

CLOUD COMPUTING
ASSIGNMENT 1



SUBMITTED TO
SIR WAQAS SALEEM

SUBMITTED BY
HAMNA MAHMOOD

2023-BSE-025

BSE V-A

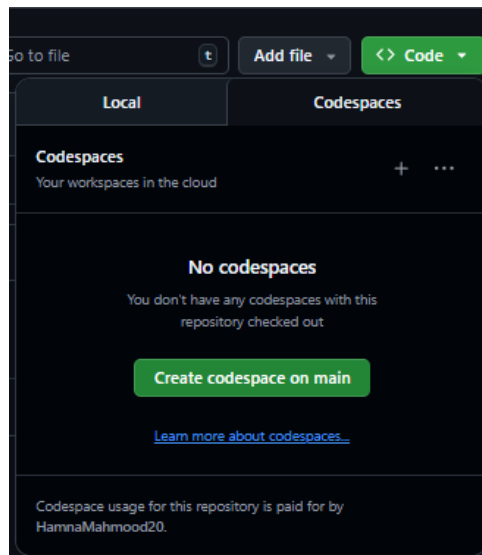
Assignment Repository: <https://github.com/HamnaMahmood20/assignment1>

Website link: <https://hamnamahmood20.github.io/>

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).



Running this command in terminal bottom in Codespace to start a container named Gitea where Port 3000 will be used for the website.

```
@HamnaMahmood20 →/workspaces/gitea-setup (main) $ docker run -d \
--name gitea \
-p 3000:3000 \
-p 222:22 \
-e USER_UID=$(id -u) \
-e USER_GID=$(id -g) \
gitea/gitea:latest
```

Click globe icon next to port 3000 on the Ports tab. This will take us to login page for Gitea as shown below,

Register

Username *

hamna

Email Address *

23-22411-025@se.fjwww.edu.pk

Password *


...

Confirm Password *

...

Register Account

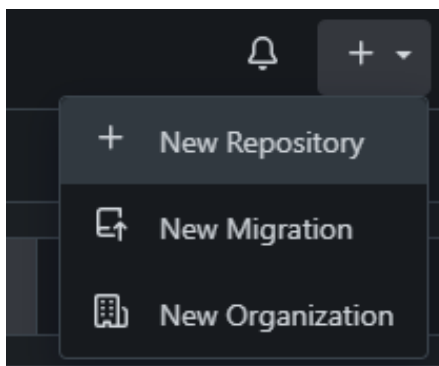
or

 Sign in with OpenID

Already have an account? [Sign in now!](#)


Create a Repository:

- Create a new repository on your Gitea server.



New Repository

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

Owner *  **hamna** ▼
 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

- Add a README.md file listing each student's name and roll number.

Making a directory named 'assignment1' in terminal, initializing an empty repository and adding my **name and roll number within**.

```

@HamnaMahmood20 →/workspaces/gitea-setup (main) $ mkdir assignment1
@HamnaMahmood20 →/workspaces/gitea-setup (main) $ cd assignment1
@HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ git init
Initialized empty Git repository in /workspaces/gitea-setup/assignment1/.git/
@HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ echo "### Students\n\n- Hamna Mahmood
Roll Number: 25" > README.md
@HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ git add README.md
@HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ git commit -m "Initial commit with RE
ADME"
[main (root-commit) df7a2f8] Initial commit with README
1 file changed, 1 insertion(+)
create mode 100644 README.md
  
```

Add Remote Repo:

- Use the following command to add your Gitea repository as a remote:
 git remote add gitea <your_gitea_repo_https_url>

```
● @HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ git remote add gitea https://cuddly-t  
rain-wrq7j974j7gjh9wg4-3000.app.github.dev/hamna/assignment1.git
```

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

```
● @HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ git push gitea main  
Enumerating objects: 3, done.  
Counting objects: 100% (3/3), done.  
Writing objects: 100% (3/3), 286 bytes | 286.00 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 http://localhost:3000/hamna/assignment1.git  
* [new branch]      main -> main
```



hamna pushed to main at hamna/assignment1 2 minutes ago



df7a2f89ea

Initial commit with README



Task 2: Mirror README.md from Gitea to GitHub

Continue Working with Your Existing Repository:

- You will use the same repository that you created and pushed to your Gitea server in Task 1.

```
● @HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ pwd  
/workspaces/gitea-setup/assignment1
```

Create GitHub Repository:

- Create a new GitHub repository named assignment 1.

Create a new repository

Repositories contain a project's files and version history. Have a project elsewhere? [Import a repository](#).
Required fields are marked with an asterisk (*).

- General**

Owner * HamnaMahmood20 / **Repository name *** assignment1

✓ assignment1 is available.

Great repository names are short and memorable. How about **curly-disco**?

Description

0 / 350 characters
- Configuration**

Choose visibility *
Choose who can see and commit to this repository Public

Add README
READMEs can be used as longer descriptions. [About READMEs](#) Off

Add .gitignore
.gitignore tells git which files not to track. [About ignoring files](#) No .gitignore

Add license
Licenses explain how others can use your code. [About licenses](#) No license

Create repository

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>

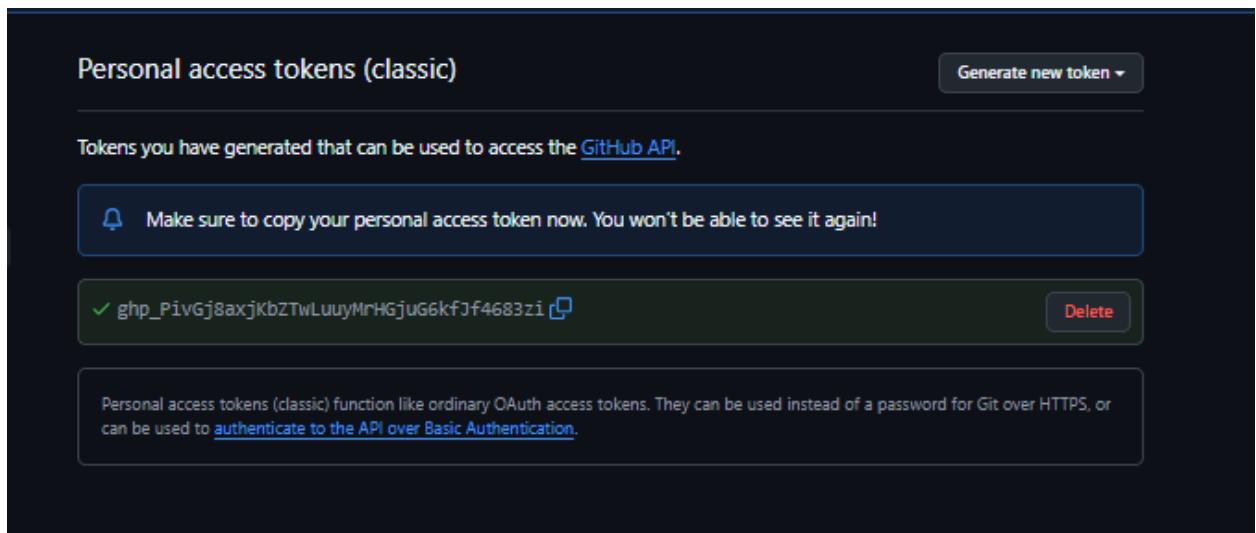
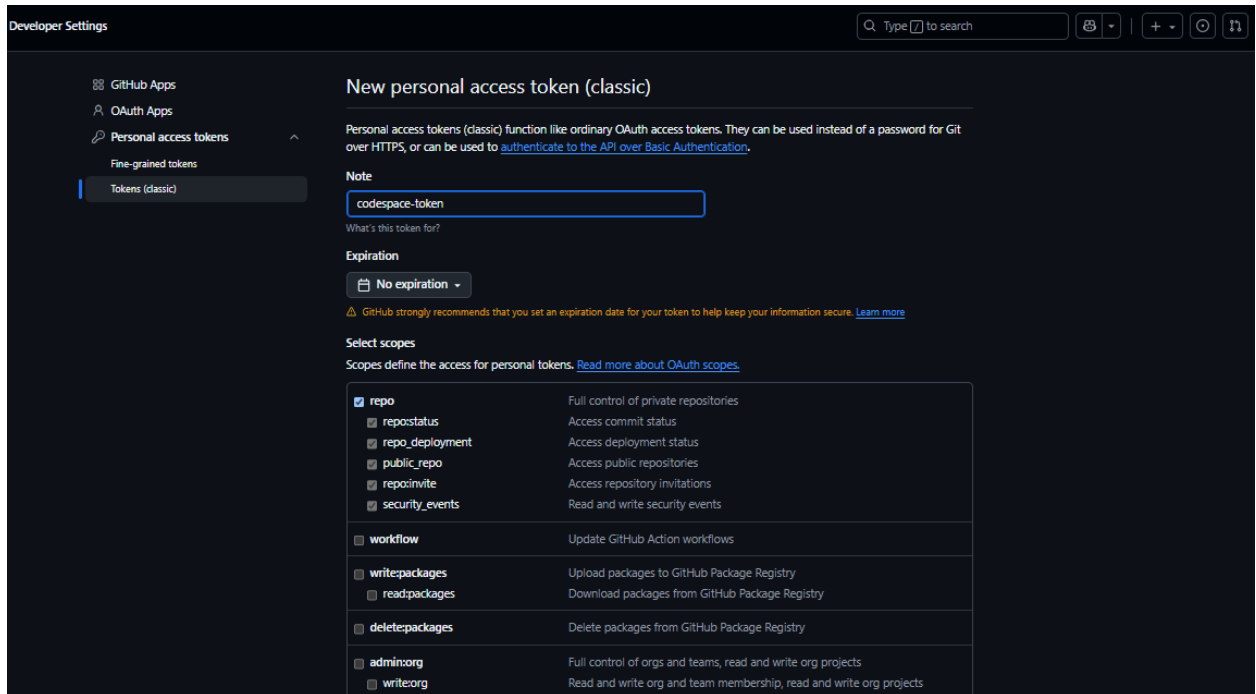
```

@HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ git remote add github https://github.com/HamnaMahmood20/assignment1.git
@HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ git remote -v
gitea http://hamna:hamna1234@localhost:3000/hamna/assignment1.git (fetch)
gitea http://hamna:hamna1234@localhost:3000/hamna/assignment1.git (push)
github https://github.com/HamnaMahmood20/assignment1.git (fetch)
github https://github.com/HamnaMahmood20/assignment1.git (push)
@HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ git push github main
remote: Permission to HamnaMahmood20/assignment1.git denied to HamnaMahmood20.
fatal: unable to access 'https://github.com/HamnaMahmood20/assignment1.git/': The requested URL returned error: 403

```

Generating token (classic) to resolve 403 Github Authentication error while pushing,

Going to github then to Settings,



Now, trying the remote command again in terminal,

```

@HamnaMahmood20 ➔ /workspaces/gitea-setup/assignment1 (main) $ git remote set-url github https://HamnaMahmood20: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@github.com/HamnaMahmood20/assignment1.git

```

Push the README.md File to GitHub:

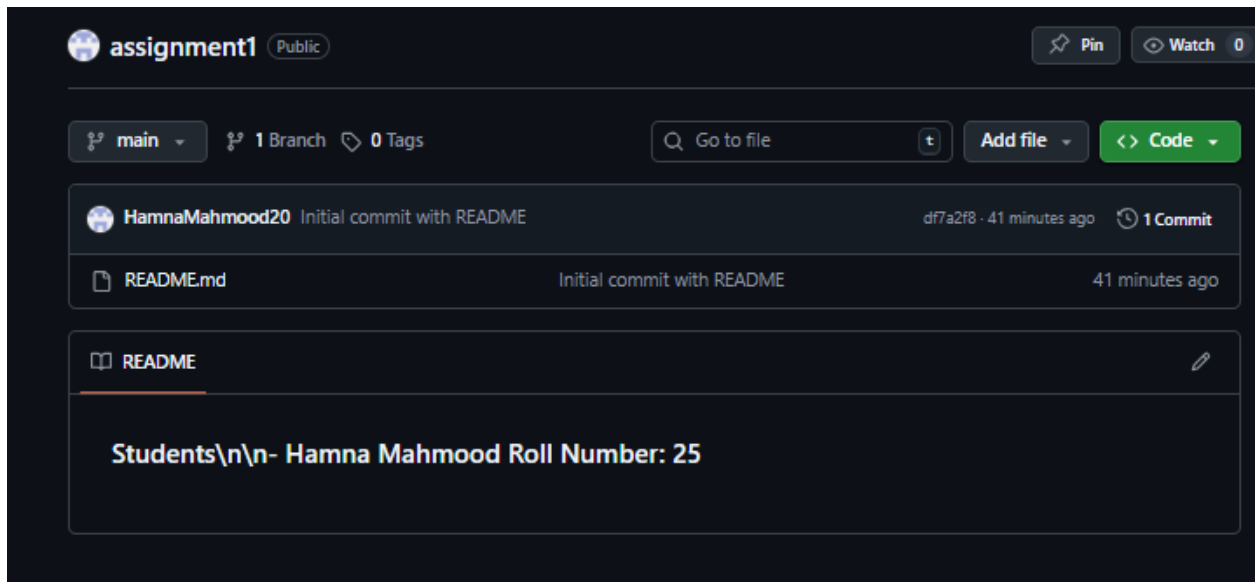
- Push the contents (including the README.md) from your local repository to GitHub.

```

● @HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ git push github main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 286 bytes | 286.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/HamnaMahmood20/assignment1.git
 * [new branch]      main -> main

```

Checking Github in our repository for confirmation,



Hence, README.md file has been successfully mirrored in Github repository.

Verify Remotes:

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

```

● @HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ git remote -v
gitea    http://hamna:hamna1234@localhost:3000/hamna/assignment1.git (fetch)
gitea    http://hamna:hamna1234@localhost:3000/hamna/assignment1.git (push)
github   https://github.com/HamnaMahmood20/assignment1.git (fetch)
github   https://github.com/HamnaMahmood20/assignment1.git (push)

```

Task 3: Use Git LFS for Large Files

Install Git LFS:

- Set up Git LFS in your local repository.


```
[new branch] main -> main
• @HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ git lfs install
Updated Git hooks.
Git LFS initialized.
```

Add Large Files:

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

```
• @HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ fallocation -l 120M large1.bin
• @HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ fallocation -l 150M large2.bin
• @HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ fallocation -l 200M large3.bin
```

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

```
• @HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ git lfs track "*.ext"
Tracking "*.ext"
```

- Replace .ext with the appropriate file extension.

```
• @HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ git lfs track "*.bin"
Tracking "*.bin"
```

Reference in Assignment Repo:

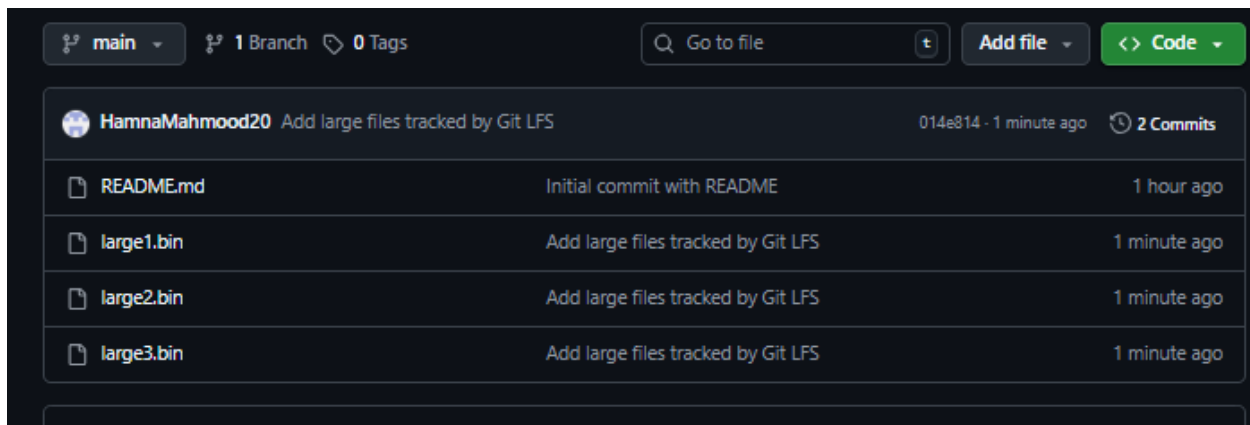
- Commit and push these large files to your GitHub assignment 1 repo.

```
Tracking *.bin
• @HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ git add large1.bin large2.bin large3.
bin
```

```
• @HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ git commit -m "Add large files tracke
d by Git LFS"
[main 014e814] Add large files tracked by Git LFS
3 files changed, 9 insertions(+)
create mode 100644 large1.bin
create mode 100644 large2.bin
create mode 100644 large3.bin
```

```
Create mode 100644 large3.bin
• @HamnaMahmood20 →/workspaces/gitea-setup/assignment1 (main) $ git push github main
Enumerating objects: 6, done.3/3), 493 MB | 27 MB/s
Counting objects: 100% (6/6), done.
Delta compression using up to 2 threads
Compressing objects: 100% (5/5), done.
Writing objects: 100% (5/5), 721 bytes | 721.00 KiB/s, done.
Total 5 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/HamnaMahmood20/assignment1.git
df7a2f8..014e814 main -> main
```

- Ensure the files are referenced correctly in your repository history.



Task 4: Create a Portfolio/CV with GitHub Pages

Create a new repository for GitHub Pages:

- Create a new repository named <your-username>.github.io.

The screenshot shows the 'New Repository' form. It includes a description: 'A repository contains all project files, including revision history. Already hosting one elsewhere? [Migrate repository.](#)'. The 'Owner' field shows 'hamna' with a dropdown arrow. Below it, a note says: 'Some organizations may not show up in the dropdown due to a maximum repository count limit.' The 'Repository Name' field contains 'HamnaMahmood.github.io'. Below it, a note says: '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.' The 'Visibility' section has a checkbox for 'Make repository private' which is unchecked, with a note: 'Only the owner or the organization members if they have rights, will be able to see it.'

- Replace <your-username> with your actual GitHub username (e.g., johnsmith.github.io).

The screenshot shows a close-up of the 'Repository name' field. The text 'HamnaMahmood20.github.io' is entered, and there is a 'Rename' button next to it.

Design Your Portfolio/CV:

- Create your portfolio or CV in HTML/CSS (or use a static site generator).

index.html

```

1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4    <meta charset="UTF-8">
5    <meta name="viewport" content="width=device-width, initial-scale=1.0">
6    <title>Hamna Mahmood - CV</title>
7    <link rel="stylesheet" href="styles.css">
8    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css">
9  </head>
10 <body>
11   <div class="cv-container">
12
13     <!-- Header / Profile -->
14     <header class="profile-header">
15       
16       <div class="profile-info">
17         <h1>HAMNA MAHMOOD</h1>
18         <h3>Software Engineer</h3>
19         <div class="contact">
20           <p><i class="fa fa-phone"></i> +92567656120</p>
21           <p><i class="fa fa-envelope"></i> 23-22411-025.se.fjwu.edu.pk</p>
22           <p><i class="fa fa-map-marker"></i> Rawalpindi, Pakistan</p>
23         </div>
24       </div>
25     </header>
26
27     <hr>
28
29     <!-- Objective -->
30     <section>
31       <h2>Objective</h2>
32       <p>
33         Seeking a responsible position in a dynamic organization where I can utilize my skills,
34         contribute to projects, and grow professionally.
35       </p>
36     </section>
37
38     <hr>
39

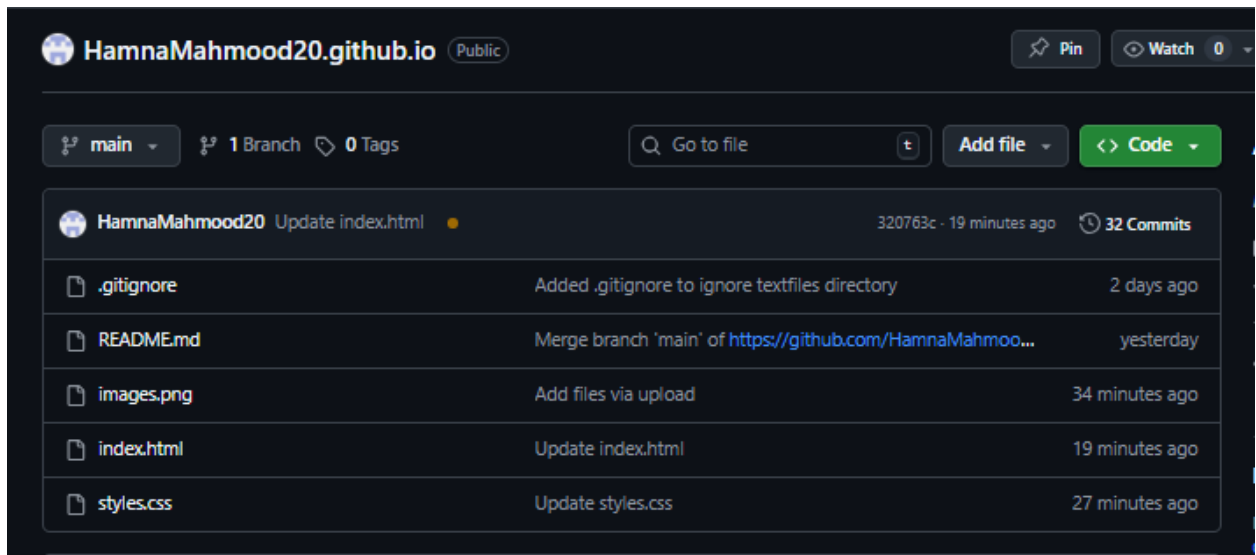
```

styles.css

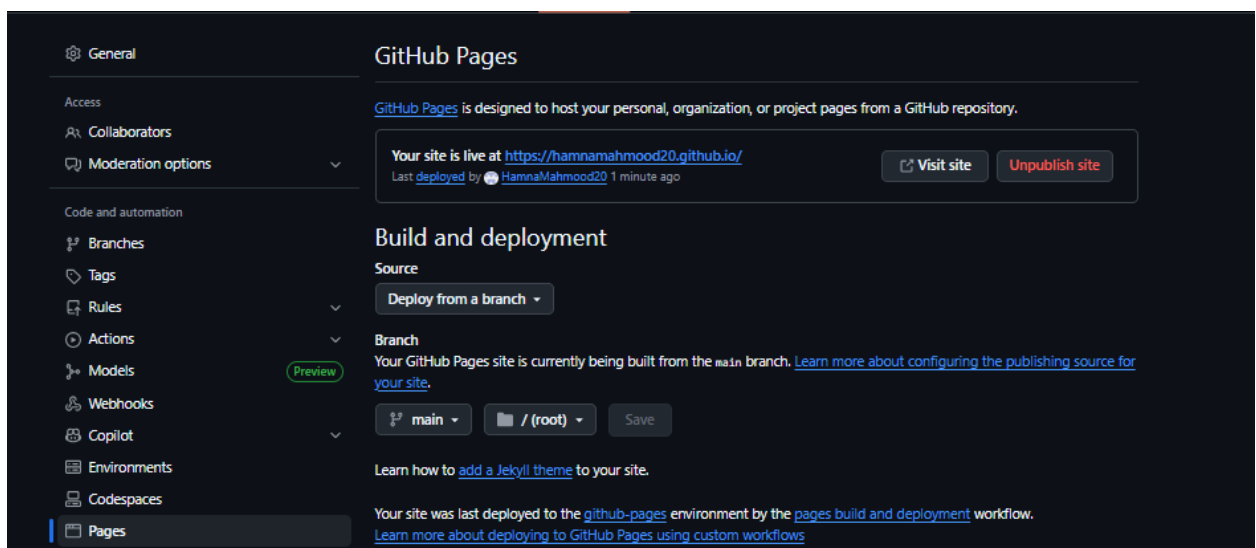
```
1  body {
2    font-family: "Segoe UI", Tahoma, Geneva, Verdana, sans-serif;
3    background-color: #f9f9f9;
4    color: #333;
5    margin: 0;
6    padding: 0;
7  }
8
9  .cv-container {
10   max-width: 900px;
11   margin: 30px auto;
12   background: #fff;
13   padding: 30px 40px;
14   box-shadow: 0 0 15px rgba(0,0,0,0.1);
15 }
16
17 .profile-header {
18   display: flex;
19   align-items: center;
20   margin-bottom: 25px;
21 }
22
23 .profile-img {
24   width: 120px;
25   height: 120px;
26   border-radius: 50%;
27   object-fit: cover;
28   margin-right: 25px;
29 }
30
31 .profile-info h1 {
32   margin: 0;
33   font-size: 28px;
34   color: #222;
```

Publish with GitHub Pages:

- Push your portfolio/CV files to the <your-username>.github.io repository.



- Enable GitHub Pages in your repository settings if not automatically enabled.



- Publish your site and share the link.

My website is at: <https://hamnamahmood20.github.io/>



HAMNA MAHMOOD

Software Engineer

☎ +92567656120

✉ 23-22411-025.se.fjwu.edu.pk

📍 Rawalpindi, Pakistan

Objective

Seeking a responsible position in a dynamic organization where I can utilize my skills, contribute to projects, and grow professionally.

Experience

07/2024 - 09/2024

Junior Intern - Internship with Syrbid Technologies, Islamabad

30/05/2024 - 05/06/2024

Junior Developer - CyberSpace Technologies, Islamabad"

Education

2023 - Present

Bachelors in Software Engineering

Fatima Jinnah Women University, Rawalpindi

2021 - 2023

ICS

Concepts College of Sciences, Rawalpindi

2019 - 2021

2019 - 2021

Pre-Medical

Fauji Foundation College for Girls, Rawalpindi

Skills

- HTML, CSS, C++, Java, Python, Dart
 - MS Office (Word, Excel, PowerPoint, Access)
 - VS Code, Visual Studio, Dartpad, Dev C++, Canva, Adobe Illustrator, Figma
-

Other Projects

- University Management System
 - Hotel Management System
 - Mental Stress Coping System Database
 - Library Management System
-

Languages

- Mother Tongue: Urdu
 - Other Languages: English (Speaking, Reading, Writing, Listening)
-

References

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Associate Professor: Dr. Shazia Hashmat | Email: shaziahashmat78@gmail.com | Contact: +923356743210