



B07 Sept 13 Lec 1 Notes

Centralized version control

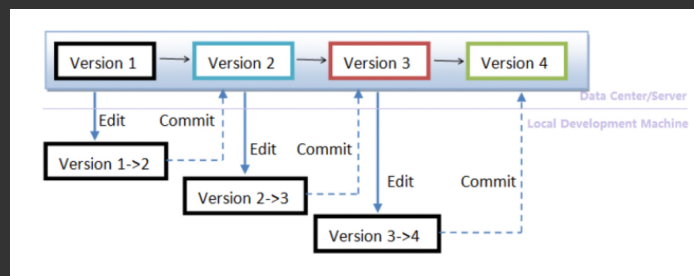
- ↳ Create local copy of the repository, make changes, and commit the change to the repository
- ↳ Code should be kept in a centralized location (Repository)

Terminology:

- ↳ Working copy - copy of the repository
- ↳ commit - make changes

Tracking changes

- ↳ Tools will allow you to revert to a previous version of the source code (only when commits occurred)



NOT version control systems

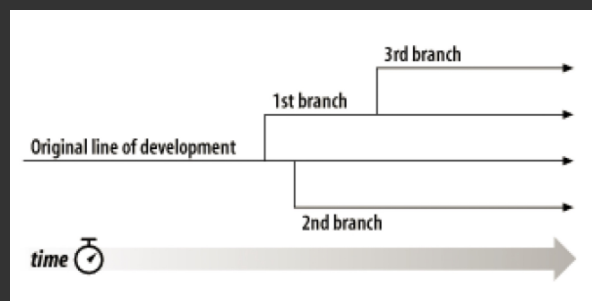
- ↳ Secure shell (SSH)
 - ↳ Connect to a remote computer and work in a shell on that computer
- ↳ Secure Copy (SCP)
 - ↳ Way to securely copy files from one computer to another
 - ↳ Transfers a copy of the files
 - ↳ Does not version files

Version Control - Managing concurrency

- ↳ What if two or more people want to edit the same file?
 - ↳ Option 1: Prevent it
 - ↳ Known as pessimistic concurrency
 - ↳ Option 2: Allow it, fix issues afterwards (look at slides)
 - ↳ Optimistic concurrency

Version Control - Branching

- ↳ Branches are divergent copies of development lines
 - ↳ These versions are used to build out complex features, or do experiments, without having an impact on the main code line.



Version Control - Storage Scheme

- ↳ Storing every copy of every file we generated over the course of a project is not practical.
- ↳ Version control systems store incremental differences in the file structures.