

**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**

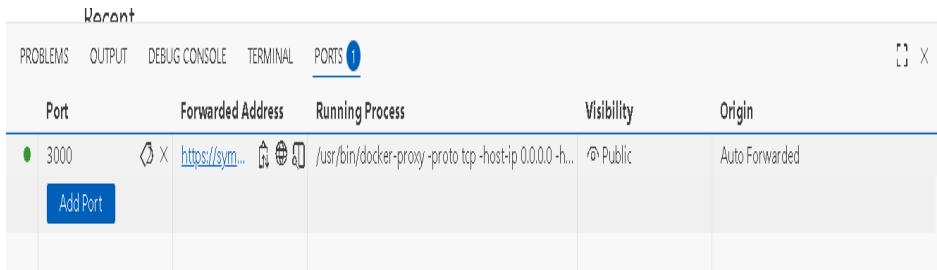
Step A: Run Gitea inside Codespace



```
Recent
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS 1

● @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:**

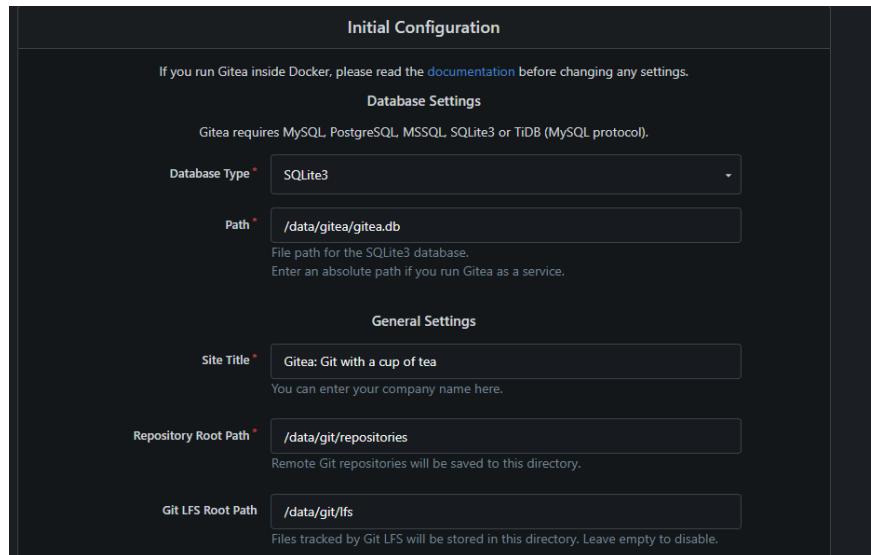


Forward				
PROBLEMS	OUTPUT	DEBUG CONSOLE	TERMINAL	PORTS 1
Port	Forwarded Address	Running Process	Visibility	Origin
3000	https://sym... ↗ X	/usr/bin/docker-proxy-proto tcp -host-ip 0.0.0.0 -h... ↗ Public	Auto Forwarded	
	Add Port			



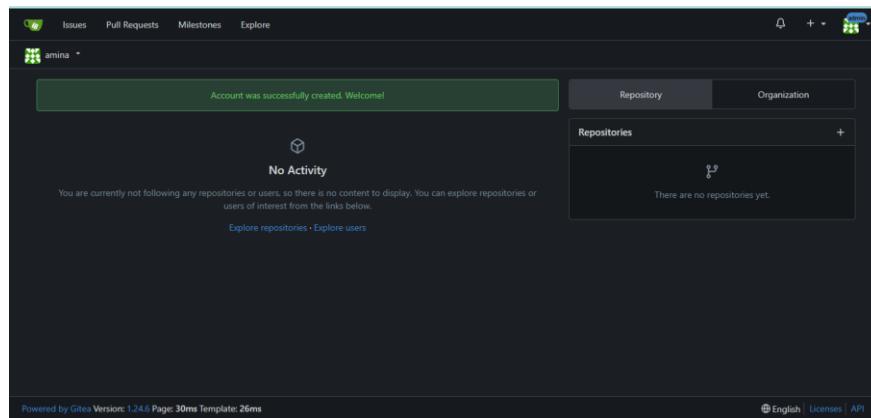
Connecting to the forwarded port...

### Step C: Set up Gitea in the browser:



The screenshot shows the "Initial Configuration" page of Gitea. At the top, it says "Initial Configuration" and provides a note: "If you run Gitea inside Docker, please read the [documentation](#) before changing any settings." Below this is the "Database Settings" section. The "Database Type" dropdown is set to "SQLite3". The "Path" input field contains "/data/gitea/gitea.db", with a placeholder below it: "File path for the SQLite3 database. Enter an absolute path if you run Gitea as a service." The "General Settings" section follows, containing fields for "Site Title" (set to "Gitea: Git with a cup of tea"), "Repository Root Path" (set to "/data/git/repositories"), and "Git LFS Root Path" (set to "/data/git/lfs"). Each setting has a corresponding explanatory placeholder text below it.

### Create an admin account.



The screenshot shows the Gitea dashboard. At the top, there are navigation links: Issues, Pull Requests, Milestones, and Explore. On the left, there's a user profile for "amina" with a green icon. The main area displays a green success message: "Account was successfully created. Welcome!". Below this, there's a "No Activity" section with a note: "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." It includes links to "Explore repositories" and "Explore users". To the right, there are tabs for "Repository" and "Organization", with a "Repositories" section showing a message: "There are no repositories yet." At the bottom, the footer includes the text "Powered by Gitea Version: 1.24.6 Page: 30ms Template: 26ms", language and license links, and a link to the API.

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

Click New Repository → name it assignment1.

The screenshot shows the 'New Repository' page in Gitea. At the top, there's a header bar with the repository name 'Zuha\_Irfan / assignment-1' and a 'Private' button. Below the header, there are tabs for 'Code', 'Issues', 'Packages', 'Projects', and 'Wiki'. A 'Quick Guide' section provides instructions for cloning the repository. It includes a 'Clone this repository' link and a 'Help' link. Below this, a 'Creating a new repository on the command line' section contains a code block with the following commands:

```
touch README.md  
git init  
git checkout -b main  
git add README.md  
git commit -m "First commit"  
git remote add origin https://symmetrical-space-happiness-r45g9qvv9qrq3gv5-3000.app.github.dev/Zuha_Irfan/assignment-1.git  
git push -u origin main
```

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

The screenshot shows the 'assignment-1' repository in Gitea. The 'Code' tab is selected, showing the contents of the 'main' branch. A file named 'README.md' is listed. The file content is as follows:

```
Assignment 01 My Name is Zuha Irfan Roll No : 2023-BSE-073
```

## Connect Codespace to Gitea:

The screenshot shows the GitHub Codespace dashboard. On the left, there's a sidebar with 'Top repositories' and a search bar. The main area is titled 'Home' and features sections for 'Ask Copilot', 'Get started with GitHub', 'Learn to code', 'Create a web app', and 'Create a profile README for me'. Below this, there's a 'Getting started' section with a progress bar indicating '1/3 complete'. Under this, there are two options: 'Create your first code project' (marked with a green checkmark) and 'Start a Copilot chat'. A note below the chat option says: 'Ask Copilot questions about coding or GitHub and get instant help with your first project.'

## Open Settings in Gitea :

Zuha\_Irfan/assignment-1 Private

Code Issues Packages Projects Wiki

Quick Guide

Clone this repository Need help doing? Visit Help.

New File Upload File HTTPS SSH https://symmetrical-space-happiness-r45g9qv9qrq3gv5-3000.app.github.dev/Zuha\_Irfan/assignment-1.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://symmetrical-space-happiness-r45g9qv9qrq3gv5-3000.app.github.dev/Zuha_Irfan/assignment-1.git  
git push -u origin main
```

## 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

Issues Pull Requests Milestones Explore

User Settings

Profile Account Notifications Appearance Security Blocked users Applications SSH / GPG Keys Actions Webhooks Organizations Repositories

Your new token has been generated. Copy it now as it will not be shown again.

53d2ab051a569eabfbb3fc6b88a764567fd0402b

Manage Access Tokens

These tokens grant access to your account using the Gitea API.

PAT Added on Oct 19, 2025 — ⓘ No recent activity Delete

► Generate New Token

Authorized OAuth2 Applications

You have granted access to your personal Gitea account to these third-party applications. Please revoke access for applications you no longer need.

Git Credential Manager Added on Oct 19, 2025 Revoke

Manage OAuth2 Applications

## Running commands on Git Bash:

```
$ 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/
$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (master)
$ git remote add gitea https://Zuha_Irfan:d83449ed75705b78d6842156d05b9067bcd876@github.com/Zuha-Irfan/Gitea.git
$ 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

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

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

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

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

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

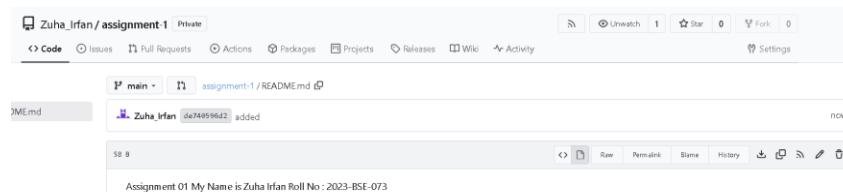
$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ AC

$ 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:

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

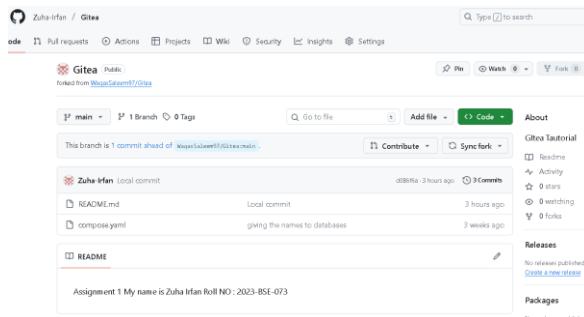
S Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ eval "$(ssh-agent -s)"
ssh-add ~/.ssh/id_ed25519
Agent pid 400
Identity added: /c/Users/S Y S/.ssh/id_ed25519 (your_email@example.com)

S Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ cat ~/.ssh/id_ed25519.pub
AAAAC3nzaC1ZD1lNTE5AAAIHtpR4Vld0M+XcFyo077MsDMiHN96hSD5kk5z7BIRQc5
your_email@example.com

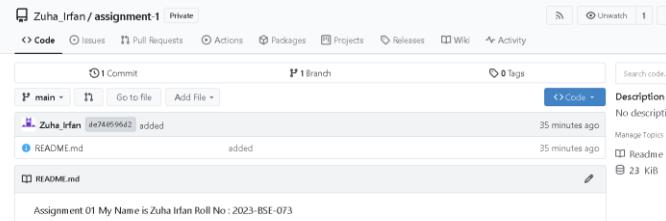
S Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ git remote set-url gitea git@github.com:Zuha-Irfan/Gitea.git

S 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:

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

Checking LFS version:

```
S Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ git lfs version
git-lfs/3.7.0 (GitHub; windows amd64; go 1.24.4; git 92dddf56)
```

Making three big files:

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

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

Stage your big files

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

Commit the changes

```
S 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
```

Push to GitHub (assignment 1 repo)

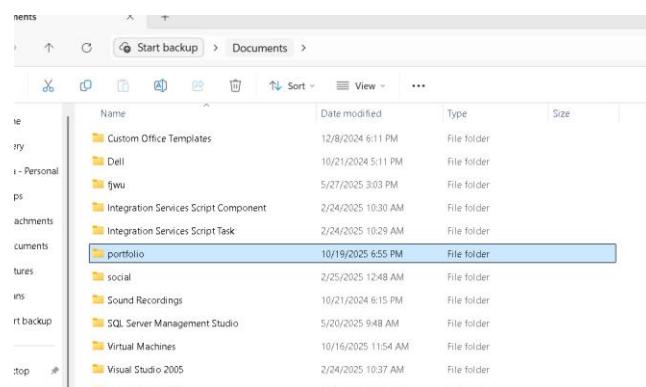
```
S Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ git push github main
Uploading LFS objects: 100% (3/3), 629 MB | 878 KB/s, done.
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 4 threads
Compressing objects: 100% (5/5), done.
Writing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

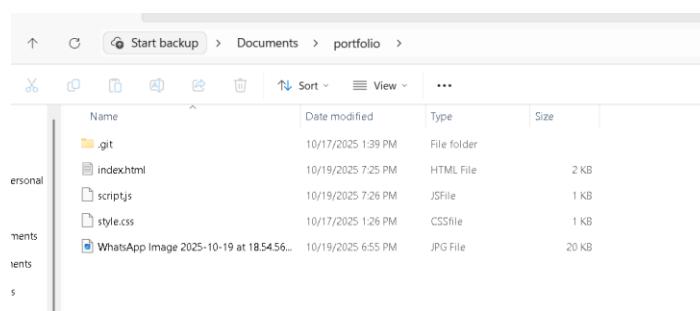
```
S Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ git commit -m "Add large file with Git LFS"
[main 417ec38] Add large file with Git LFS
 4 files changed, 10 insertions(+)
 create mode 100644 .gitattributes
 create mode 100644 bigfile1.zip
 create mode 100644 bigfile2.zip
 create mode 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) 2ac11d] 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 AAAACjNzaC1EzO1NTESAAAAIHp4VIdOM4xcFyoO77MsDMiHN96hSD5kk5z78IRQc5
your_email@example.com

$ Y S@Irfan-Ahmed MINGW64 ~/OneDrive/start backup/Work (main)
$ git remote set-url gitea git@github.com:Zuhra-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:Zuhra-Irfan/Gitea.git
  421ea28..d086f6a main -> main
branch 'main' set up to track 'gitea/main'.

```

## On GitHub:

The screenshot shows a GitHub repository named 'Gitea'. The repository has 3 commits. The most recent commit was made 3 hours ago by 'Zuhra-Irfan' (local commit). The commit message is 'Assignment 1 My name is Zuhra Irfan Roll NO:-2023-RSF-073'. The repository has 3 forks and 0 stars.

## 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

### 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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### Language

- English
- Urdu
- Punjabi

