

**Name: Zuha Irfan**

**Rol No : 2023-BSE-073**

**Assignment : 01**

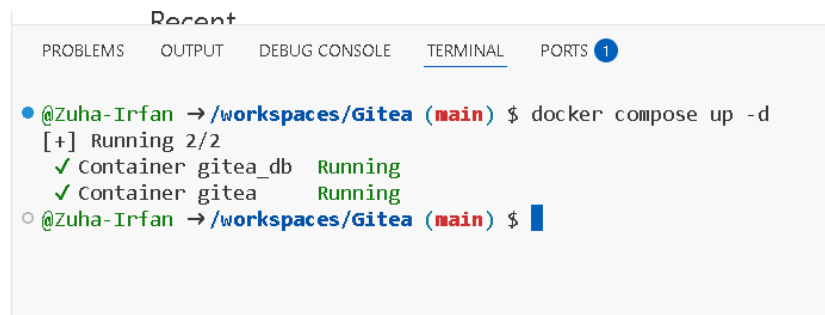
**Semester & Section: V-B**

**Subject : Cloud Computing**

### **Task List:**

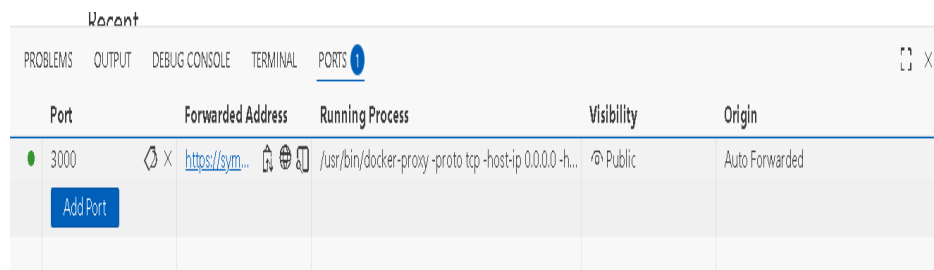
#### **Task 1: Run Gitea in Codespace and Create an Initial Repo**

Step A: Run Gitea inside Codespace



```
@Zuha-Irfan → /workspaces/Gitea (main) $ docker compose up -d
[+] Running 2/2
 ✓ Container gitea_db Running
 ✓ Container gitea Running
@Zuha-Irfan → /workspaces/Gitea (main) $
```

**Step B: Forward the port to access Gitea:**



Port	Forwarded Address	Running Process	Visibility	Origin
3000	<a href="https://sym...">https://sym...</a>	/usr/bin/docker-proxy -proto tcp -host-ip 0.0.0.0 -h...	Public	Auto Forwarded

[Add Port](#)



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

amina

Account was successfully created. Welcome!

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

Repository Organization

Repositories

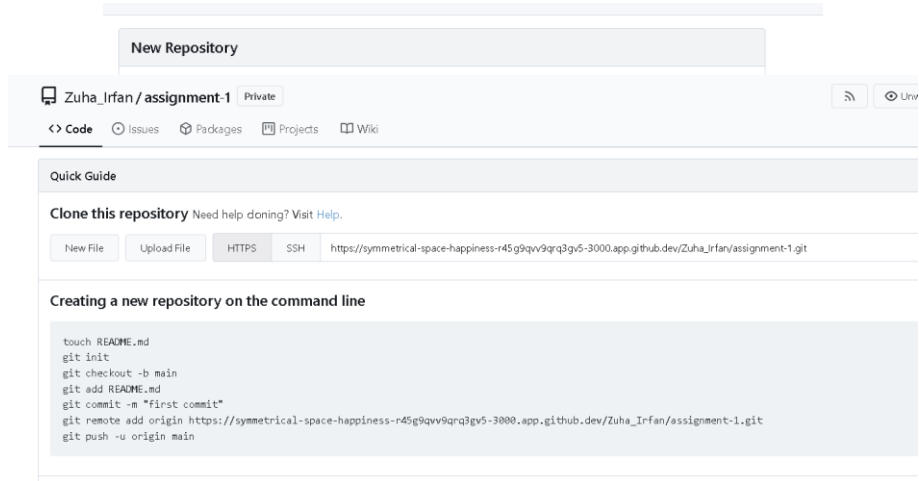
There are no repositories yet.

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

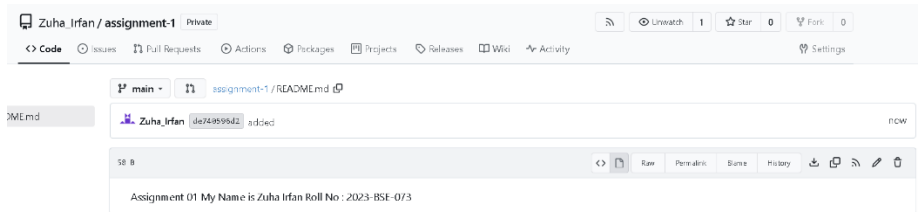
English Licenses API

## Step D: Create a new repository in Gitea:

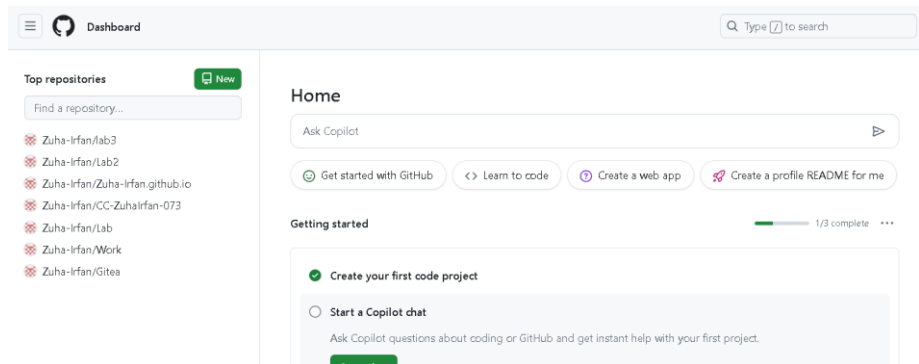
Click **New Repository** → name it assignment1.



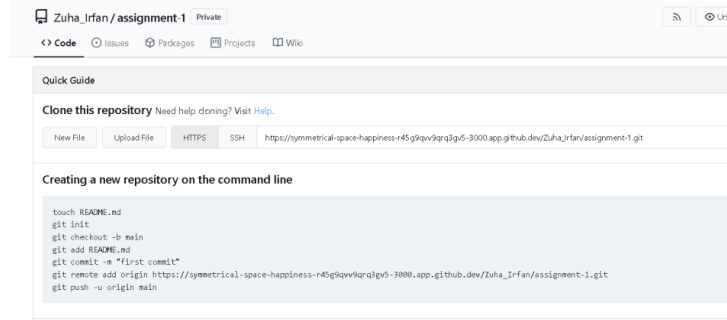
Add a **README.md** listing student names & roll numbers.



## Connect Codespace to Gitea:



## Open Settings in Gitea :



## Generating Token:

▼ Generate New Token

Token Name

PAT

Repository and Organization Access

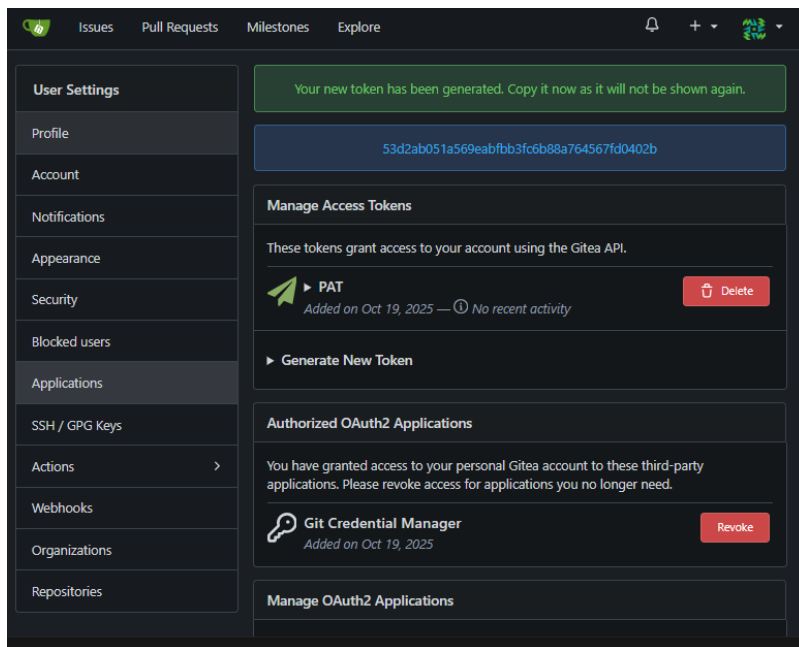
☐ Public only

☒ 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
admin	<input type="radio"/> No Access	<input type="radio"/> Read	<input checked="" 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



## Running commands on Git Bash:

```
S Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/work (master)
$ git init
Initialized empty Git repository in C:/Users/S Y S/OneDrive/start backup/work/.git/

S Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/work (master)
$ git remote add gitea https://Zuha_Irfan:d83449ed75705b78d6842156d05b9067bcd8766e@github.com/Zuha-Irfan/Gitea.git

S Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/work (master)
$ git pull
remote: Enumerating objects: 6, done.
remote: Counting objects: 100% (6/6), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 6 (delta 1), reused 4 (delta 1), pack-reused 0 (from 0)
Unpacking objects: 100% (6/6), 1.62 KiB | 21.00 KiB/s, done.
From https://github.com/Zuha-Irfan/Gitea
* [new branch] main -> gitea/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=gitea/<branch> master

S Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/work (master)
$ git branch -M main

S Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/work (main)
$ git pull gitea main
From https://github.com/Zuha-Irfan/Gitea
* branch main -> FETCH_HEAD
```

```
S Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/work (main)
$ ls
compose.yaml

S Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/work (main)
$ cat README.md
cat: README.md: No such file or directory

S Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/work (main)
$ ^C

S Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/work (main)
$ ls -a
./ ../ .git/ compose.yaml

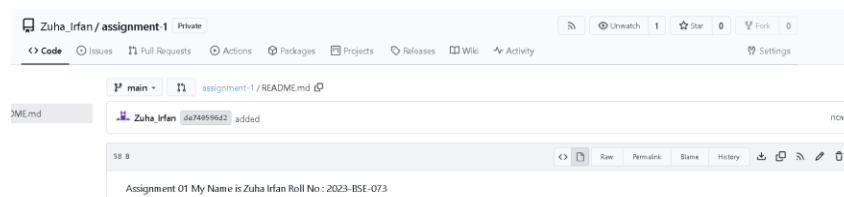
S Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/work (main)
$ ^C

S Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/work (main)
$ find . -name "README.md"
```

```
S Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/work (main)
$ ls
README.md compose.yaml

S Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/work (main)
$ cat README.md
Assignment 1
My name is Zuha Irfan
Roll NO : 2023-BSE-073
```

## On Gitea:



## Task 2: Mirror README.md from Gitea to GitHub

Running commands on Git Bash:

```
$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/work (main)
$ ls ~/.ssh
id_ed25519 id_ed25519.pub known_hosts known_hosts.old

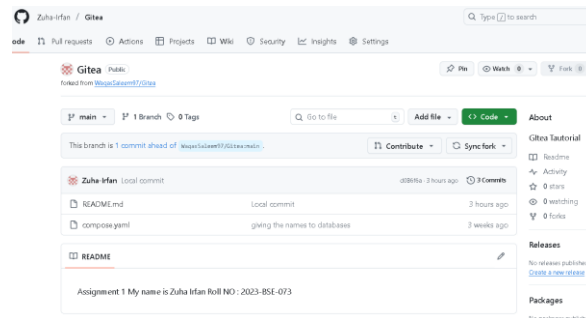
$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/work (main)
$ eval "$(ssh-agent -s)"
ssh-add ~/.ssh/id_ed25519
Agent pid 400
Identity added: /c/Users/S Y S/.ssh/id_ed25519 (your_email@example.com)

$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/work (main)
$ cat ~/.ssh/id_ed25519.pub
ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIHtpR4Vld0M+xcFyo077MsDMiHN96hSD5kk5z7BIRqc5
your_email@example.com

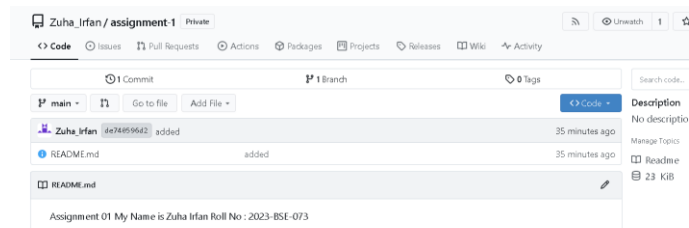
$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/work (main)
$ git remote set-url gitea git@github.com:Zuha-Irfan/Gitea.git

$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/work (main)
$ git push -u gitea main
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 346 bytes | 115.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To github.com:Zuha-Irfan/Gitea.git
   421ea28..d086f6a  main -> main
branch 'main' set up to track 'gitea/main'.
```

On GitHub:



On Gitea:



Verify Remotes:

```
$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/work (main)
$ git remote -v
gitea git@github.com:Zuha-Irfan/Gitea.git (fetch)
gitea git@github.com:Zuha-Irfan/Gitea.git (push)
```

### Task 3: Use Git LFS for Large Files

Install Git LFS

```
S Y SQIrfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ git lfs install
Updated Git hooks.
Git LFS initialized.
```

Checking LFS version:

```
S Y SQIrfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ git lfs version
git-lfs/3.7.0 (GitHub; windows amd64; go 1.24.4; git 92ddd56)
```

Making three big files:

```
S Y SQIrfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ dd if=/dev/zero of=bigfile1.zip bs=1M count=250
250+0 records in
250+0 records out
262144000 bytes (262 MB, 250 MiB) copied, 0.176932 s, 1.5 GB/s

S Y SQIrfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (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, 0.11885 s, 1.8 GB/s

S Y SQIrfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (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, 0.220526 s, 1.2 GB/s
```

Tell Git LFS to track your big files

```
S Y SQIrfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ git lfs track "*.zip"
Tracking "*.zip"

S Y SQIrfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ git add .gitattributes
```

Stage your big files

```
S Y SQIrfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ git add bigfile1.zip bigfile2.zip bigfile3.zip
```

Commit the changes

```
S Y SQIrfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ git commit -m "Add large file with Git LFS"
[main 417ec38] Add large file 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)

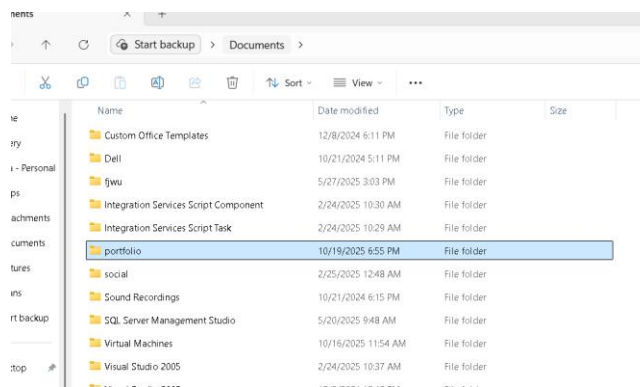
```
$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ git push github main
Uploading LFS objects: 100% (3/3), 629 MB | 878 KB/s, done.
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 4 threads
Compressing objects: 100% (5/5), done.
Writing 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:

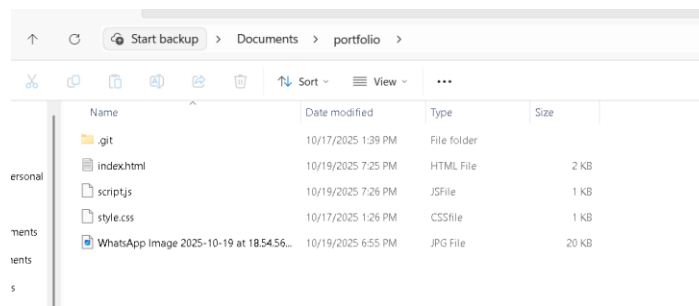
```
$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ git commit -m "Add large file with Git LFS"
[main 417ec38] Add large file with Git LFS
4 files changed, 10 insertions(+)
create mode 100644 .gitattributes
create mode 100644 bigfile1.zip
create mode 100644 bigfile2.zip
create mode 100644 bigfile3.zip
```

## 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



```

$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ cd ~/Documents/portfolio

$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ ls
'cv(java).js'  cv.css  cv.htm  images.png

$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ git init
Initialized empty Git repository in C:/Users/lenovo/Documents/portfolio/.git/

$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ git add .

$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ 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

```

```

$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ ls ~/.ssh
id_ed25519 id_ed25519.pub known_hosts known_hosts.old

$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ eval "$(ssh-agent -s)"
ssh-add ~/.ssh/id_ed25519
Agent pid 400
Identity added: /c/Users/S Y S/.ssh/id_ed25519 (your_email@example.com)

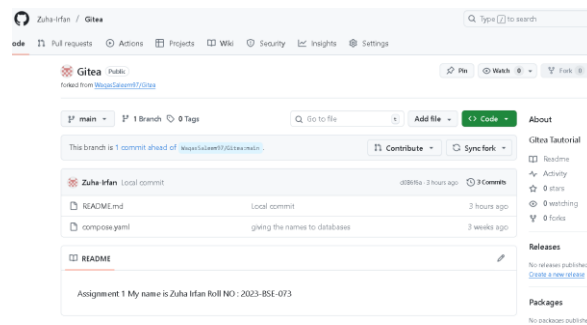
$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ cat ~/.ssh/id_ed25519.pub
ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIHTpR4VldOM+XcFyo077MsDMiHN96hSD5kk5z7BIRQc5
your_email@example.com

$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ git remote set-url gitea git@github.com:Zuha-Irfan/Gitea.git

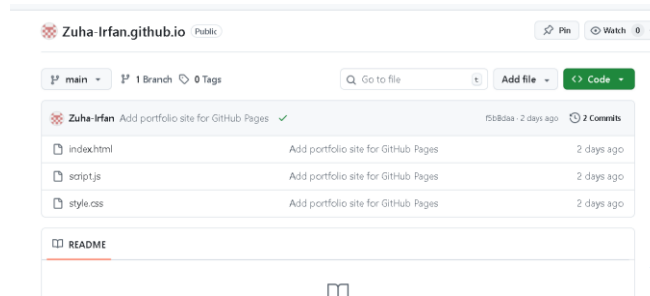
$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ git push -u gitea main
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 346 bytes | 115.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To github.com:Zuha-Irfan/Gitea.git
  421ea28..d086f6a  main -> main
branch 'main' set up to track 'gitea/main'.

```

On GitHub:

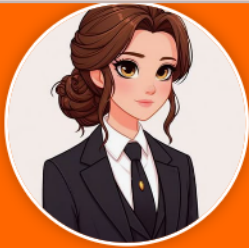


GitHub Pages:



Now live link: <https://23-22411-073-oss.github.io/>

Live Site View:



## Zuha Irfan

Student

### Education

**FATIMA JINNAH WOMEN UNIVERSITY**  
2023–2027 — Bachelor of Science in Software Engineering (Ongoing)

**APS HUMAYUM RWP**  
2021–2023 — Intermediate (Pre-Engineering), A1

**APS HUMAYUM RWP**  
2019–2021 — Matriculation, A1

### Skills

- Programming Languages
- Web Design
- Branding
- Graphic Design
- SEO
- Marketing
- Microsoft Tools
- Data Structures & Algorithms
- Operating Systems
- Version Control (Git)
- Problem-Solving & Debugging

### About Me

I possess a diverse set of skills in tech and digital marketing, including proficiency in Programming Languages, Web Design, Branding, Graphic Design, SEO, Marketing, Microsoft tools, Data structures and algorithms, and Operating systems. Additionally, my skill set encompasses management, version control using Git, strong Problem-solving and debugging expertise, effective collaboration, and communication, and experience with Cloud computing platforms like AWS and Azure.

### Contact

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Rawalpindi, Islamabad

### Language

- English
- Urdu
- Punjabi

