Git is a powerful version Control System that allows Developers to track and manage changes in their code repositories efficiently.

Below is a comprehensive list of Git commands

git init

Initializes a new Git repository.

git clone

Copies a remote repository to the local machine.

Example: git clone <repository_url>

git add

Stages change for commit.

Subcommands

git add . - Stages all changes.

git add <file> - Stages a specific file

Example:

git add .

git add file.txt

git commit

Records changes to the repository with a descriptive message.

Subcommands

git commit -m "<message>"
Commits changes with a brief message.

Example:
git commit -m "Add new feature"

git push

Uploads local commits to a remote repository.

Example:
git push origin <branch_name>

git pull

Fetches changes from a remote repository and merges them into the current branch.

Example:
git pull origin <branch_name>

git branch

Lists creates, or deletes branches.

Subcommands

git branch: Lists all branches.

git branch <branch_name>: Creates a new branch.

git branch -d <branch_name>: Deletes a branch.

git checkout

Switches between branches or restores files.

Subcommands

git checkout <branch_name>: Switches to a specific branch.

git checkout -b <new_branch_name>: Creates a new branch and switches to it.

git checkout -- <file>: Discards changes in a specific file

git merge

Combines changes from different branches.

Subcommands

git merge <branch_name>: Merges changes from a specified branch into the current branch.

git fetch

Downloads new changes from a remote repository without merging.

git status

Displays the current status of the repository.

git log

Shows a history of commits.

git diff

Displays differences between commits, branches, or files.

git stash

Temporarily saves changes that are not ready to be committed.

Subcommands

git stash: Saves changes.

git stash apply: Applies saved changes.

git remote

Manages remote repositories.

Subcommands

git remote -v: Lists remote repositories.

git remote add <name> <url>: Adds a remote repository.

git rm

Removes files from the repository.

git reset

Resets the repository to a previous commit.

Subcommands

git reset <commit>: Resets the repository to a specific commit.

git tag

Creates, lists, or deletes tags to mark specific commits.

Subcommands

git tag: Lists all tags.

git tag <tag_name>: Creates a new tag.

git tag -d <tag_name>: Deletes a tag.

git config

Sets configuration options for Git.

Subcommands

git config --global user.name "<name>": Sets the user name.

git config --global user.email "<email>": Sets the user email.

Thank you!