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Git is a free and open-source distributed version control system. It's designed to track changes in files and projects over time, allowing you to collaborate with others and revert to previous versions if needed. This makes Git more robust and flexible, especially for distributed teams.

→Some features of GIT

Version Control: Track changes to files and revert to previous versions easily.

Branching and Merging: Create and work on independent branches without affecting the main project.

Staging Area: Stage specific files for the next commit, giving you flexibility before committing changes.

Commits: Bundle changes into snapshots of your project at specific points in time. Commits have descriptive messages.

Collaboration: Share your repository with others and work together on projects. Pull and push changes to keep everyone in sync.

Essential Git Commands

git init: Initializes a new Git repository.

git clone: Creates a copy of an existing Git repository from a remote server.

git add: Adds files to the staging area for the next commit.

git commit: Records the changes in the staging area as a new commit with a message.

git status: Shows the current state of the repository.

git log: Shows the history of commits in the repository.

git checkout: Switches between branches and versions of files.

git branch: Creates, lists, and deletes branches.

git merge: Combines changes from different branches into the current branch.

git pull: Downloads changes from a remote repository into your local repository.

git push: Uploads your local commits to a remote repository.