



What are we going to see in this session?

- What is Git ?
- Overview about version control system
- History of Git
- Advantage of using Git
- Types of version control system





What is Git ?

- Git is an distributed version control (source control) system.
- What is version control by the way ?
 - ✓ System that records changes of your file/project and then able to recall any specific version of project at later point in time.
 - ✓ In other words – version control mechanism allows us to go back in time and get previous state of your project, also you can compare the changes over time.





Problem without version control.

- Lets assume you are working on web-page creation project.
- You have done couple of things like creating [Header & footer etc for your web-page]
- You are going to save this contents into folder as an first version.
- For every new change in web-page, you might create new folder.



Project – v1.0



Project – v2.0



Project – v3.0



- This approach would fill up your drive easily, when the project file grows exponentially.



Version control as an solution.

- In order to avoid such painful and complexity in handling files for bigger projects version control system was created.
- Version control system allows you to make snapshot of current state of your project.
- Which means all of your different versions of project is going to be saved in one directory.



Project – v1.0/v2.0/v3.0



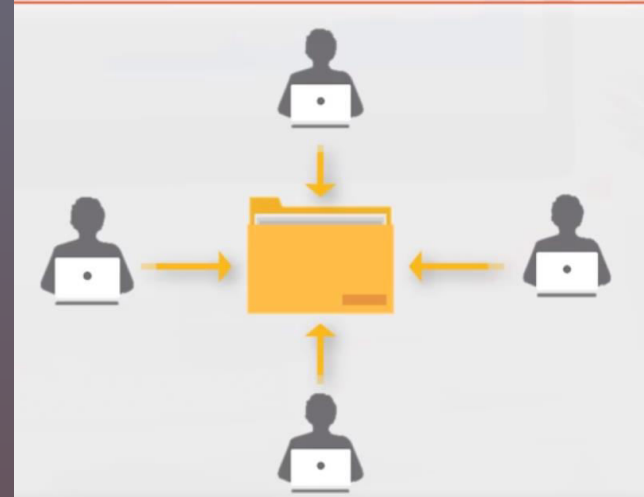
History of Git..

- Now you might be clear about version control system.
- Git is one of the version control tool like any other.
- Other version control system tools available in market are..
 - ✓ Subversion
 - ✓ Beanstalk
 - ✓ Mercurial
 - ✓ Perforce
- Git is created by “Linux Torvalds” The same person who created the Linux kernel.
- As like Linux, Git is also an open source tool.



Advantage of using Git ?

- Collaboration. (Different developers can work on the same project)
- For this use some solutions such as
 - ✓ GitHub
 - ✓ GitLab
 - ✓ Bitbucket
- This solutions just provide some shareable place to store your code using Git.





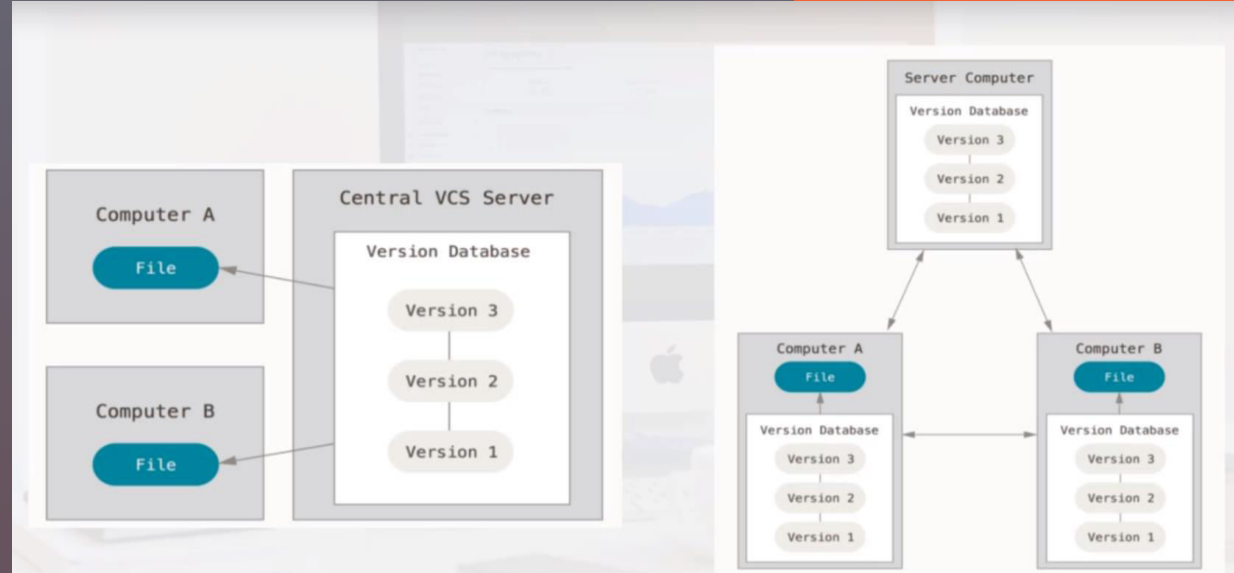
Types of version control system

- In General, there are 2 types of version control system.

- Centralized :

Downside :

- ✓ If any network failure you may not be able to reach your project files.
- ✓ If central server collapse we may loose the project files.



- Distributed :

- ✓ Versions of project files saved locally, in different computers & git server. Hence it has several copies.



End of this topic !

Any questions?

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