Version Control System(VCS)/ Source Code Management(SCM)

* Track and Manage the source code
* Used to track the source code changes in files/folders
* Collaboration between the teams

Git, CVS, SVN, Mercurial, PVCS, IBM Rational Clearcase…

2005 – Linus Torvalds – Linux Kernel

Junio Hamano

GIT – 0.99 – 2.34

“Unpleasent Situation” – **G**lobal **I**nformation **T**racker

File – version1, version2, version3….

3 types of VCS –

1. Local
2. Centralized
3. Distributed

Advantages of Distributed VCS:

1. Backup is available if something goes wrong
2. No need to be connected to the internet all the time

GIT is distributed version control system, open-source and free

GIT!=GITHub

GitHub(online repository management system)

* Website to upload the repositories online
* Provides backup on cloud
* Provides visual interface to manage your repository
* Makes collaboration easier

Ex: BitBucket

Branch: An independent path for development

Any changes/edit has to be done on a branch and then you need to merge it to the main/master

git init

git status

git add <file> -> adding one file

git commit –m “message”

git add . or git add \*.\* -> adding multiple changes

git config - -global user.email ……..

git config - -global user.name ……

git remote add origin <URL>

git push –u origin master

git clone <URL>

git branch <branch-name>

git checkout <branch-name>

git add <files>

git commit –m “message”

**Come to master/main branch before you push the branch to remote: git checkout master**

git push –u origin <branch-name>

git merge <branch-name>

git push –u origin master

All changes gets reflected on the master/main as well.

To delete a branch,

git branch –d <branch-name>

git push origin –delete <branch-name>

Explore -

git pull