GIT

Karan Mehta

Advantages of GIT

- Free and open source
- Distributed
- Small and Fast
- Branching and merging
- Staging area
- Data assurance

Major GIT commands

- git clone <remoteLocation>
- git init
- git add --all or git add -A
- git commit or git commit -m ”Message for each commit”
- git status

Major GIT commands(branching)

- git branch
- git branch -a
- git checkout <branchName>
- git remote
- git merge

Git commit commands

- git push
- git fetch
- git reset
- git log
- git show
- git stash

Python script for GIT commands

- pullmerge: Pull the given branch and merge to current branch
- Get the status of the branch’s porcelain commands.
- Download objects and references from remote repository.
- Pick out and massage or change parameters (porcelated) before the actual program is called. (hashcode)
- Get parameters of the main repository. (hashcode)
- Find the best common ancestor.
- Create new master of the remote branch.
- Merge the master to your local branch.

Note: Run the precommit to check whether your changes has not affected others.

Python script for GIT commands

- mergepush: Automatically merge to current branch from given branch and push
- Get the status of the branch’s porcelain commands.
- Check if we can merge (get the most common ancestor).
- Pick out and massage or change parameters (porcelated) before the actual program is called. (hashcode)
- Constraint : For clean merge, merge base should either be HEAD or its second parent.
- All good then, perform merge.
- Push your HEAD to the origin.

Reference

- https://git-scm.com/about/small-and-fast
- https://www.siteground.com/tutorials/git/commands.htm