LESSON 22

GIT

CLIENTS

- GitHub
- GitLab
- Bitbucket

VERSION-CONTROL METHODS

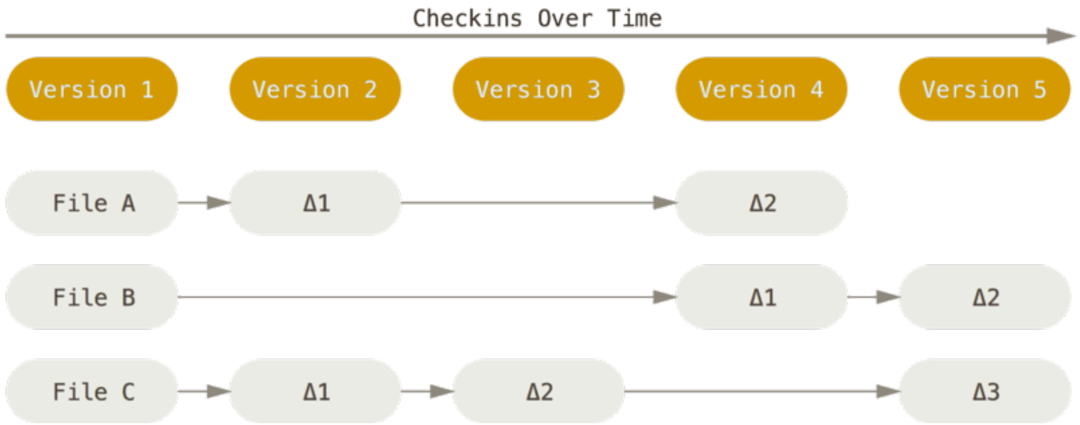
- Local Version Control Systems
- Centralized Version Control Systems
- Distributed Version Control Systems

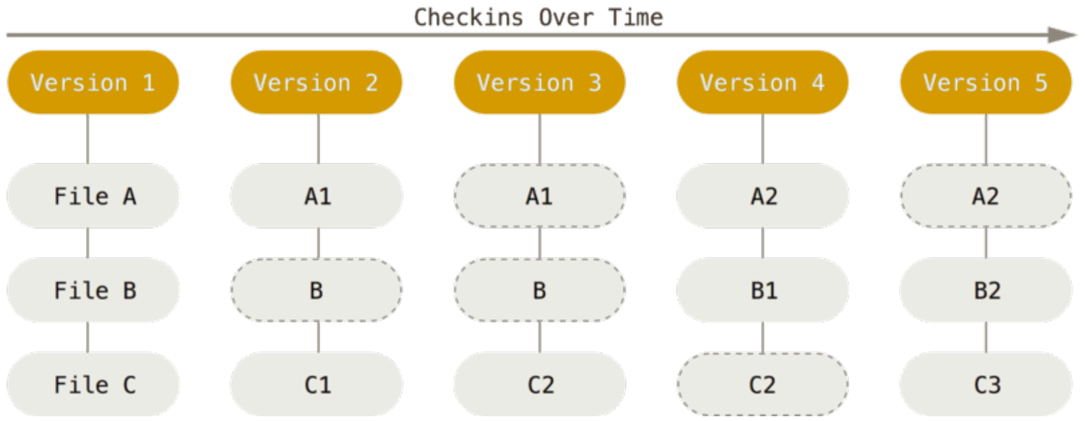
BRIEF HISTORY

- SVN 2000 CollabNet VersionOne

- Git 2005 Linux

SNAPSHOTS VS DIFFERENCES





HASH

- 40 - hexadecimal digits number

CLI vs GUI

- Command line interface
  - cmd, terminal

- Graphical user interface
  - Special soft
  - IDE

FILE STATES

- committed
- modified
- staged

README.MD

- Default markdown file
- Repo overview

.GITIGNORE

- List of ignored files / directories

CHECK CURRENT STATUS

git status

On branch master

Your branch is up to date with 'origin/master'.

Untracked files:

(use "git add <file>..." to include in what will be committed)

./

nothing added to commit but untracked files present (use "git add" to track)

COMMIT

- Commits are the core building block units of a Git project timeline.
- Commits can be thought of as snapshots or milestones along the timeline of a Git project.

- git commit -m

- --amend (modify the last commit)

LOG

- git log

- help
- patch
- oneline (pretty)
- Stat

COMMIT

- git commit

- git add .
- git commit -m ‘message’
- git push

BRANCHING

- git branch branch_name
- git checkout -b branch_name

COMMANDS

- Reset
- Merge
- Rebase
- Tag
- Stash

CONCEPTS

- Fork
- MR / PR
- Pipelines / test / linters
- Semantic versioning
- .git folder

BEST PRACTICES

- Commit early and often
- Don’t change published history
- Meaningful commit messages
- Branch name consists ticket name in the beginning