



Cloud Computing Lab 3

Submitted To:

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Submitted By:

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Section:

5(A)

Roll Number:

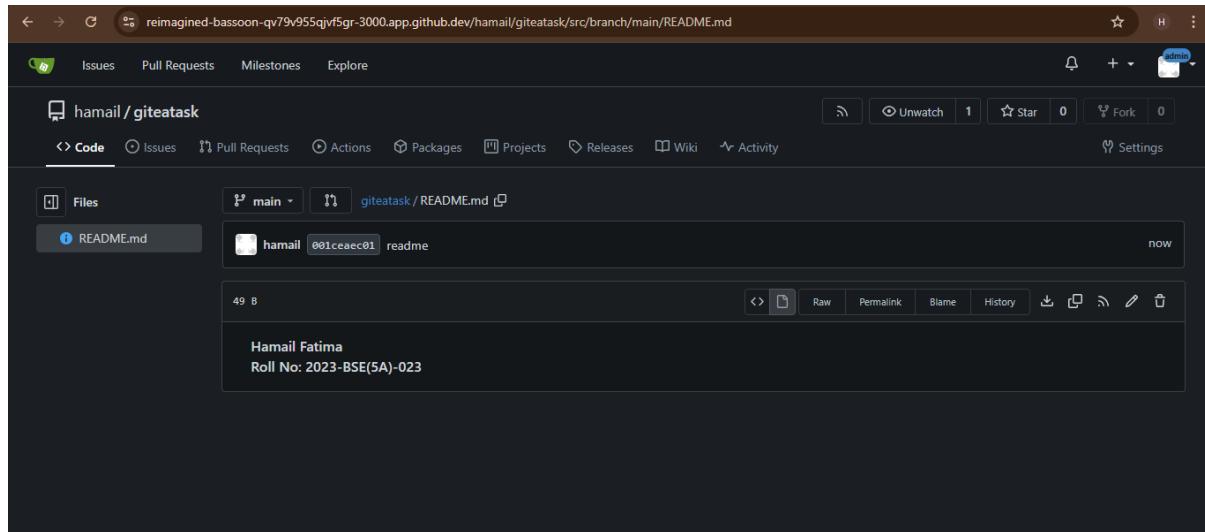
2023-BSE-023

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

Set up Gitea:

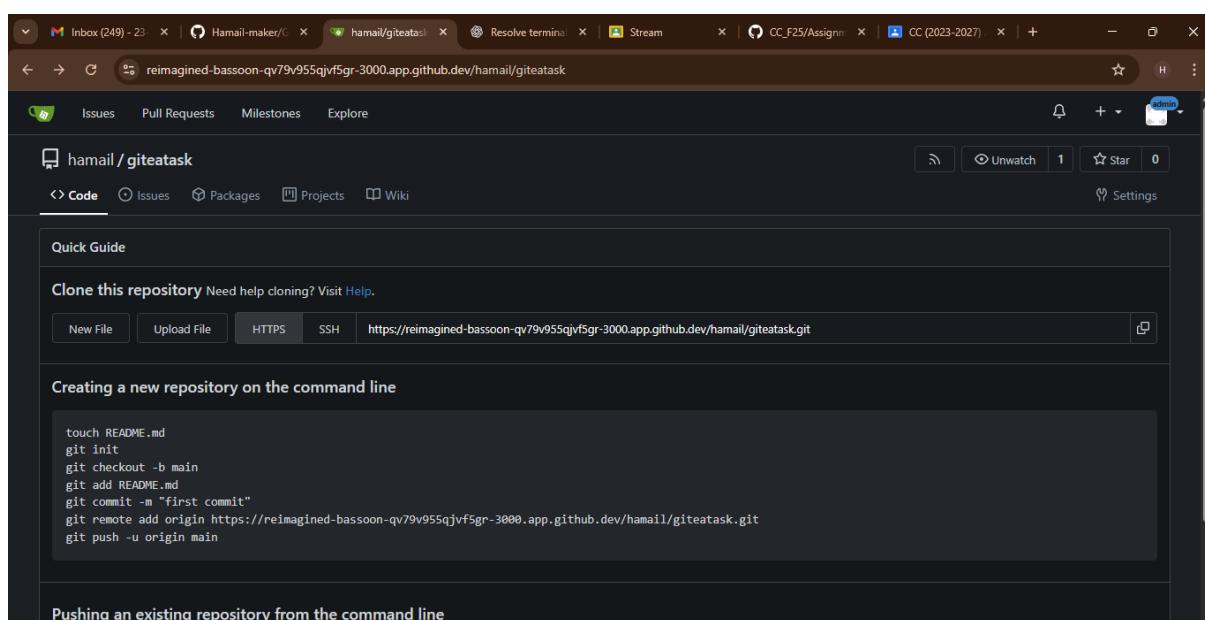
Run a Gitea server inside your Codespace.

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.



The screenshot shows the 'Manage Access Tokens' section of the Gitea user settings. A new token named 'PAT' is being generated. The 'Scopes' dropdown is set to 'All (public, private, and limited)'. A table lists various API endpoints and their access levels:

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

<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).

The screenshot shows the 'Manage Access Tokens' section after a token has been generated. A green banner at the top says 'Your new token has been generated. Copy it now as it will not be shown again.' Below it, a blue box displays the token value: '6e96e93642cdf751a58e97cf0e4af5c2a7091dcf'. The token entry has a 'Delete' button next to it.

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-wrjwwjwqpvv25rvg-3000.app.github.dev/Admin/StudentsDemo.git

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

```
MINGW64:/c/Users/admin/OneDrive/Desktop/Assignment1
admin@Hamail-Alan MINGW64 ~/OneDrive/Desktop/Assignment1
$ git init
Initialized empty Git repository in C:/Users/admin/OneDrive/Desktop/Assignment1/
$ git remote add gitea https://hamail:47bea0c8af7e2917825a1915fe9dcacfe4acb6298r
eimagined-bassoon-qv79v955qvjvf5gr-3000.app.github.dev/hamail/Assignment1.git
admin@Hamail-Alan MINGW64 ~/OneDrive/Desktop/Assignment1 (master)
$ git pull
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (3/3), 214 bytes | 12.00 KiB/s, done.
From https://reimagined-bassoon-qv79v955qvjvf5gr-3000.app.github.dev/hamail/Assignment1
 * [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

admin@Hamail-Alan MINGW64 ~/OneDrive/Desktop/Assignment1 (master)
$ |
```

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-Altam MINGW64 ~/OneDrive/Desktop/assignment1a (master)
$ git branch -M main

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

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

admin@Hamail-Altam 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-Altam MINGW64 ~/OneDrive/Desktop/assignment1a (main)
$ git add .
warning: in the working copy of 'README.md', LF will be replaced by CRLF the next time Git touches it

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

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

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

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

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

admin@Hamail-Altam 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:5b3a4a64283c26ad713c54b02501fffb4f46cf523@reimagined-bassoon-qv79v955qjvf5gr-3000.app.github.dev/hamail/assignment1a.git (fetch)
gitea  https://hamail:5b3a4a64283c26ad713c54b02501fffb4f46cf523@reimagined-bassoon-qv/9v955qjvf5gr-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:

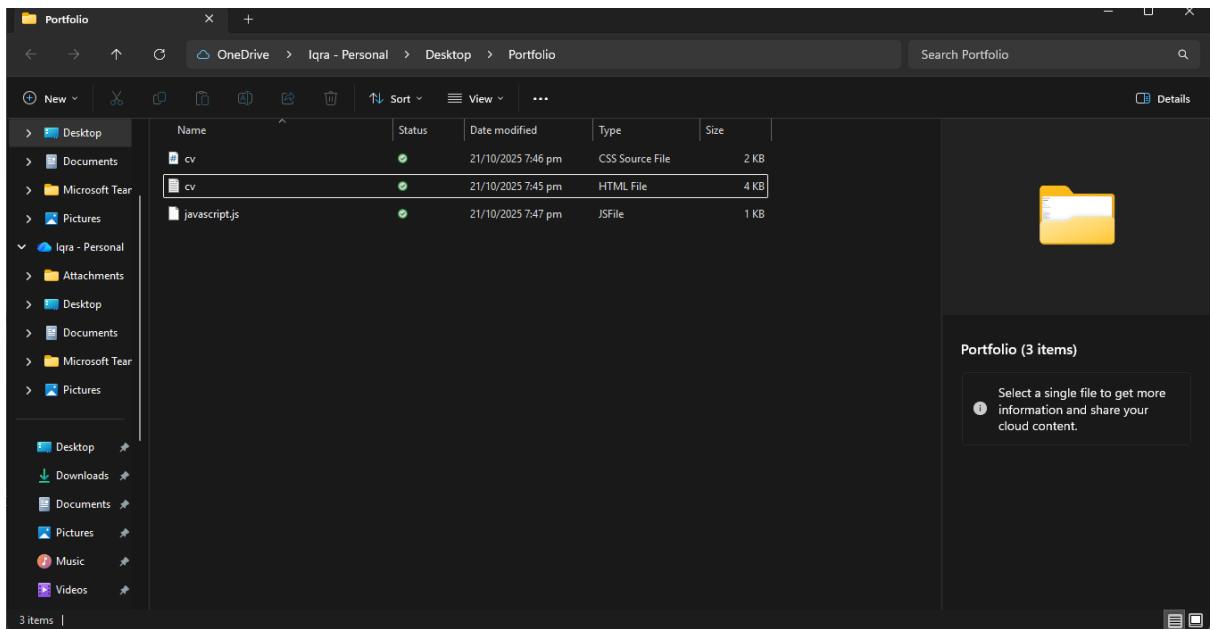
The screenshot shows a GitHub repository page for 'assignment1a'. The repository is public and has 1 branch and 0 tags. It contains several files: '.gitattributes', 'README.md', and three large zip files ('bigfile1.zip', 'bigfile2.zip', 'bigfile3.zip'). The 'README' file includes the text 'Name : Hamail Fatima Roll No: 2023-BSE-023Assignment #01'. The repository has 3 commits, 0 stars, 0 forks, and 0 releases.

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:

The screenshot shows a GitHub repository page for the user 'Hamail-maker'. The repository name is 'Hamail-maker.github.io'. The page has a dark theme. At the top, there's a header bar with the GitHub logo and the repository name. Below it is a navigation bar with links for Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. The main content area shows a summary message: 'main had recent pushes 6 seconds ago'. It lists three commits from the 'master' branch: 'Hamail-maker Stop tracking DocFiles' (commit c80bf9f, 2 days ago), 'index.html Add portfolio site for GitHub Pages' (commit 2 days ago), and 'style.css Add portfolio site for GitHub Pages' (commit 2 days ago). Below these, there's a 'README' section. On the right side, there are sections for 'About' (with a note: 'No description, website, or topics provided.'), 'Activity' (0 stars, 0 watching, 0 forks), 'Releases' (no releases published), and 'Packages' (no packages published).

GitHub Pages:

The screenshot shows the GitHub Pages settings page for the repository 'Hamail-maker'. The main heading is 'GitHub Pages'. A message states: 'GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.' Below this, it says 'Your site is live at <https://hamail-maker.github.io/>' and 'Last deployed by Hamail-maker 2 days ago'. There are two buttons: 'Visit site' and 'Unpublish site'. On the left, there's a sidebar with sections like 'General', 'Access', 'Collaborators', 'Moderation options', 'Code and automation' (with 'Branches', 'Tags', 'Rules', 'Actions', 'Models', 'Webhooks', 'Copilot', and 'Environments' listed), and a 'Preview' button. The 'Branch' section indicates the site is built from the 'master' branch. At the bottom, there's a note about adding a Jekyll theme.

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

The screenshot shows a static website built with GitHub Pages. The header features the name 'Hamail Fatima' and the title 'Web Developer | Student | Designer'. Below the header is a section titled 'About Me' with the text: 'Hello! I am a passionate student learning web development. This is a simple static website created using HTML and CSS.' Underneath is a 'Skills' section listing: HTML & CSS, JavaScript (Basic), Git & GitHub, and Python / C++ (if applicable). The 'Contact' section includes email and LinkedIn links. At the bottom, a dark footer bar contains the copyright notice: '© 2025 Your Name. All Rights Reserved.'