

Assignment Question And Answer

What is Git?

Git is popular (distributed) version control system developed by Linus Torvalds in 2005 and has been maintained by Junio Hamano.

Git is used for

- tracking code changes (updates)
- Collaborations for coding
- And tracking who and when changes are made on the file.

What do you understand by the term 'Version Control System'?

Version Control System is the system that track the changes made to file or a set of file over time, so that we can recall specific version later. that is for every ~~file~~ source code changes in a file a new version will be

Q. What is Github?

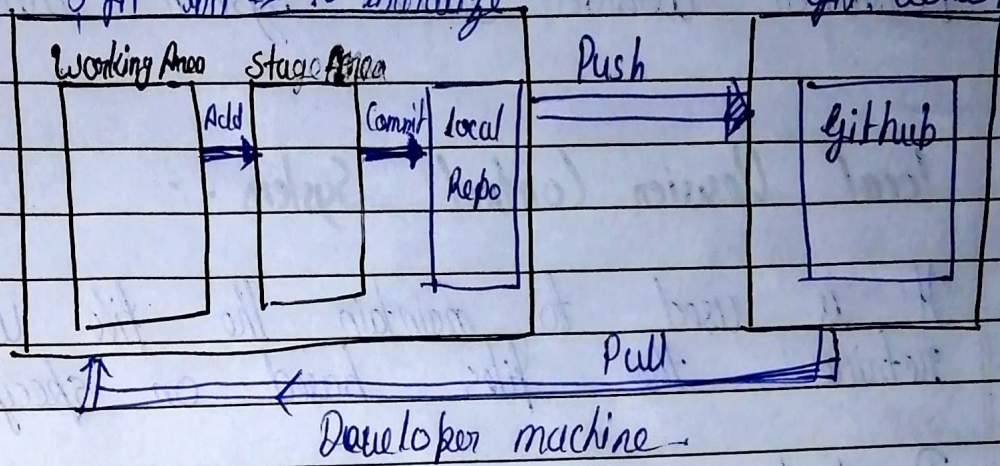
Ans. → Github is git server, It is a repository.

→ It is the largest host of source code in the world.

→ It is used to maintain and store the source code of a project.

\$ git init ⇒ to initialize

git server



Q. Mention some popular git hosting services.

Ans. Git hosting services are tools that allow us to host projects that use git.

Some popular git hosting services are github, gitlab, BitBucket, gitbit etc.

Ques Different type of version control system.

Ans There are 3 type of VCS (Version Control System) :-

- ① Local Version Control System (LVS)
- ② Centralised Version Control System (CVCS)
- ③ Distributed Version Control System (DVCS)

1. Local Version Control System :-

It is used to maintain the file version and retrieve the files based on specific version.

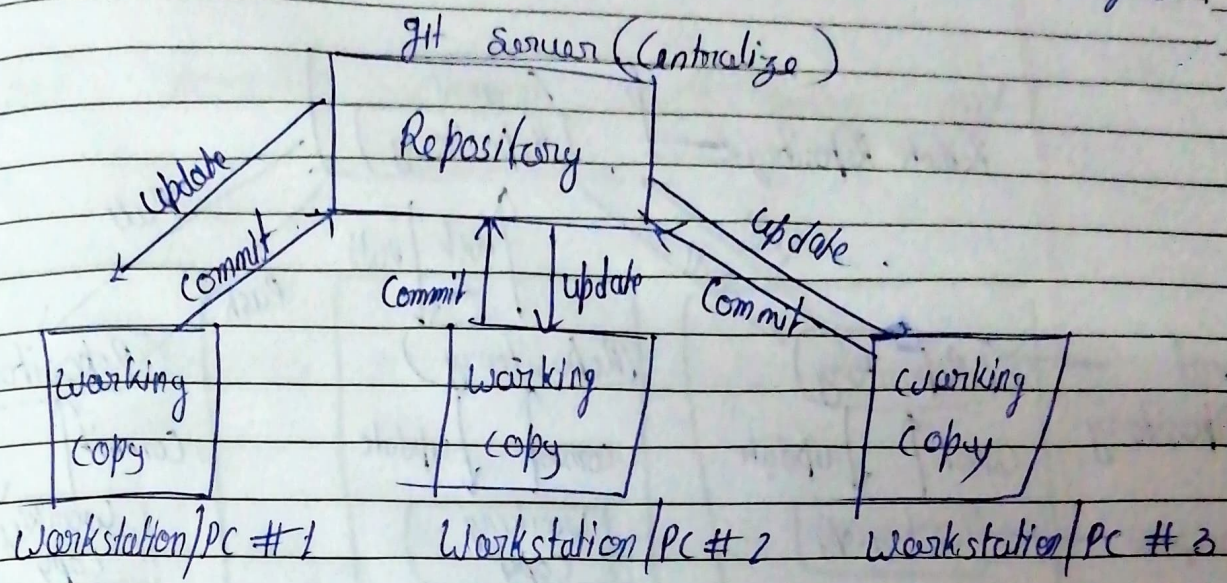
Drawbacks.

1. If our system is corrupted then there may be data loss issue.
2. By mistake we can delete those files.

2. Centralised Version Control System.

In these version control system a centralised git server is available to the developers where the source code can be placed by using push command.

Developer can collaborate and do the changes

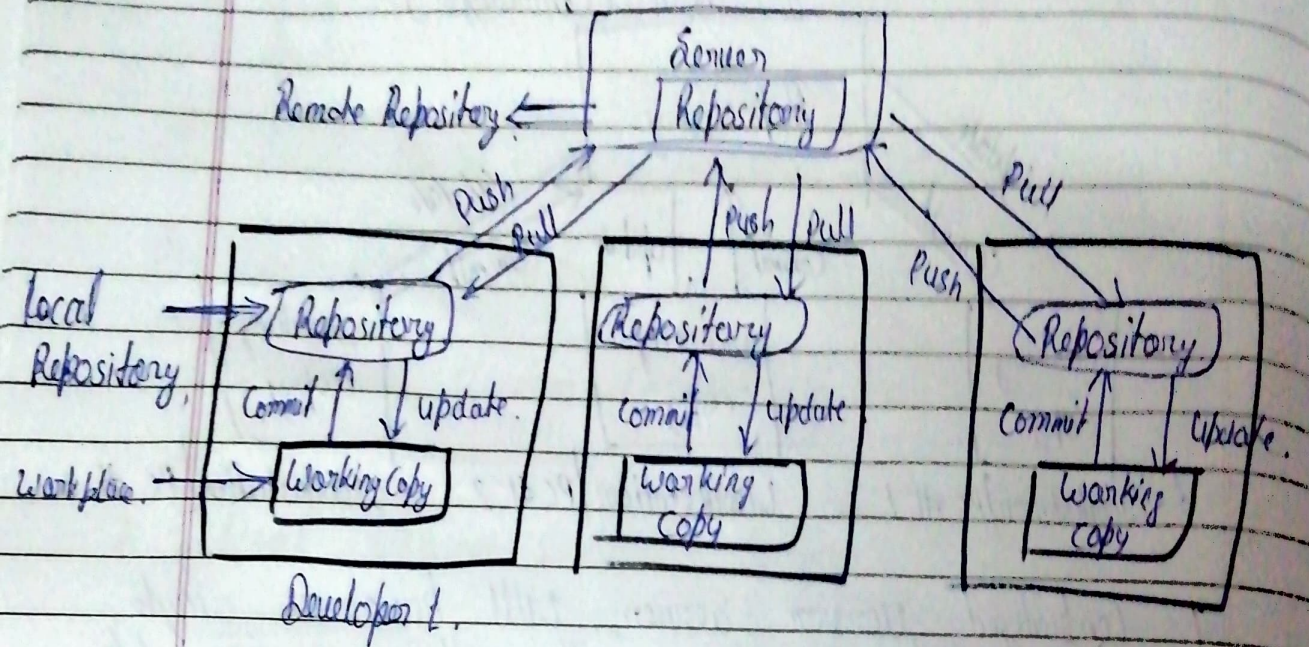


1. Centralized version server will have a single server that contains all the version files
2. No more clients connect to vcs and check out for files.
3. For many years this has been the standard version control system

Drawbacks.

1. Single point of failure (SPOF) that centralised server represents.
2. If the server goes down for an hour then during that hour nobody can collaborate or save versioned changes to the server.

Distributed Version Control System:-



→ Distributed Version Control System are Git, Mercurial, Darcs, Bazaar etc.

→ Developers don't check out the latest snapshot of the file rather they ~~are~~ fully mirror the repository including it's full history.

→ If the main server dies, then the local system will maintain a copy of the main repository which has full backup of data.

→ If the remote repository is down, then the developer can make changes in the local repository and when the main repository is up the code can be

Pushed to remote repository from local repository

Q What benefits comes with using git?

Ans Various benefit of using git are as follow: -

1. It allows us to keep records of version of files
2. Repository are stored at local as well as server, so if the system crash our project are safe.
3. Full control on the repository.
4. Coding Collaboration.

7. What is a git repository?

Git Repository collection on file of various different version of a project. These files are imported from the repository into local server of the user for further updation and modification in the content of the file.

init ini

How can you initialize a repository in Git

We can initialize a repository in Git
By using init command at
it Bash.

for that open git Bash
go in the source location by
using cd command.

Now use the code.
git init -> (git init).