GIT AND GITHUB

1.) LOCAL REPOSITORY AND SOME COMMANDS :

- To create a git local repository in any directory, just go to the directory if it exists(or make a new if it doesn't exist) using terminal. Type the command "git init" to initialise the git repository in that particular directory.

- A .git (hidden directory) will be created.

- Git add, restore, commit, log and show commands :

- "git add" command adds the file from "working area" to "staging area", where the modifications can be tracked by the git.
- Until you add the files to the staging area, git won't show any modification notification.

- "git commit" command is used to move the files from "staging area" to "local repository", where git keeps the modification track of all the files committed.

- How to delete files from local repo or pull files from local repo to the working area??

- "git log" - to show all the recent commits.
- "git log --oneline" - to show all the recent commits in one line.
- "git show <commit id>" - to show the details.
- "git ls-files" - to check all the files in the git local repository being tracked.

2.) SYNCING LOCAL AND REMOTE REPOS :

- Linking “remote repo” with the “local repo” :
  “git remote add origin <link to remote repo>”
- Note here that the “origin” word used above is just a default alias for the link to the remote repo. And we can use any word to create the alias for the link.

- How to check if our remote repo is linked with the local repo?
  Using the “git remote -v” command.

- How to sync files from local repo to the remote repo?
  Using the “git push origin master” command.

- BRANCHING :

Branching is an integral part of any Version Control System. Unlike other VCS, Git “does not create a copy” of existing files for new branches. It points to the snapshot of the change you have made in the system.

- “git branch” - shows the info of all the branches available.
- “git status” - it also shows the info about the current branch we are working in.
- Creating a new branch - “git branch <branch_name>”
- Switching the branch - “git checkout <branch_name>”
- “git log <branch_name>” - it gives the info of total commits in the particular branch.
- “git log --oneline <branch_name>”
- Branch merging - “git merge <branch_name>” -to merge any branch to master, you first have to be at the master branch.
- Deleting a branch - “git branch -d(-D) <branch_name>”

- REBASING :

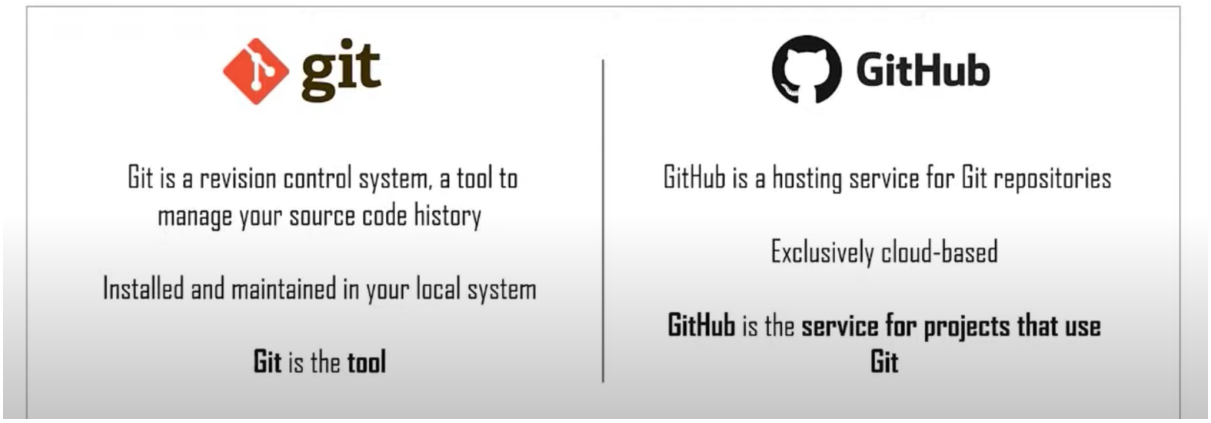
Rebase is used when changes in one branch needs to be reflected in another branch.

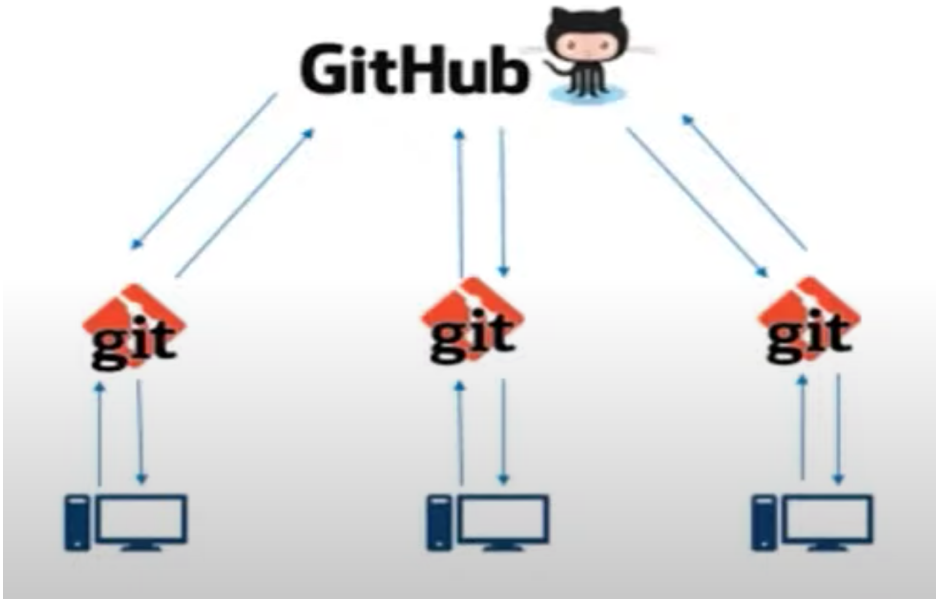
- “git rebase master” - go to the particular branch to rebase it with the master branch.

- SOME BONUS COMMANDS :
- To “archive” your repo : “git archive --output=./example_repo_archive.zip --format=zip master”

3.) GITHUB :

- Web based Git repository hosting service
- Open source for version control
- Cloud storage of repositories





- “git remote” - to see which remote servers are configured.
- “git remote -v” - it shows the URLs that Git has stored for the “short name” to be used when reading and writing to that remote.
- This command will list all the remote servers present.
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