



Web Development
(Class - 41)

Last Lecture Review

1. Version Control
2. Introduction to Git
3. Git Installation
4. Concept of Repositories
5. Understanding basic Git commands (Working with Local Repositories)
6. Tracking Code History
7. Ignore Tracking
8. Concept of Branch
9. Git Branches



What Will You Learn Today?

Table of Content

1. Introduction to GitHub
2. Setup and Commands
3. ReadMe Markdown
4. FREE Website Host
5. Collaboration / Teamwork



Front-End





Version Control

Version Control

It's a system that records changes to a file or set of files over time so that you can recall specific versions later. It is an essential tool for managing projects that involve multiple contributors, track changes and ensure the integrity and consistency of project files.

OFFLINE



ONLINE





GitHub is a web-based platform used for version control and collaboration on software projects. It allows developers to store, manage, and track changes to their codebase.

There are 4 phases for Online Version Control

1. Working (Tree) Directory
2. Staging Area (Index)
3. Commit (Local Repository)
4. GitHub (Online Repository)



GitHub Setup & Commands

1. Create GitHub Account <https://github.com/>
2. Create Repository
3. Remote add (connect) your repository
4. Connect upstream (first time) and Push to origin

Command	Purpose
git remote add origin <URL>	Connect with remote git
git remote set-url origin	Reset to new Origin
git push -u origin <branchName>	Upstream push to origin of main branch
git push	Pushes committed changes to a remote repository on GitHub.
git push origin [branch-name]	Pushes changes to a specific branch of the remote repository.
git pull	Pulls changes from a remote repository to your local repository
git pull origin [branch-name]	Pulls changes from a specific branch of the remote repository.
git clone <URL>	Clones an existing repository from a remote URL to your local machine.

GitHub Repository Example

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)

Required fields are marked with an asterisk (*).

Owner * Muddassir1171 / Repository name * sampleRepo
sampleRepo is available.

Great repository names are short and memorable. Need inspiration? How about [effective-guide](#) ?

Description (optional)

☐ **Public**
Anyone on the internet can see this repository. You choose who can commit.

☒ **Private**
You choose who can see and commit to this repository.

Initialize this repository with:

☐ **Add a README file**
This is where you can write a long description for your project. [Learn more about READMEs.](#)

Add .gitignore
.gitignore template: None

Choose which files not to track from a list of templates. [Learn more about ignoring files.](#)


Choose a license
License: None

A license tells others what they can and can't do with your code. [Learn more about licenses.](#)


① You are creating a private repository in your personal account.

[Create repository](#)



 **sampleRepo** Private


Unwatch 1 Fork 0 Star 0



Set up GitHub Copilot

Use GitHub's AI pair programmer to autocomplete suggestions as you code.

[Get started with GitHub Copilot](#)



Add collaborators to this repository

Search for people using their GitHub username or email address.

[Invite collaborators](#)

Quick setup — if you've done this kind of thing before

[Set up in Desktop](#) or [HTTPS](#) [SSH](#) https://github.com/Muddassir1171/sampleRepo.git

Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

...or create a new repository on the command line

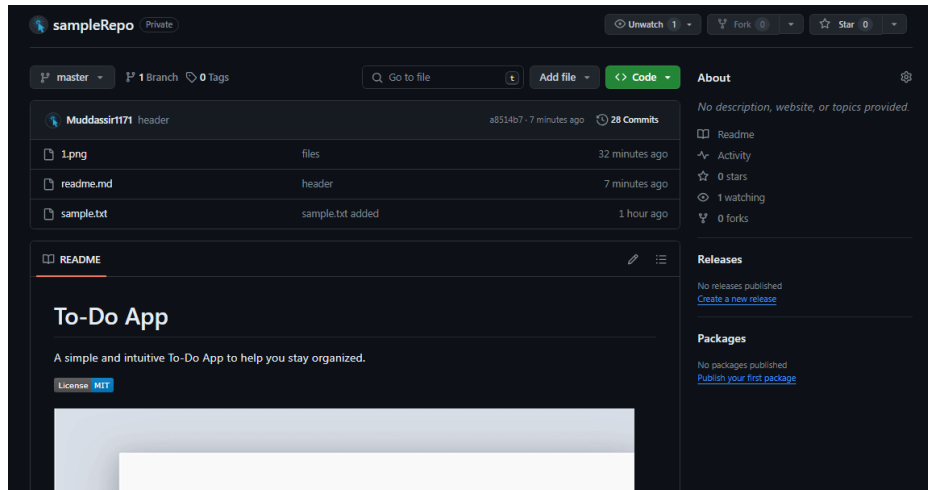
```
echo "# sampleRepo" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin https://github.com/Muddassir1171/sampleRepo.git
git push -u origin main
```

...or push an existing repository from the command line

```
git remote add origin https://github.com/Muddassir1171/sampleRepo.git
git branch -M main
git push -u origin main
```

GitHub Add Origin Example

```
git remote add origin https://github.com/Muddassir1171/sampleRepo.git
```

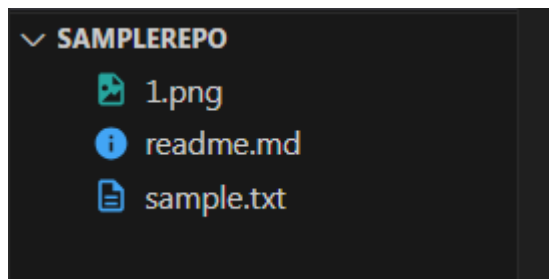


GitHub Clone Example

```
git clone https://github.com/Muddassir1171/sampleRepo.git
```

OR Pull Current Repo State

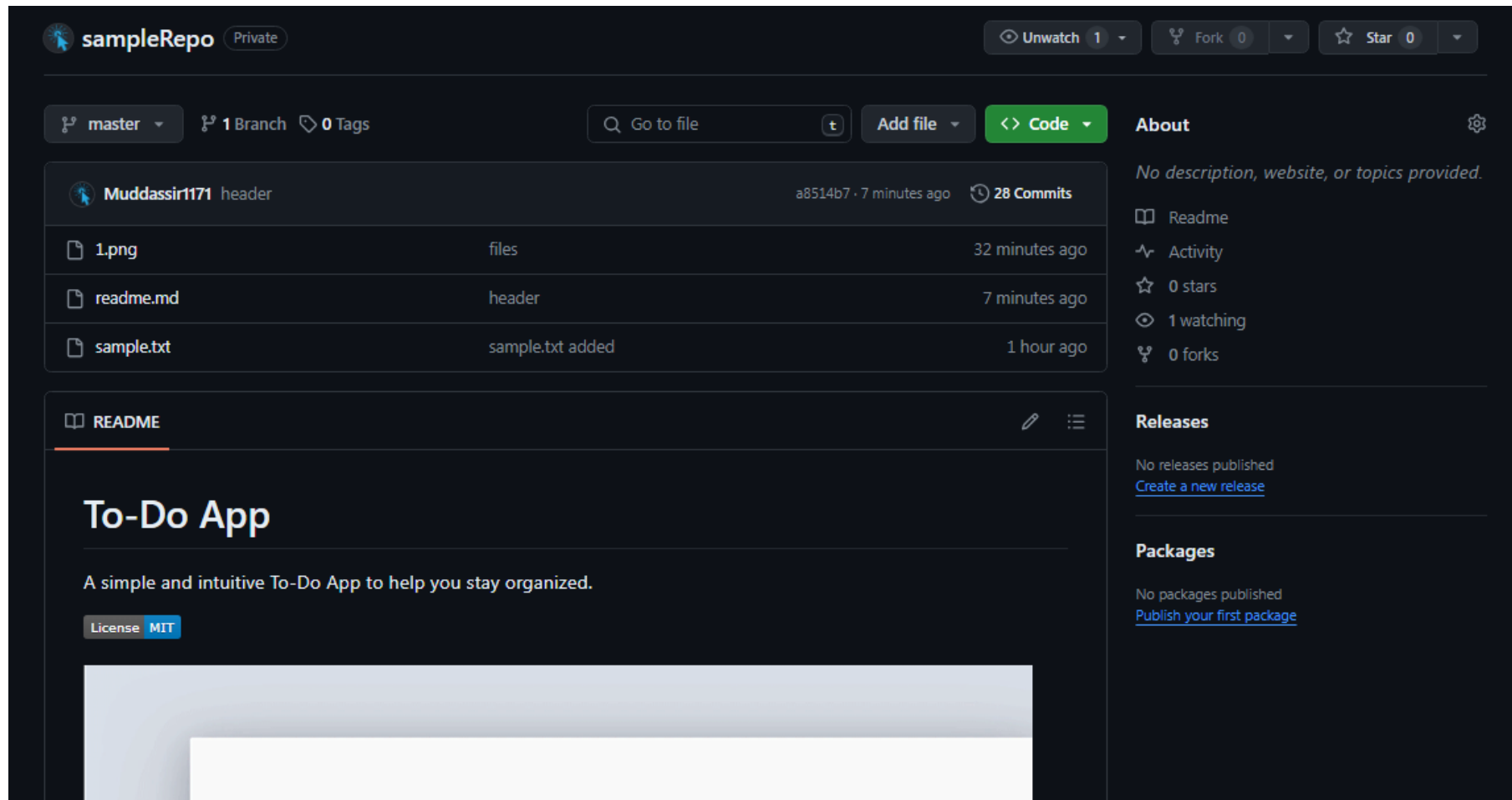
```
git pull origin master
```



GitHub Push to Origin Example

Push to Origin <Branch Name>

```
> git push -u origin master
```



The screenshot shows a GitHub repository named 'sampleRepo' (Private). The repository has 1 branch (master) and 0 tags. The commit history shows a commit by 'Muddassir1171' with the message 'header' (a8514b7) 7 minutes ago, which is the 28th commit. The file list shows three files: '1.png' (files, 32 minutes ago), 'readme.md' (header, 7 minutes ago), and 'sample.txt' (sample.txt added, 1 hour ago). The README file is selected, showing the title 'To-Do App' and the description 'A simple and intuitive To-Do App to help you stay organized.' The license is MIT. The right sidebar shows the 'About' section with no description, website, or topics provided. It also lists 'Readme', 'Activity', '0 stars', '1 watching', and '0 forks'. The 'Releases' section shows no releases published with a link to 'Create a new release'. The 'Packages' section shows no packages published with a link to 'Publish your first package'.

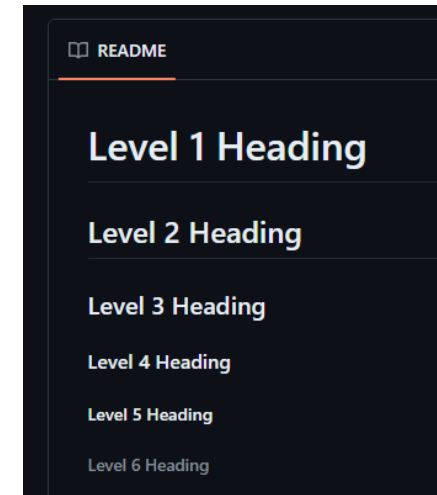
ReadMe Markdown

Markdown is a lightweight markup language with plain-text formatting syntax. It's often used for formatting README files on GitHub because it's easy to read and write.

Section	Description
Headers	Use # for headers
Emphasis	Use * or _ for italic, ** or __ for bold
Lists	Use *, -, or 1., 2. for unordered/ordered
Links	Use [text](URL) for links
Images	Use ![Alt text](image.jpg) for images
Code Blocks	Use triple backticks for code blocks
Quotes	Use > for block quotes
Horizontal Rule	Use --- or ___ for a horizontal rule
Tables	Use hyphens for headers and pipes for columns
Task Lists	Use - [] for incomplete, - [x] for complete

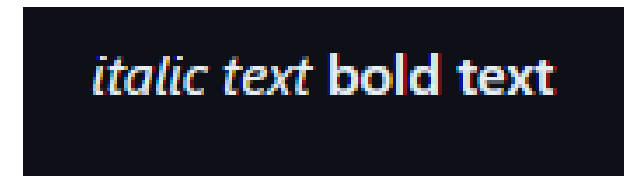
ReadMe Markdown – Headers - Example

```
readme.md > # Level 1 Heading > ## Level 2 H
1 # Level 1 Heading
2 ## Level 2 Heading
3 ### Level 3 Heading
4 #### Level 4 Heading
5 ##### Level 5 Heading
6 ##### Level 6 Heading
7
```



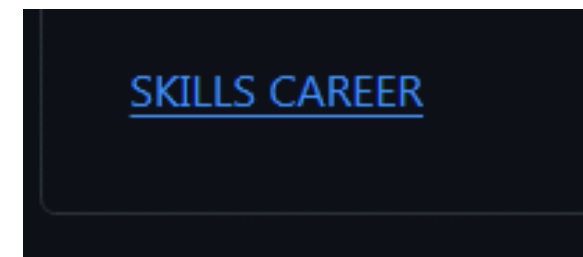
ReadMe Markdown – Emphasis - Example

```
8 *italic text*
9 **bold text**
```



ReadMe Markdown – Links - Example

```
17 [SKILLS CAREER](https://skills-career.com/)
```



ReadMe Markdown – Lists - Example

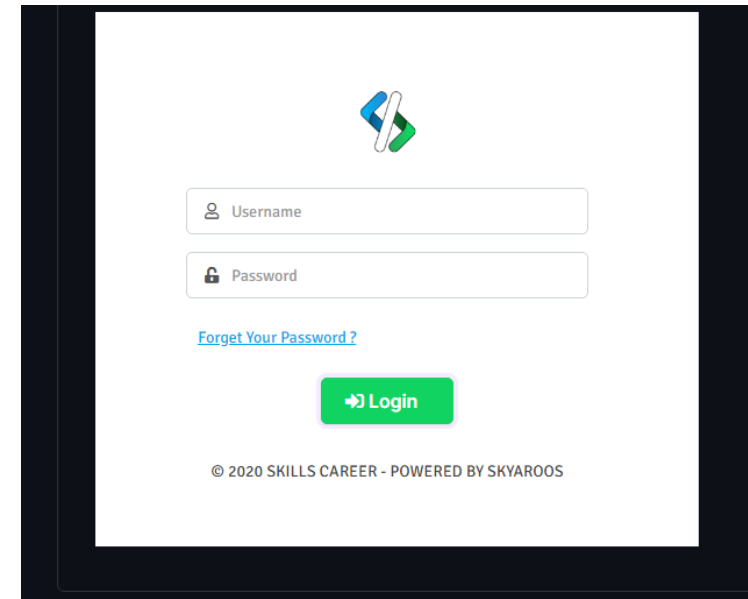
```
11 - Item 1
12 - Item 2
13
14 1. First item
15 2. Second item
```

- Item 1
- Item 2

1. First item
2. Second item

ReadMe Markdown – Images - Example

```
20 ![Alt SKILLS Login Page](1.png)
21
```



ReadMe Markdown – Task Lists - Example

```
36  
37 - [x] Task 1  
38 - [ ] Task 2  
39
```

☒ Task 1
☐ Task 2

ReadMe Markdown – Code Blocks - Example

```
23 ```JavaScript  
24 console.log("Hello, World!")  
25 ```
```

```
console.log("Hello, World!")
```

ReadMe Markdown – Horizontal Rule - Example

```
29 ---
```

ReadMe Markdown – Quotes - Example

```
26  
27 > This is a block quote.  
28
```

| This is a block quote.

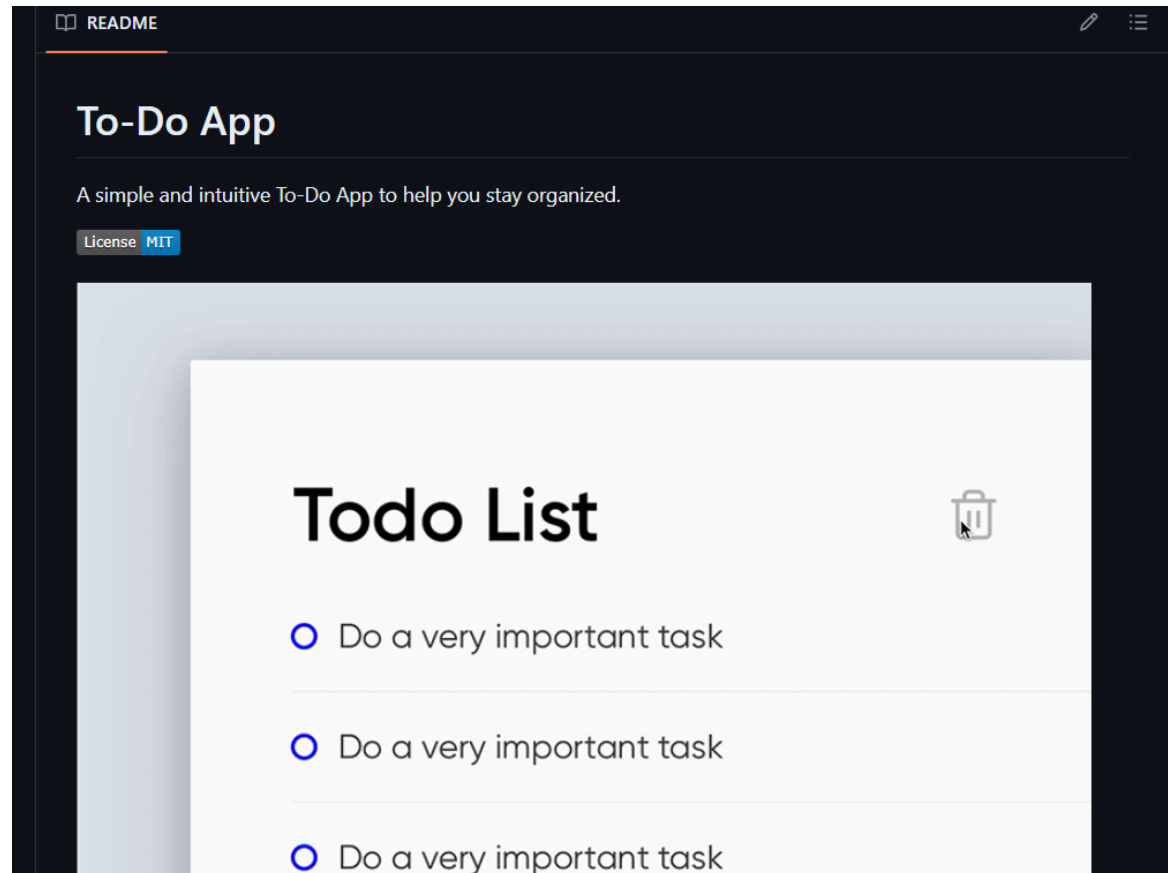
ReadMe Markdown – Tables- Example

```
31 | Header 1 | Header 2 |  
32 | ----- | ----- |  
33 | Row 1    | Row 1    |  
34 | Row 2    | Row 2    |  
35
```

Header 1	Header 2
Row 1	Row 1
Row 2	Row 2

Class Activity

Make this ReadMe Markdown: <https://github.com/Muddassir1171/sampleTest>







FREE Website Host

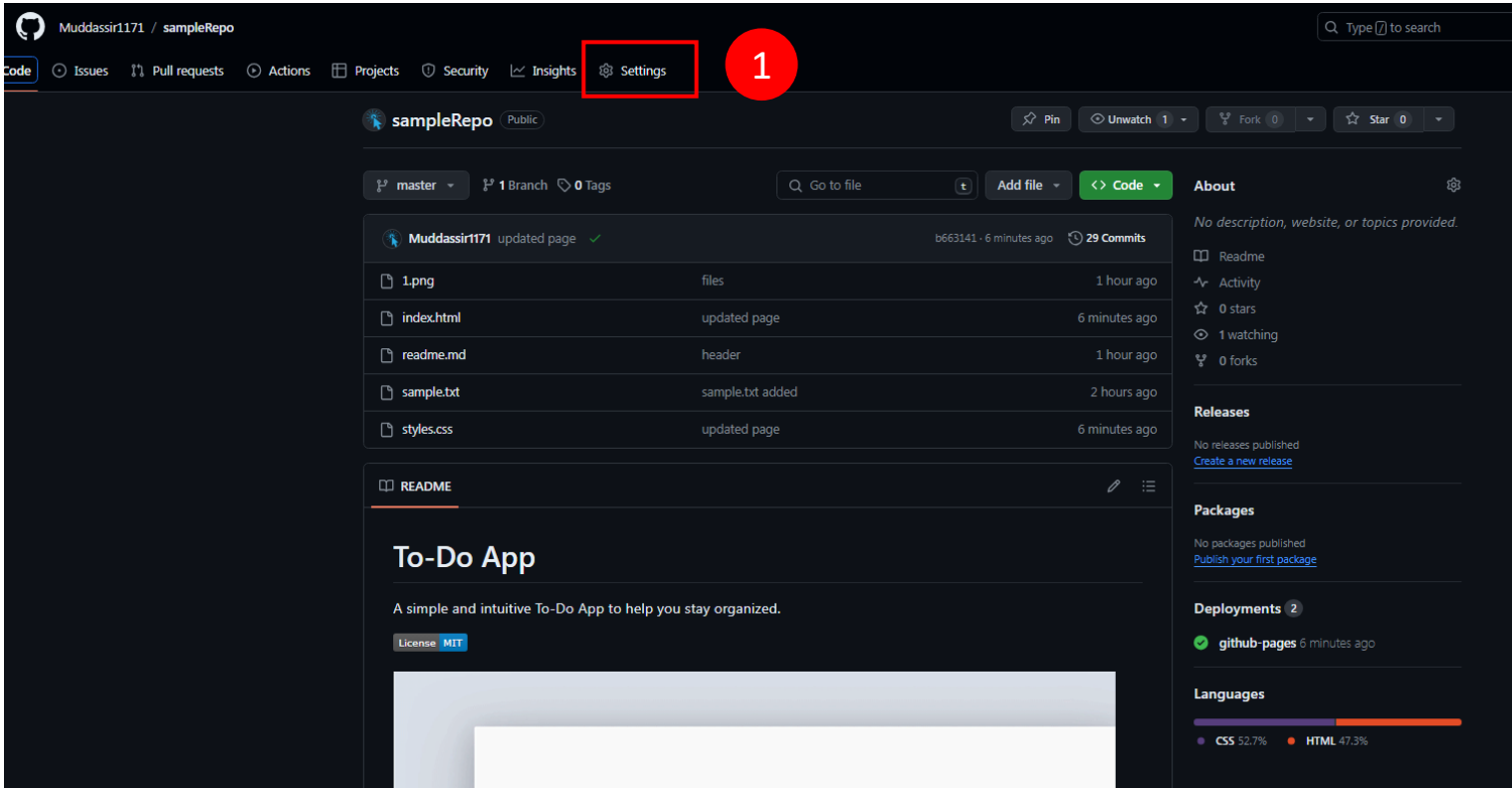


Follow these steps

1. Go to repository setting
2. Go to Code and Automation Section and Select Pages
3. Select Branch

Note: After some wait hosted website link will be appears. It will update website content if there is any change in repository

FREE Website Host



Muddassir1171 / sampleRepo

Code Issues Pull requests Actions Projects Security Insights **Settings**

sampleRepo Public

master 1 Branch 0 Tags

Go to file Add file Code

Muddassir1171 updated page 6 minutes ago 29 Commits

File	Commit	Time
1.png	b663141	1 hour ago
index.html	6 minutes ago	6 minutes ago
readme.md	header	1 hour ago
sample.txt	sample.txt added	2 hours ago
styles.css	updated page	6 minutes ago

README

To-Do App

A simple and intuitive To-Do App to help you stay organized.

License MIT

About

No description, website, or topics provided.

Releases

No releases published

Packages

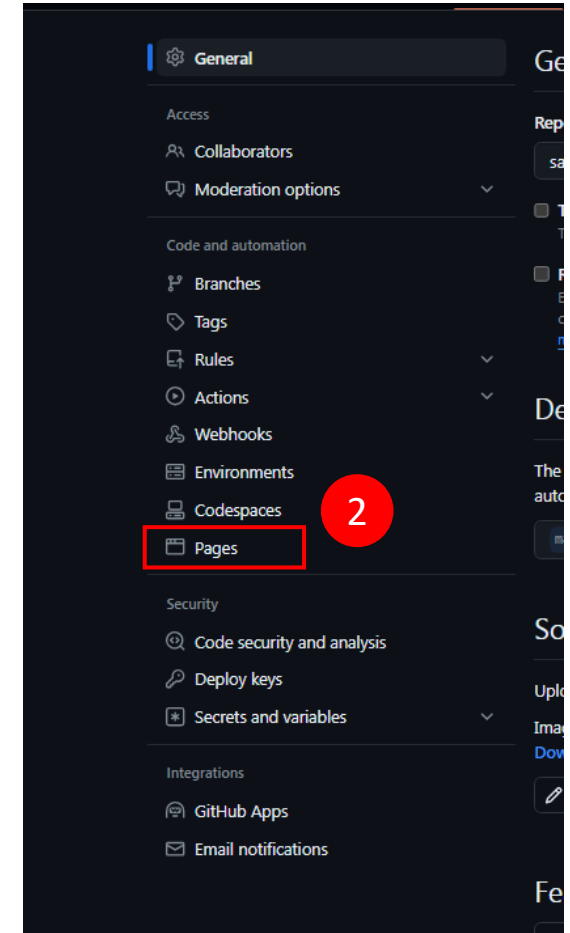
No packages published

Deployments

github-pages 6 minutes ago

Languages

CSS 52.7% HTML 47.3%



General

Access

- Collaborators
- Moderation options

Code and automation

- Branches
- Tags
- Rules
- Actions
- Webhooks
- Environments
- Codespaces
- Pages**

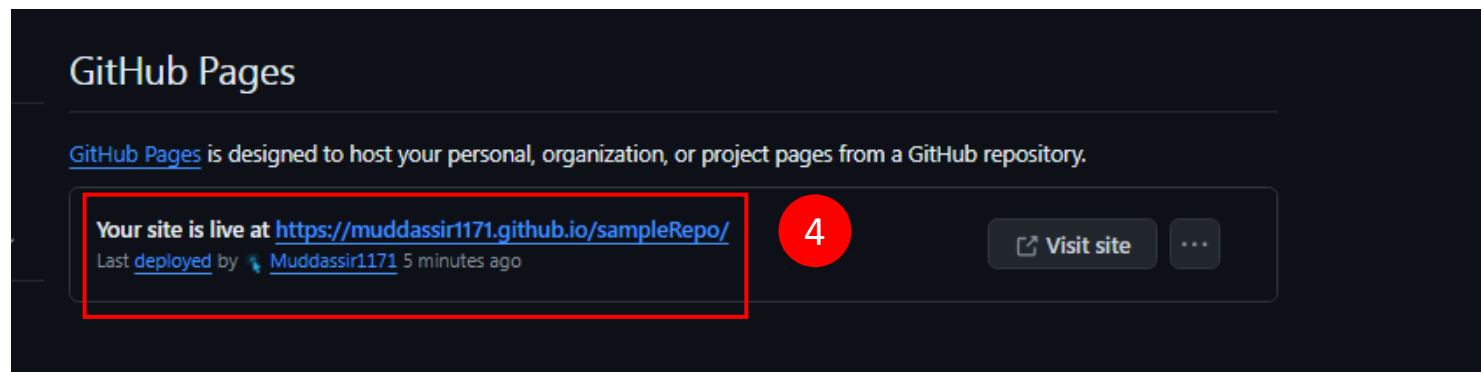
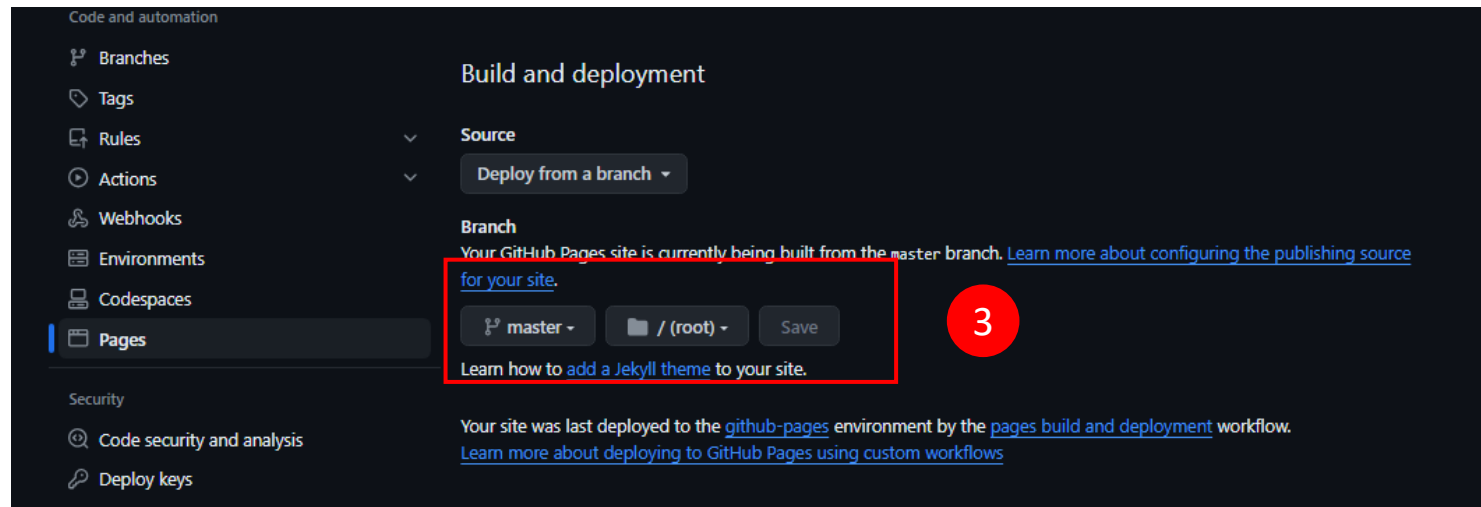
Security

- Code security and analysis
- Deploy keys
- Secrets and variables

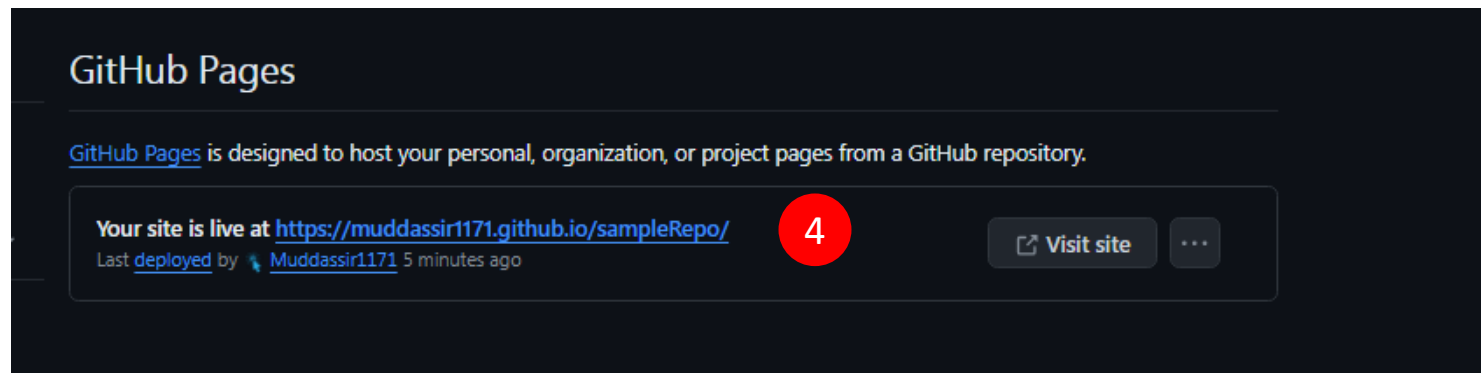
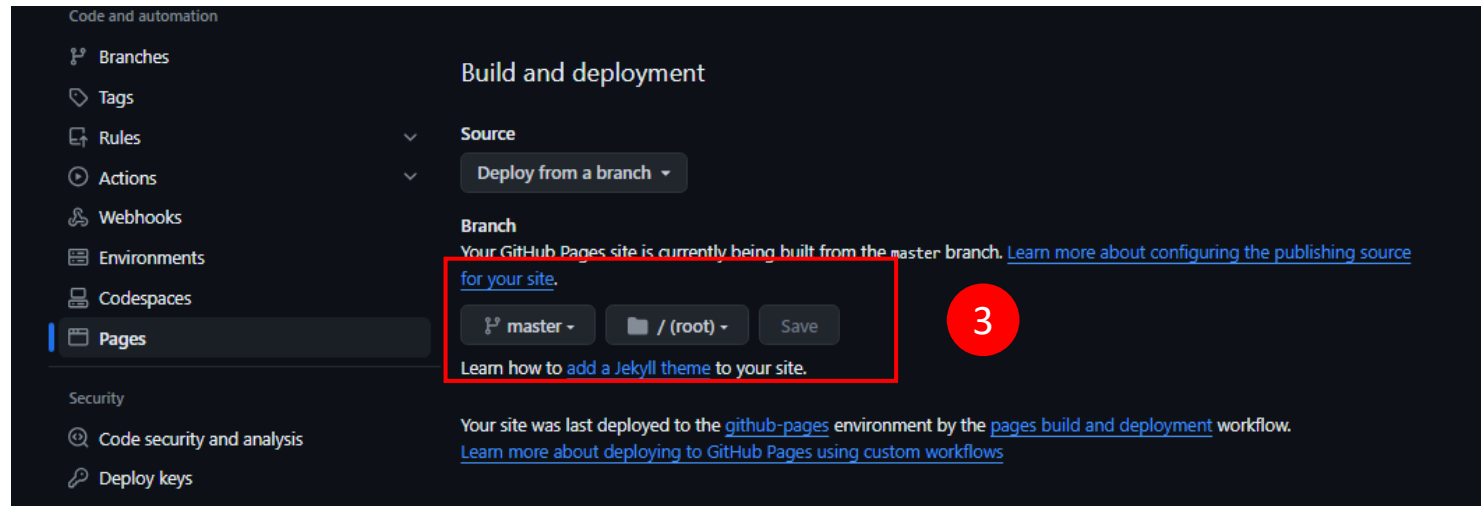
Integrations

- GitHub Apps
- Email notifications

FREE Website Host



FREE Website Host



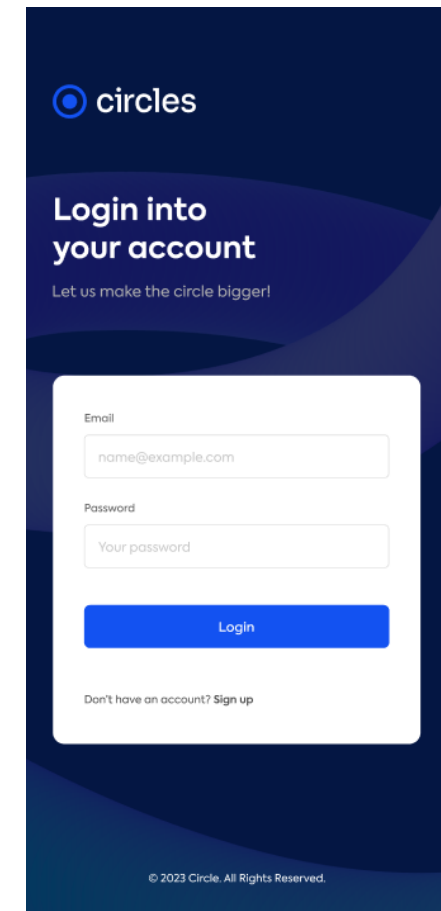
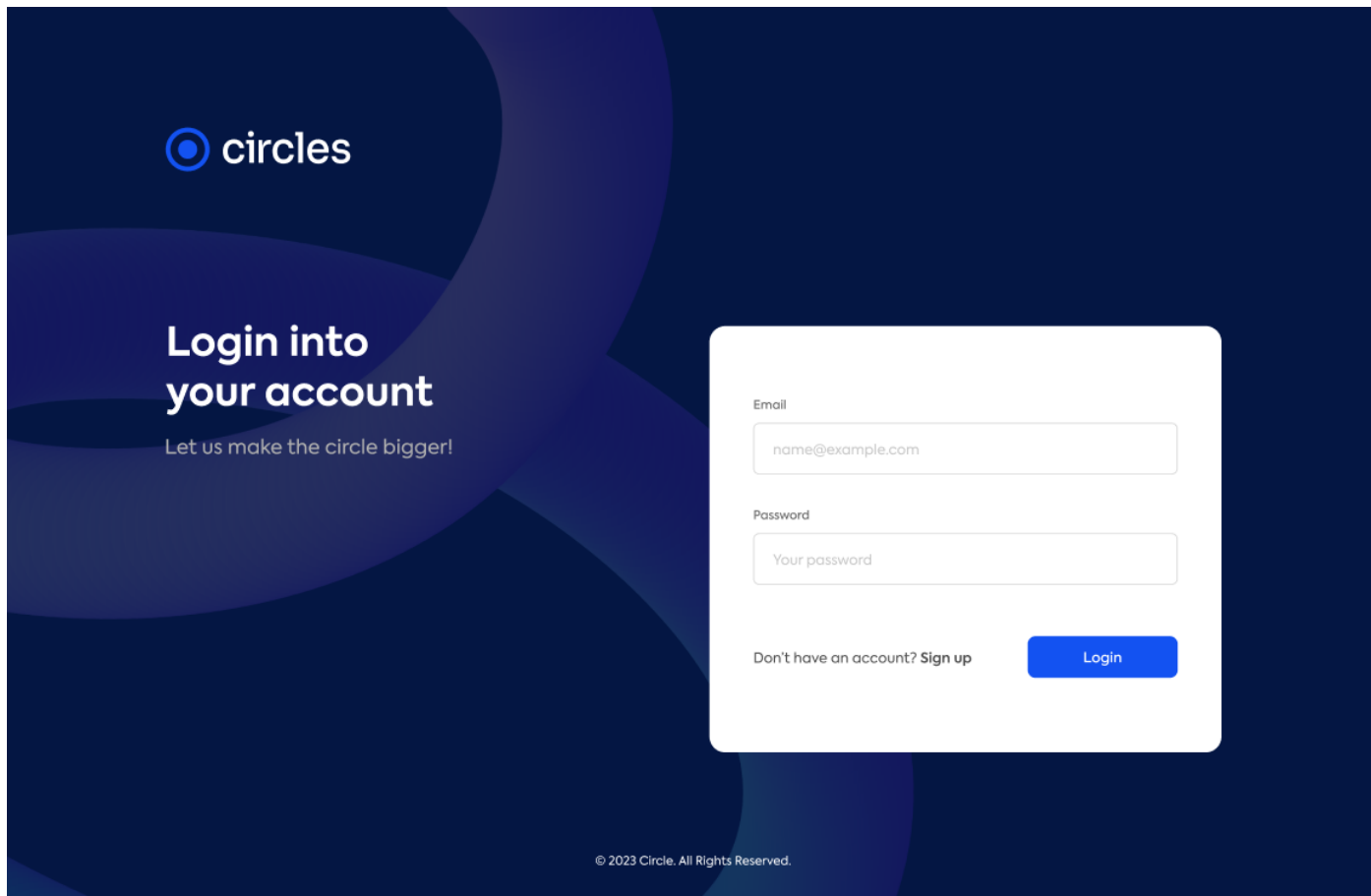
Current Repo Link

<https://muddassir1171.github.io/sampleRepo/>

Class Activity

Make this design and Host it

[https://www.figma.com/file/3aNT9BgKmOAXi7RBYPxrwK/Responsive-Login-screen-\(Community\)?type=design&node-id=0-1&mode=design](https://www.figma.com/file/3aNT9BgKmOAXi7RBYPxrwK/Responsive-Login-screen-(Community)?type=design&node-id=0-1&mode=design)



Recap



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