Author :	**Ali Raza**
Course :	MLOps
Module :	Git and GitHub
Email :	sahilir21727@gmail.com

🚀 Git and Github

- install git in laptop other than C derive
- then open vs code terminal and config by followiing code
    - git config --global user.name ""
    - git config --global user.email ""
- Add Github to your local PC
    - git clone github link
    - git status
    - git pull origin main # add any change you made in github
- Add your local project to the Github
    - git init # to incorporate git in folder
    - Remove-Item -Recurse -Force .git # disconnect git from github
    - create repositor in github with same name of your project and without .rmd file
    - git add .
    - git commit -m "first commit"
    - git remote add origin github link # connect
    - git branch
    - git remote --v
    - git push -u origin main # first time
    - git push command # use onward

🔁 To log out Git from Github

git config --global --unset user.name
git config --global --unset user.email

- Search for Credential Manager in Windows Start
- Open Windows Credentials
- Find anything like git:https://github.com
- Click and remove/delete it

🔁 GitHub Access Types – Short Guide

1. Fork → Clone → Change → Push

- ☑ Changes go to **their GitHub fork**
- ✖ Your repo is not affected

- ☑ They can open a **pull request** to suggest changes

2. Just Clone (No Fork)

- ☑ Gets a **local copy** of your code
- ✖ Cannot push or create pull request
- ✖ Changes stay only on their computer

3. Add as Collaborator

- ☑ Clone your repo
- ☑ Push changes directly OR
- ☑ Pull request required if **branch is protected**

🔁 **Git Feature Branch Workflow**

This guide walks through creating a feature branch, making changes, pushing to GitHub, opening a pull request, and pulling merged code.

🔨 Git Script

```
# Step 1: Create and switch to a new feature branch
git checkout -b feature/my-feature

# Step 2: Stage all changes
git add .

# Step 3: Commit the changes
git commit -m "Add: My feature implementation"

# Step 4: Push the feature branch to GitHub
git push origin feature/my-feature

# 👉 Go to GitHub and open a Pull Request:
#     https://github.com/your-username/your-repo/branches
#     Click "Compare & pull request" next to your branch

# Step 5: (Optional) Pull the latest changes from main after merge
git checkout main
git pull origin main
```

🔁 **General commands**

Create a new branch and switch to it

git checkout -b feature/my-feature

Switch to an existing branch

```
git checkout main
```

Rename current branch

```
git branch -m new-branch-name
```

Rename a specific branch (not checked out)

```
git branch -m old-branch-name new-branch-name
```

Delete a local branch

```
git branch -d feature/old-feature # Use -D to force delete
```

Delete a remote branch

```
git push origin --delete feature/old-feature
```