GIT / GIT HUB / GIT LAB

VCS – Version Control System – tracking and managing changes to software code

SCM – Source Code Management

RCS – Revision Control System

10 developers – **6 FE**, 3 BE, 1 DBA, 1 TL, 1 PM

Code inconsistency

* Used to track changes to files/folders
* Collaboration in teams

VCS –

1. Local VCS
2. Centralized
3. Distributed

Adv of Distributed VCS

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

GIT – Distributed VCS – open-source and free

Other VCS tools –

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

**CLI – commands**, **GUI – user-interactive**, **Git Bash (linux)**

Tortoise Git, GitHub Desktop, Source Tree, GitCola….

GIT -? Global Information Tracker

**Linus Torvalds** – 2005 for Linux Kernel – Git –“ Unpleasent person”

**Junio Hamano** (Core maintainer since 2005)

Git Hub Ex: Bitbucket

* Website to upload your repositories online
* Provides backup(cloud)
* Provides visual interface(UI) for your repo
* Makes collaboration between teams easier

Order of steps –

1. ADD
2. COMMIT
3. PUSH

Basic Commands

* git –version
* git init
* git status
* git add “filename”
* git add \*.\*
* git add .
* git commit –m “message”
* git remote add origin “URL” - https://github.com/Deepthi2306/OneBillRepo.git
* git push –u origin “branch”
* git log
* git –help
* git config –global user.email “…..”
* git config –global user.name “…”
* git branch “branchname”
* git checkout “branchname” / git checkout –b “branch name”
* git add “changes” -> commit -> push
* git merge “branch name”
* git push –u origin “branchname”
* git branch –d “branchname” -> local
* git push origin –delete “branchname” -> remote
* git rm “filename” -> local
* git rm –cached “filename” -> remote
* git clone “URL”

COMMIT -> SHA1 Simple Hashing Algorithm (40-character long string)