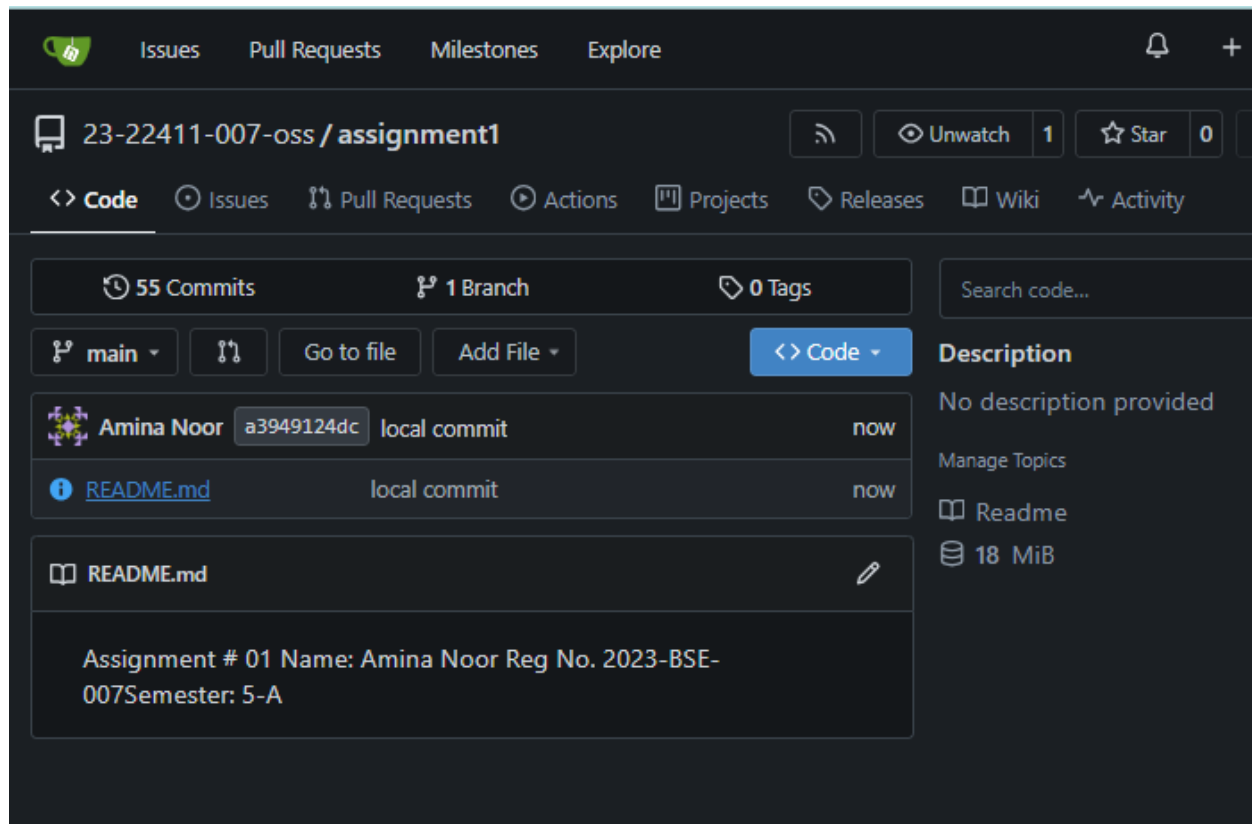
```

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git remote set-url gitea https://gitea.com/23-22411-007-oss/assignment1.git

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git push -u gitea main
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), 313 bytes | 104.00 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://gitea.com/23-22411-007-oss/assignment1.git
    2296121..a394912  main -> main
branch 'main' set up to track 'gitea/main'.

```

On Gitea:



Task 2: Mirror README.md from Gitea to GitHub

Running commands on Git Bash:

```
lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git remote add github https://gitea.com/23-22411-007-oss/assignment1.git

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git push -u github main
remote: Failed to authenticate user
fatal: Authentication failed for 'https://gitea.com/23-22411-007-oss/assignment1.git/'

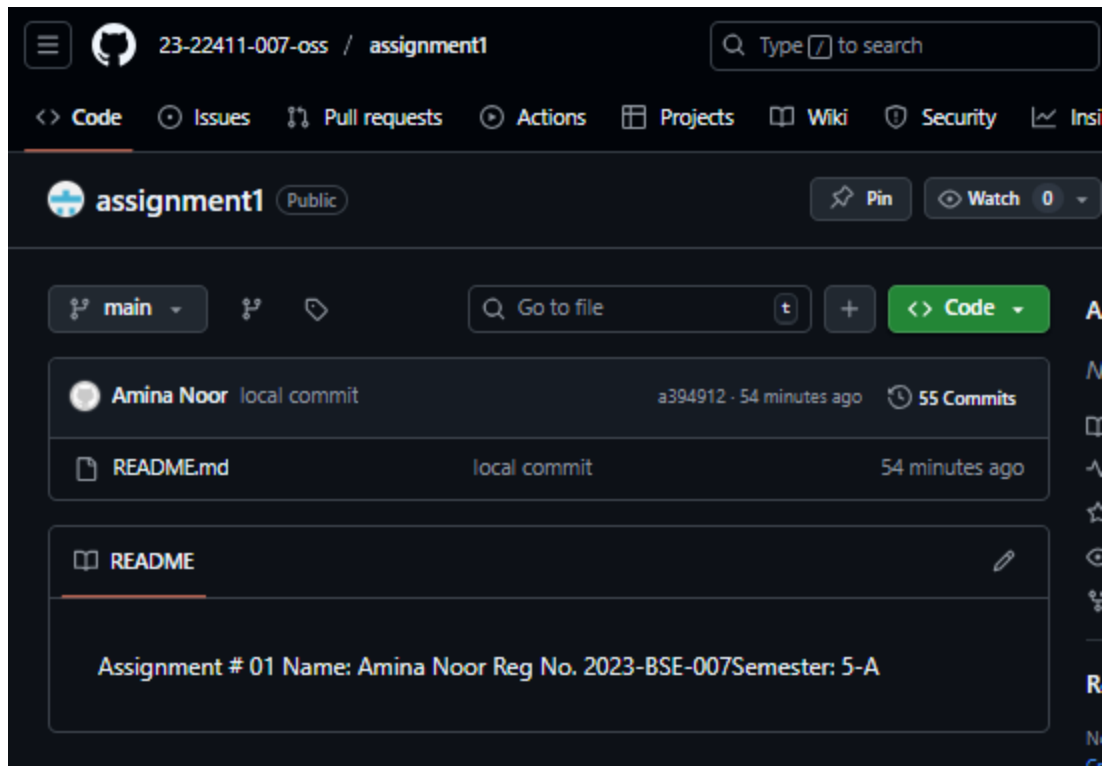
lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git remote remove github

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git remote add github https://github.com/23-22411-007-oss/assignment1.git

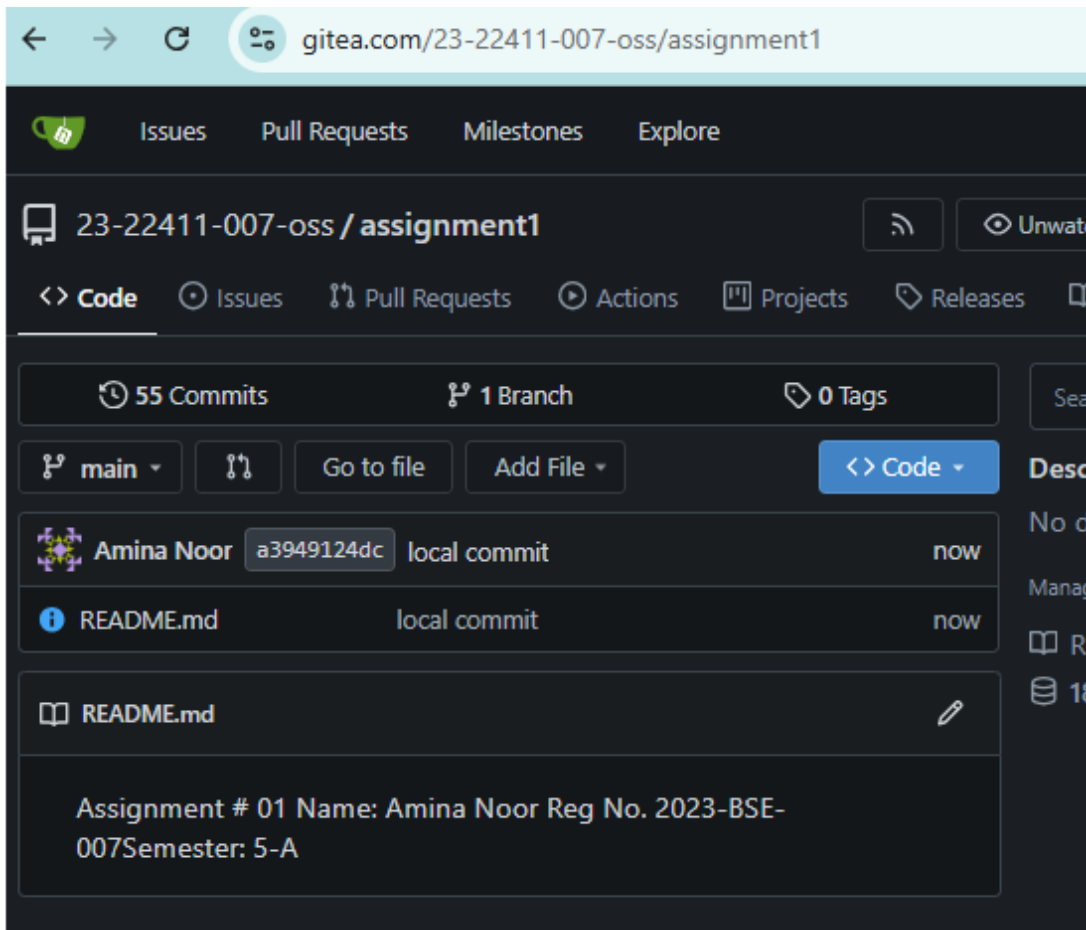
lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git push -u github main
remote: Repository not found.
fatal: repository 'https://github.com/23-22411-007-oss/assignment1.git/' not found

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git push -u github main
Enumerating objects: 267, done.
Counting objects: 100% (267/267), done.
Delta compression using up to 4 threads
Compressing objects: 100% (194/194), done.
Writing objects: 100% (267/267), 8.75 MiB | 289.00 KiB/s, done.
Total 267 (delta 46), reused 233 (delta 34), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (46/46), done.
To https://github.com/23-22411-007-oss/assignment1.git
 * [new branch]      main -> main
branch 'main' set up to track 'github/main'.
```

On GitHub:



On Gitea:



Verify Remotes:

```
lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git remote -v
gitea https://gitea.com/23-22411-007-oss/assignment1.git (fetch)
gitea https://gitea.com/23-22411-007-oss/assignment1.git (push)
github https://github.com/23-22411-007-oss/assignment1.git (fetch)
github https://github.com/23-22411-007-oss/assignment1.git (push)
origin https://gitea.com/23-22411-007-oss/assignment1.git (fetch)
origin https://gitea.com/23-22411-007-oss/assignment1.git (push)
```

Task 3: Use Git LFS for Large Files

Install Git LFS

```
lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git lfs install
Updated Git hooks.
Git LFS initialized.
```

Checking LFS version:

```
lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git lfs version
git-lfs/3.7.0 (GitHub; windows amd64; go 1.24.4; git 92ddf56)
```

Making three big files:

```
lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (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, 0.0800286 s, 2.0 GB/s

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ dd if=/dev/zero of=bigfile2.zip bs=1M count=200
200+0 records in
200+0 records out
209715200 bytes (210 MB, 200 MiB) copied, 0.0879745 s, 2.4 GB/s

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ dd if=/dev/zero of=bigfile3.zip bs=1M count=250
250+0 records in
250+0 records out
262144000 bytes (262 MB, 250 MiB) copied, 0.109043 s, 2.4 GB/s
```

Tell Git LFS to track your big files

```
lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git lfs track "*.zip"
Tracking "*.zip"

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git add .gitattributes
```

Stage your big files

```
lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git add bigfile1.zip bigfile2.zip bigfile3.zip
```

Commit the changes

```
lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git commit -m "Add large files with Git LFS"
[main 84622ee] 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 (assignment 1 repo)

```

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ git push github main
Uploading LFS objects: 100% (3/3), 629 MB | 878 KB/s, done.
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 4 threads
Compressing objects: 100% (5/5), done.
Writing objects: 100% (6/6), 797 bytes | 199.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/23-22411-007-oss/assignment1.git
a394912..84622ee main -> main

```

On GitHub after adding those three big files:

The screenshot shows the GitHub interface for a repository named 'assignment1' under the user '23-22411-007-oss'. The repository is public. The file history table shows the following files and their commit details:

File	Commit Message	Commit Hash	Time
.gitattributes	Add large files with Git LFS	84622ee	16 minutes ago
README.md	local commit		1 hour ago
bigfile1.zip	Add large files with Git LFS	84622ee	16 minutes ago
bigfile2.zip	Add large files with Git LFS	84622ee	16 minutes ago
bigfile3.zip	Add large files with Git LFS	84622ee	16 minutes ago

Below the file history, the README file is displayed with the following content:

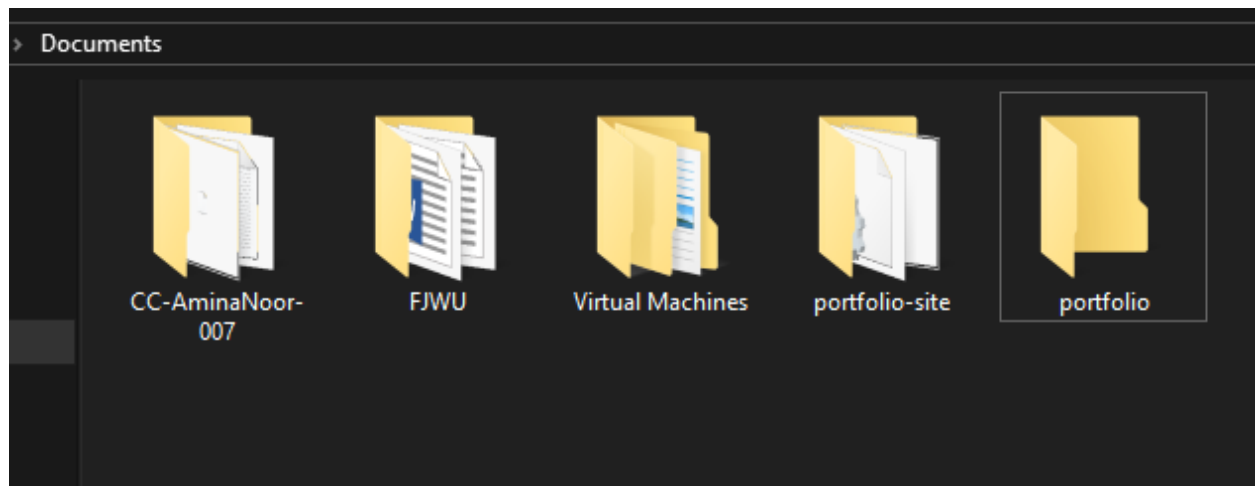
```

Assignment # 01 Name: Amina Noor Reg No. 2023-BSE-007Semester: 5-A

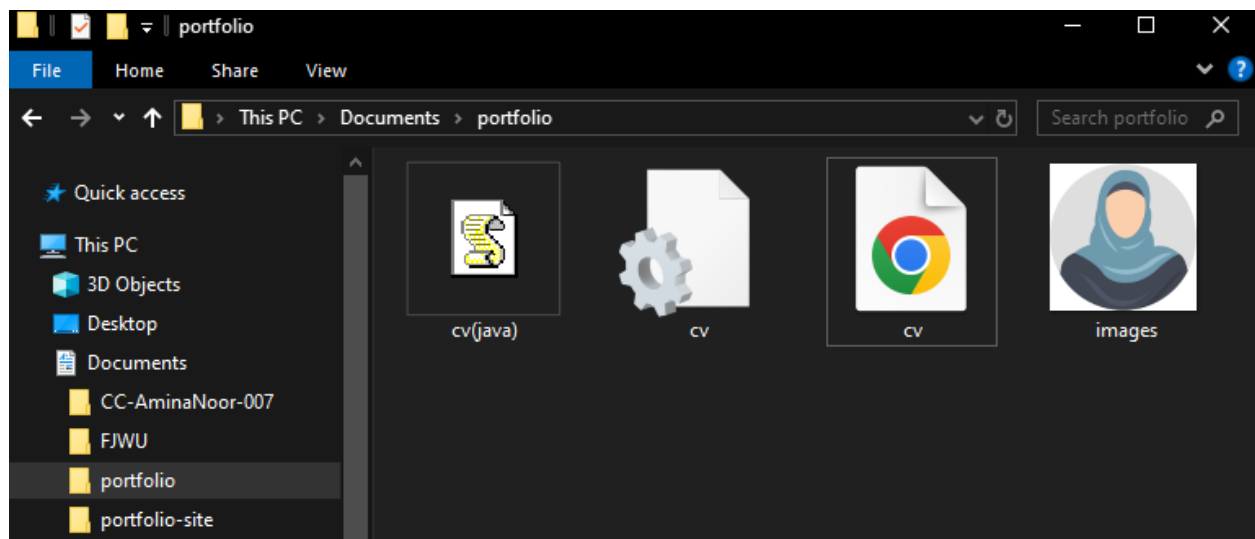
```

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


```
lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/CC-AminaNoor-007 (main)
$ cd ~/Documents/portfolio

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/portfolio (master)
$ ls
'cv(java).js'  cv.css  cv.htm  images.png

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/portfolio (master)
$ git init
Initialized empty Git repository in C:/Users/lenovo/Documents/portfolio/.git/

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/portfolio (master)
$ git add .

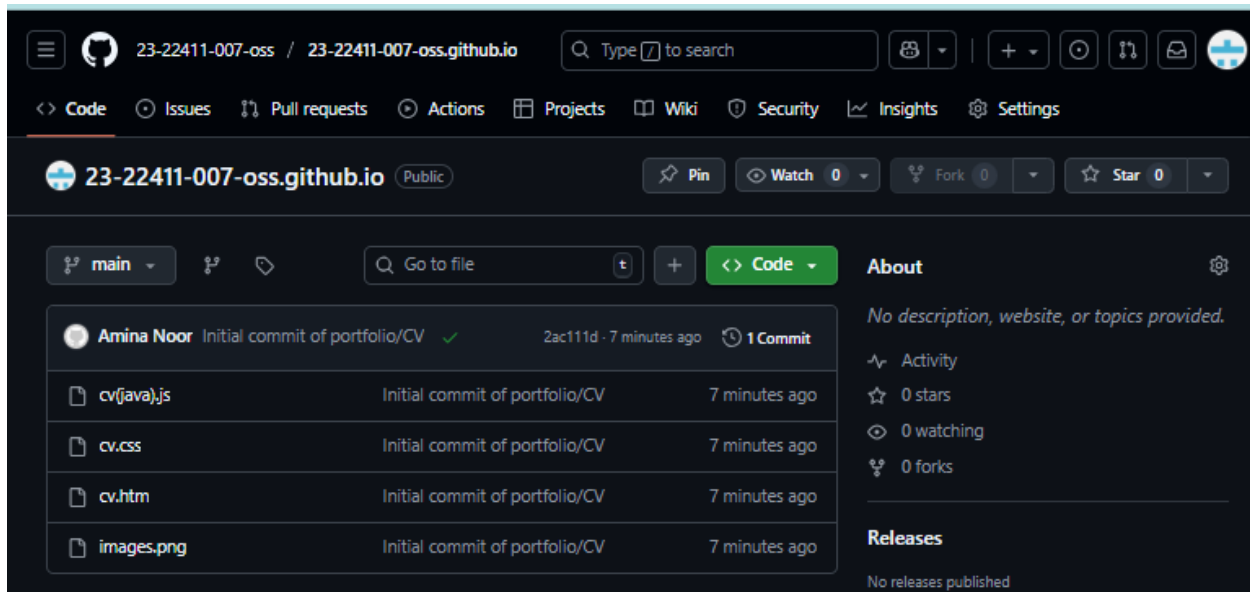
lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/portfolio (master)
$ git commit -m "Initial commit of portfolio/CV"
[master (root-commit) 2ac111d] Initial commit of portfolio/CV
4 files changed, 256 insertions(+)
create mode 100644 cv(java).js
create mode 100644 cv.css
create mode 100644 cv.htm
create mode 100644 images.png
```

```
lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/portfolio (master)
$ git remote add origin https://github.com/23-22411-007-oss/23-22411-007-oss.github.io.git
```

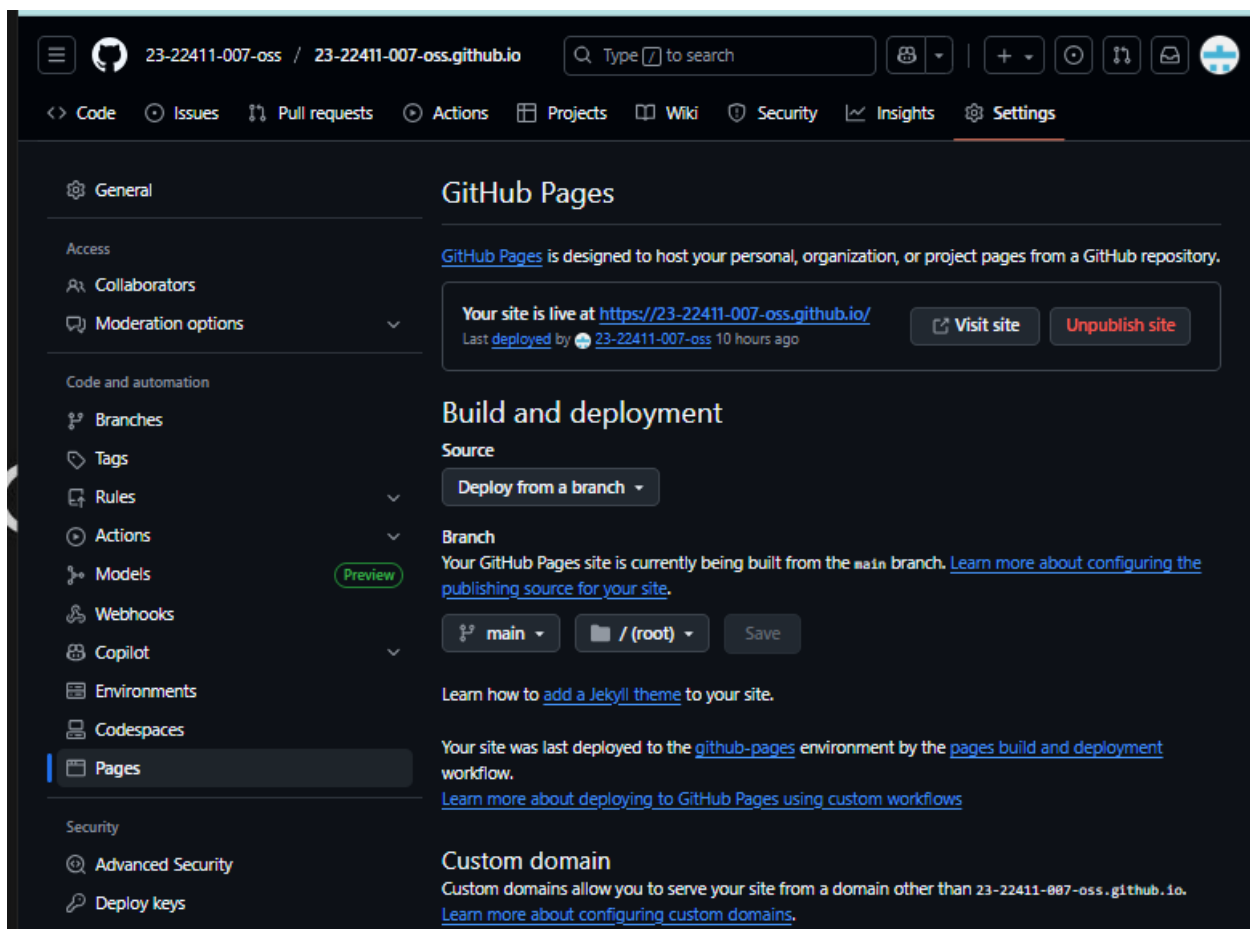
```
lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/portfolio (main)
$ git push -u origin main
To https://github.com/23-22411-007-oss/23-22411-007-oss.github.io.git
! [rejected]        main -> main (fetch first)
error: failed to push some refs to 'https://github.com/23-22411-007-oss/23-22411-007-oss.github.io.git'
hint: Updates were rejected because the remote contains work that you do not
hint: have locally. This is usually caused by another repository pushing to
hint: the same ref. If you want to integrate the remote changes, use
hint: 'git pull' before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.

lenovo@DESKTOP-2IJM5BT MINGW64 ~/Documents/portfolio (main)
$ git push -u origin main --force
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 4 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (6/6), 7.88 KiB | 1.97 MiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/23-22411-007-oss/23-22411-007-oss.github.io.git
+ 8e20d3d...2ac111d main -> main (forced update)
branch 'main' set up to track 'origin/main'.
```

On GitHub:



GitHub Pages:



Now live link: <https://23-22411-007-oss.github.io/>

Live Site View:



Amina Noor

Bachelor of Software Engineering — Fatima Jinnah Women University

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[About Education Skills Expertise](#)

About Me

Personable and motivated, equipped with foundational knowledge and technical skills in project management and data analysis. Familiar with Microsoft Office and basic coding languages. Aims to leverage these skills to contribute to team success and drive positive outcomes.

Education

Fatima Jinnah Women University

Rawalpindi — 2023 - Present

Bachelor of Software Engineering

Fauji Foundation College

Rawalpindi — 2021 - 2023

FSc - ICS

Army Public School & College (FWO)

Rawalpindi — 2019 - 2021

Computer Science

Skills Summary

- C++
- SQL
- Project Management
- Microsoft Office

Expertise

Management Skills

Creativity

Critical Thinking

Leadership

Made By Amina Noor. Download: [Download as HTML bundle](#)
