

Design Document

1. How is your .gitlet directory structured? What files / classes are you using to represent your repository state, and what information is contained in these files / classes?

- .gitlet
 - Blobs (dir with files named with hashcodes of tracked files)
 - Commits (dir with files named with hashcodes of Commit objects)
 - Stage (dir with file names, each file has content written as blob)
 - Head (file, content is the hash of the current branch)
 - Main (file, content is the hash of the current commit)

2. What is the process of adding a file then committing? How does your .gitlet directory change after adding; then after committing?

☒ Initial commit 0

- ☒ Create repo
- ☒ Commit with metadata
- ☒ Main points to commit
- ☒ Head ID updated

☒ Adding file

- ☒ ~~DONT stage if committed version is identical; in that case, remove from stage if it's already there~~
- ☒ ~~Staged for addition, contents saved in blob~~
- ☒ Blobs saved
- ☒ Stage saved

☒ Committing

- ☒ ~~Commit 1 created with metadata~~
- ☒ ~~Pointer to blob (contents of file unique ID created from hashing)~~
- ☒ ~~Blobs: files, parent, msg, time~~
- ☒ ~~SAME FILE CONTENTS, BUT ADDITION AND REMOVAL UPDATED~~
- ☒ ~~Watch for date and message~~
- ☒ ~~Clear the stage!~~
- ☒ ~~Commit only cares about updates before staged~~
- ☒ ~~Main points to Commit 1~~
- ☒ ~~Head ID updated~~
- ☒ ~~Reference to parent commit~~
- ☒ ~~No files → No changes added to the commit.~~
- ☒ ~~No msg → Please enter a commit message.~~

- ☒ Checkout
 - ☒ ~~Reference to head ID~~
 - ☒ ~~Use Hashmap on Commit to find the right info~~
 - ☒ ~~Write to object in CWD~~
- ☒ Checkout [ID]
 - ☒ ~~Same thing, but find the reference to the commit~~
- ☐ Log
 - ☐ Find references to all commits, print using Commit class
 - ☐ commit.getMessage(), etc.

3. How does your design support operations that rely on branches? You should explicitly account for branch, checkout [branch name], and reset. Note: even though branches are not part of the checkpoint, we strongly encourage thinking about them earlier – you have a default branch, so your branch representation does actually affect your checkpoint implementation!

- Branches can make more directories??