



Learning GitHub

Workflow :

GitHub repository → clone → changes → add → commit → push

Basic Commands :

git clone "url" → clone the git file

git status → check the status of the file

git add <file name> → add the file to stage

git add . → add all files to stage

git commit -m "message" → commit all the stage files

git push → push all the committed to GitHub

git log → to check all commits

Local Directory Commands :

git init → initialize an empty git repository

Remove-Item-Recurse-Force.git → to de initialize the empty git repository

git remote add origin <link> → set the origin link

git remote -v → to verify remote

git push origin main → push file to the origin main (main is the branch name)

git push -u origin main → now no need to write 'git push origin main' every time just write git push

Branch Commands :

git branch → to check branch

git branch -M <new name> → to rename branch

git checkout -b <new branch name> → to create new branch

git checkout <branch name> → to navigate to the other branch

git branch -d <branch name> → to delete the branch

Merging Code :

git diff <branch name> → gives difference between two branches

Way 1 : git merge <branch name> → to merge two branches

Way 2 : create a Pull Request

Pull Command :

git pull origin <branch name i.e. main> → pulls all the changes occurred in the GitHub

Solving Merge Conflicts :

solve using GitHub or vs code terminal

Undoing Changes :

Case 1 : staged changes

git reset <file name> → to reset the change of particular file

git reset → to reset change of multiple file

Case 2 : commit changes (for one commit)

git reset HEAD~1 → if it is committed the HEAD~1 sets head to the previous commit and we get the changes

Case 3 : committed changes (for many commits)

git reset <commit hash> → get hash of the needed commit and use

git reset —hard <commit hash> —hard make changes in the vs code

Fork :

creates a copy of the repository in your repository

then we can perform add, commit there

and create a pull request to the main repository (if the owner approves it gets added to original repository)