Version Control System

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Version Control System

Version Control is a management software responsible for managing changes to computer Programs, docs, large websites, or other collection of Information.

Easy recovery of files / folders.
Rollback to the previous version.
Inform us about who, what, when, why changes have been made.

History of VCS.

There are 3 types of VCS.

① Local VCS.
② Centralized VCS.
③ Distributed VCS.

LOCAL VCS :

Changes are stored in a database, along with timestamp.
Code is in local System.

Cons :

Project can be lost, IF the hard-disk is corrupted.

Centralised VCS.

Repository:

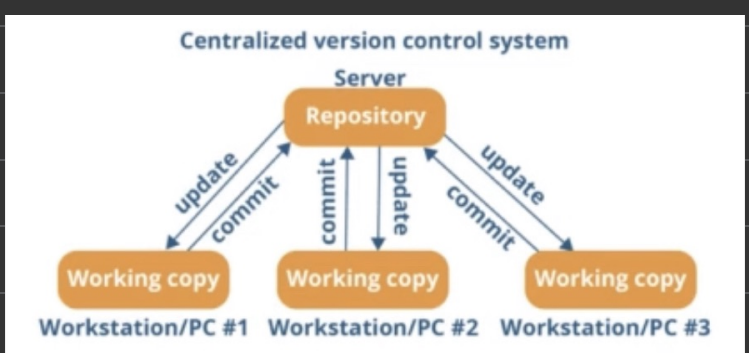
A directory where our project resides. It can be a local folder in our computer or a remote directory on a Server.

There are 2 types of repository:

Local Repository.

Central Repository.

→ Centralized VCS contain just one repository i.e Central repository & each user gets to work on the same.



Cons:

When the central repo goes down even for an hour.
When the hard disk of the central server goes down, we will lose the Project.

Distributed VCS :

Distributed version control systems contain multiple repositories.
Each user has their own local repository and there is a central repository where the final code resides.
Provides Full Back-up of the Project.
Git is an e.g of distributed VCS.

All users have the same code, they can pull the code from the main server / central repo onto their local system & they can push the code over the central repo.

Each user will have their own local repo, whatever change they want they can do into their local repo, once they are happy with the changes they can push to central repo.