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**What is Git?**

Git is the most commonly used version control system today and is quickly becoming the [standard for version control](http://stackoverflow.com/research/developer-survey-2015#tech-sourcecontrol). Git is a distributed version control system, meaning your local copy of code is a complete version control repository. These fully-functional local repositories make it is easy to work offline or remotely. You commit your work locally, and then sync your copy of the repository with the copy on the server. This paradigm differs from centralized version control where clients must synchronize code with a server before creating new versions of code.

**What is the difference between Git and SVN?**

**GIT:**

* A Git repository stores the full history of all of its branches and tags within the *.git*
* The latest stable release is contained within the master
* Active feature work is developed in separate branches.
* When a feature is finished, the feature branch is merged into masterand deleted.

**SVN:**

* The trunk directory represents the latest stable release of a project.
* Active feature work is developed within subdirectories under branches.
* When a feature is finished, the feature directory is merged into trunk and removed.

**Write a command to commit your work in Git?**

* On your computer, move the file you'd like to upload to GitHub into the local directory that was created when you cloned the repository.
* Open Git Bash.
* Change the current working directory to your local repository.
* Stage the file for commit to your local repository.
* Commit the file that you've staged in your local repository.
* Push the changes in your local repository to GitHub.

**What are the advantages of using GIT?**

* Distributed model: This means your work is your own. You can let others see only what is necessary. Not everything has to be public. There are other advantages to the distributed model, such as the speed (since most everything is local) and possibility of working offline
* Branching and merging are easy: Branching is a walk in the park. It feels like a natural part of the workflow. They are cheap (fast and consume very little space) so that you can branch whenever you want. This means you can sandbox your features and ideas till they are ready for the mainstream.
* Workflow is flexible: Compared to Centralized VCS, git has the qualities that allow to choose your own workflow. It can be as simple as a centralised workflow to as hierarchical as the dictator-lieutenant workflow. Use the process that best fits you.

**What is Git clone?**

The **git clone** command copies an existing **Git**repository. This is sort of like SVN checkout, except the “working copy” is a full-fledged **Git** repository—it has its own history, manages its own files, and is a completely isolated environment from the original repository.

**What is the command to delete branch?**

* **Delete Local Branch**
* To delete the *local* branch use one of the following:
* $ git branch -d branch\_name
* $ git branch -D branch\_name

# Delete Remote Branch

* $ git push <remote\_name> --delete <branch\_name>
* which might be easier to remember than
* $ git push <remote\_name> :<branch\_name>

**Explain the architecture of GIT in your own words?**

**How to resolve conflicts in GIT?**

Open any one of your favourite editor, example, Notepad, gedit, vim, nano or even Eclipse.

1. Whenever there is conflict in a file git add conflict marker that looks like this <<<<<<<<.
2. When you open the file in your text editor, you'll see the changes from the HEAD or base branch after the line <<<<<<< HEAD
3. ========, it divides your changes from the other branch as >>>>>>>>YOUR\_BRANCH\_NAME
4. You can decide if you want keep your branch changes or not. If you want to keep the changes what you did, delete the conflict marker they are,<<<<<<<, =======, >>>>>>> and then do a merge.