

GIT ASSIGNMENT

Assignment :2(a)

Create version control account on GitHub and using Git Commands to Create a repository and push your code on github.

What is Git?

- Git is a distributed version control system (DVCS) used for tracking changes in source code during software development.
- It helps developers collaborate efficiently, maintain code history, and manage different versions of a project.
- Key Features:
 - o Distributed System
 - o Version Control
 - o Branching and Merging

What is GitHub?

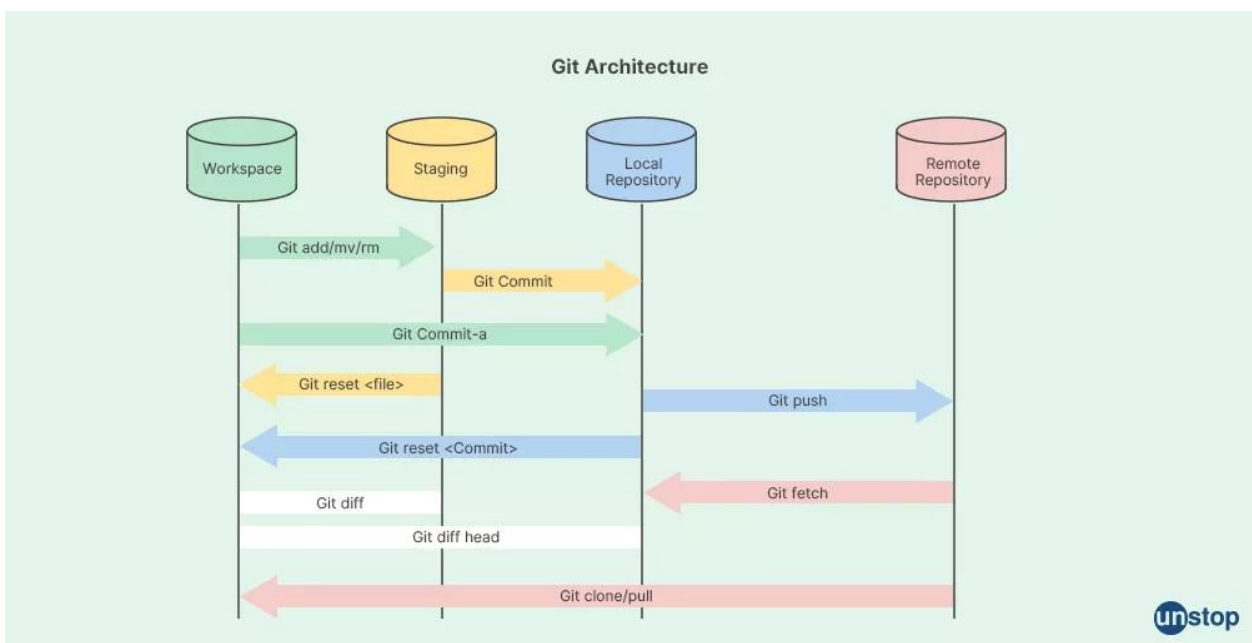
- GitHub is a cloud-based platform for version control and collaboration, built on Git.
- It allows developers to store, manage, and share their code while working on projects with others.
- Key Features
 - o Repository Hosting
 - o Security & Access Control
 - o Pull Requests & Code Review

Difference between Git And Github:

Feature	Git	GitHub
Definition	A version control system (VCS) used to track changes in code.	A cloud-based platform for hosting and managing Git repositories.
Purpose	Helps developers track	Provides a remote storage

	code changes, collaborate, and manage versions.	space for Git repositories, enabling collaboration.
Installation	Needs to be installed locally on your computer.	Web-based service; no installation required.
Access	Works offline	Requires the internet to access repositories online
Commands	Uses commands like <code>git init</code> , <code>git add</code> , <code>git commit</code> , <code>git push</code> , etc	Provides UI-based controls and Git-based commands like <code>git push origin main</code>

Git Architecture:-



Components of Git Architecture:

1. Working Directory

- Stores the current version of your project files.
- Any modifications made here are untracked until staged.

2. Staging Area (Index)

- Holds changes before committing to the repository.
- Allows selective commits by staging specific files.

3. Local Repository

- A hidden .git folder storing all commit history.
- Enables version control even without internet access.

4. Remote Repository

- A shared Git repository hosted on platforms like GitHub.
- Used for collaboration and code sharing among developers.

GIT Commands

The screenshot shows the GitHub repository page for 'WAD-Practical' by 'amolaware'. The repository is public and has 1 branch (main) and 0 tags. The commit history shows a single commit 'Delete First Practical directory' by 'amolaware' 7 minutes ago. The README section is empty, with a prompt to 'Add a README'. The right sidebar shows repository statistics: 0 stars, 1 watching, and 0 forks. There are no releases or packages published.

Push(After)

The screenshot shows the GitHub repository page for 'WAD-Practical' by 'amolaware' after a push. The repository is public and has 1 branch (main) and 0 tags. The commit history shows a single commit 'Add files via upload' by 'amolaware' now. The file list shows the following files:

Name	Last commit message	Last commit date
..		
Registration_form.html	Add files via upload	now
list.html	Add files via upload	now
script.js	Add files via upload	now
users.js	Add files via upload	now

Pull(After)

Name	Date modified	Type	Size
iii	12/02/2025 19:33	Microsoft Edge HTM...	1 KB
iii2	12/02/2025 19:33	Microsoft Edge HTM...	1 KB
new_doc	12/02/2025 20:14	File	1 KB
script	12/02/2025 19:50	JavaScript File	1 KB
users	12/02/2025 19:50	JavaScript File	1 KB

MINGW64:/d/New Ajaxfolder

```
mange@Mangesh MINGW64 /d/New Ajaxfolder (master)
$ git pull origin master
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (3/3), 921 bytes | 51.00 KiB/s, done.
From https://github.com/adityaam2904/wad
 * branch            master       -> FETCH_HEAD
    21a6df1..4e17c17  master       -> origin/master
Updating 21a6df1..4e17c17
Fast-forward
 new_doc | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 new_doc

mange@Mangesh MINGW64 /d/New Ajaxfolder (master)
$
```