

GIT

- Distributed Version Control System (DVCS)
- Free and open source

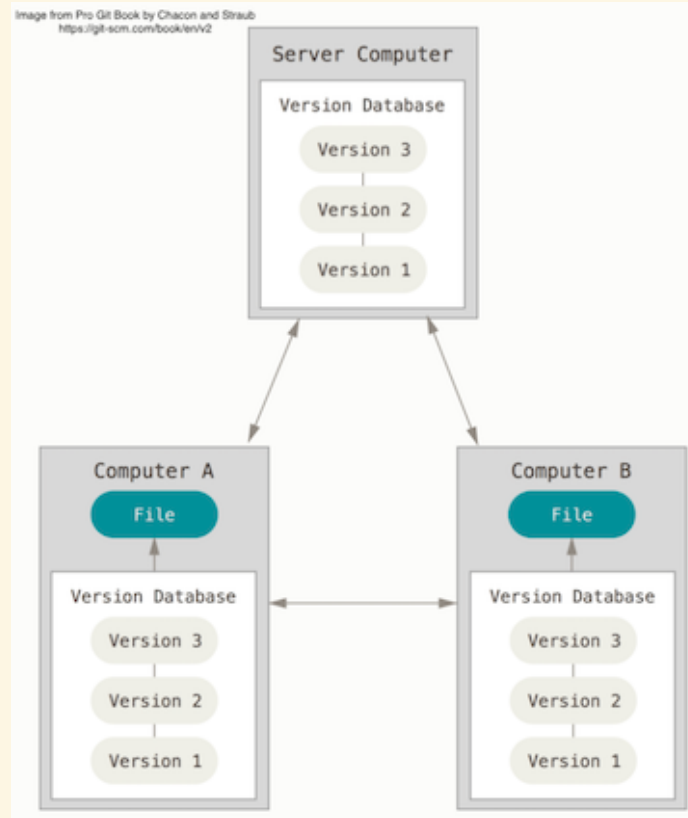
VERSION CONTROL SYSTEM

- Records changes to a file/set of files over time
- Allows viewing and recalling of history
- Who cares:
 - Rollback changes
 - Investigate bugs, bug fixes
 - Recover deleted files

DISTRIBUTED VERSION CONTROL

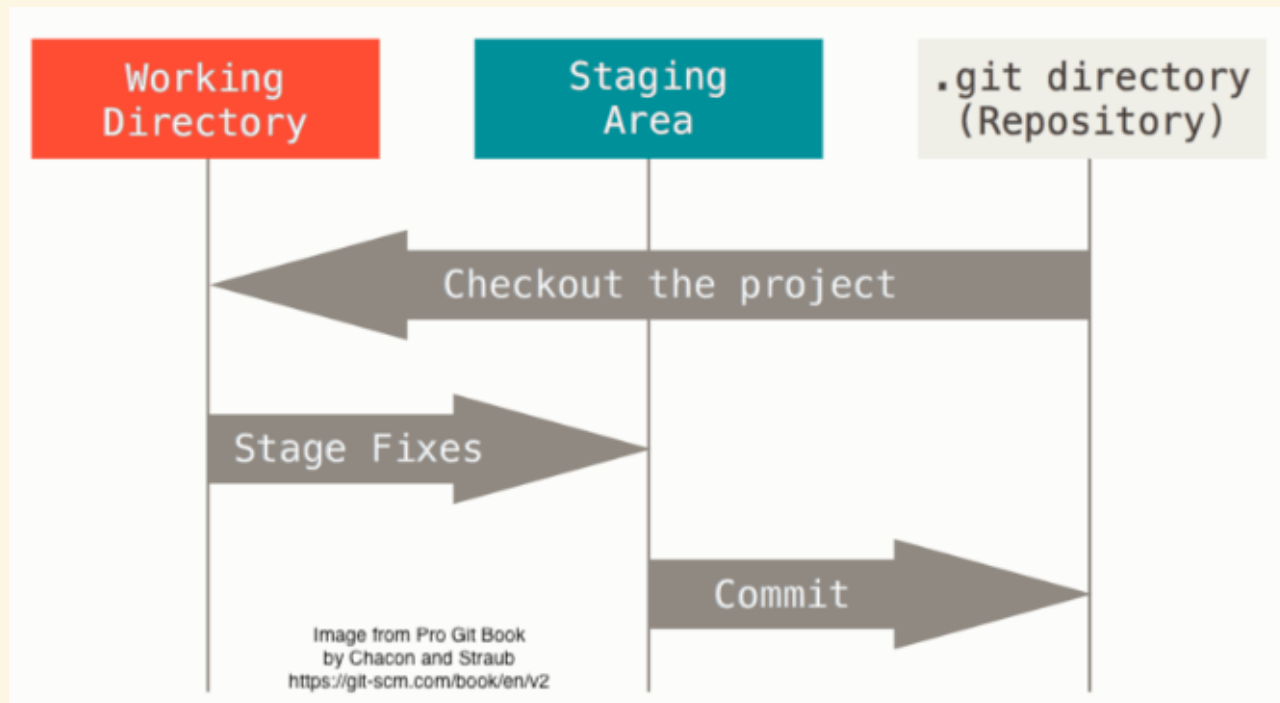
- each client fully mirrors repository, including full history
- each clone is full backup
- allows for working, recording changes offline

DISTRIBUTED VERSION CONTROL



FILE STATES - LOCAL

- Modified: changed, but not committed
- Staged: modified files marked to be committed
- Committed: version of file stored in local repo



HOW IT WORKS - BIG IDEA

- Committing -> like taking a picture of all files
- Links to old file if no change
- Underneath:
 - eventually objects are packed
 - packing basically stores as changes from closest overall state of project

FIRST TIME USING GIT

- Install
- Configure (specify name, email, default editor)
- Most likely want to do for all of your repos on this computer
 - `--global` option
- Can specify for:
 - whole system (`--system`)
 - single repo (`--local`)

CONFIGURING GIT

- How to configure:

```
git config --global user.name "Erin Carrier"
```

```
git config --global user.email carrieer@gvsu.edu
```

- View configuration:

```
git config --list
```