

CMPUT 301

Intro to

Version Control
(Git)

Your Project

- it runs
- it mostly works

Your Project

last week

- Did not fully work.
- But still ran

Your Project

last year

- Was the CMPT 294 project.
- Did something totally different

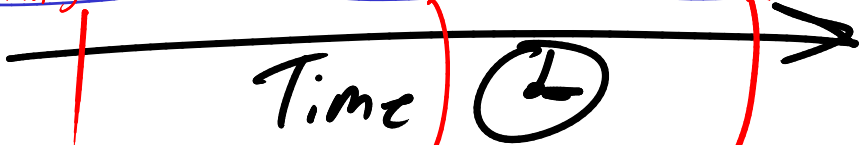
Then

Your Project
last year

Your Project
last week

Now

Your Project



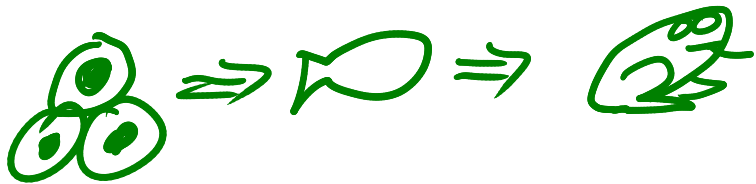
Snapshots

SOFTWARE

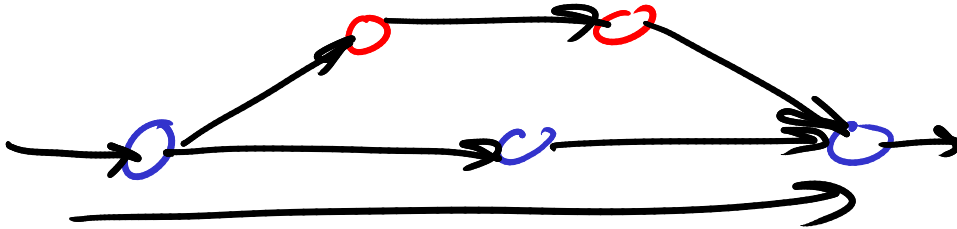
has Context

- Current time
- Current Requirements
- Current Functionality
- Current Issues
- Current Team

SOFTWARE EVOLVES



Version Control Helps Track
Evolution



Time

○ Commit

○

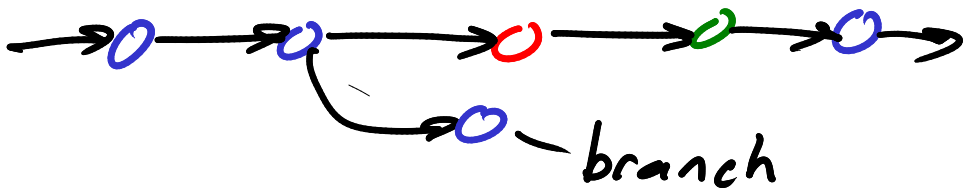
→ Code Flow

Version Control

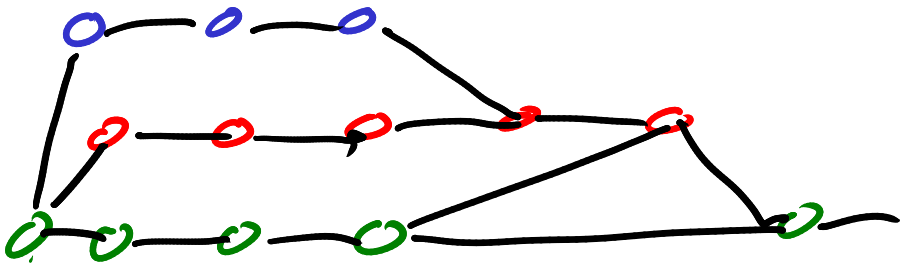
- tracks changes
- tracks files
- tracks authors
- tracks time

Centralized Version Control

1 repository



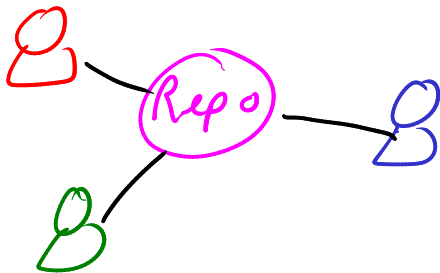
Distributed Version Control Many Repositories



Each Repo is like a branch
(Repo, Branch) tuple is a unique ^{branch}

Repository Style

Central Repository

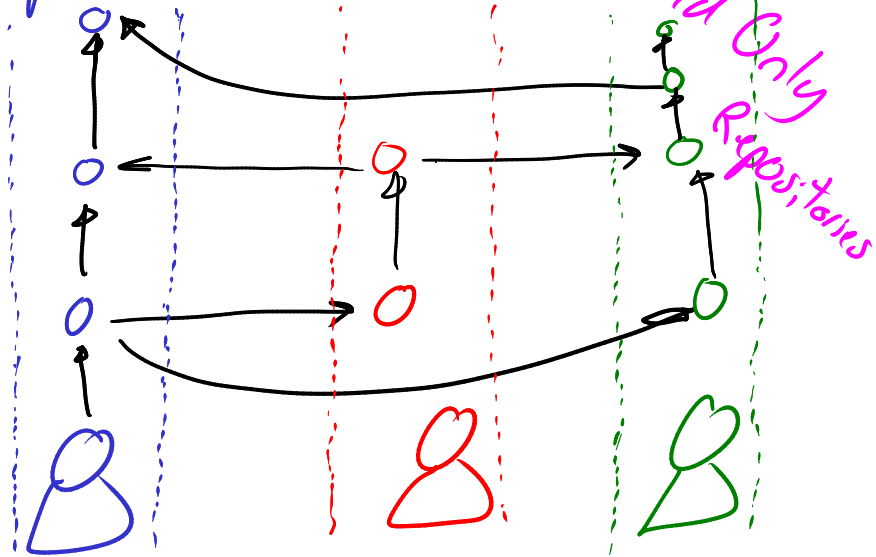


update/
checkout
modify
commit



Repository Style

Separate towers



Repository Style

Seperate towers

- Only need to give READ access.
- No need to give write Access
- Provide Isolation from change.
- Each Repo is a personal branch

