

Version Control System

OBJECTIVE

Implement a git like client system with limited capabilities. The program should be able

- to create/initialize a git repository, creating a .git folder with the necessary details.
- to add files to index and commit, maintaining the commit-ids so that retrieving them back could be done.
- to see the status, diff, checkout previous commits, as shown by the git utility.

Commands to be Implemented

1. init
2. add
3. status
4. commit
5. rollback
6. diff
7. log
8. retrieve -a vno
9. retrieve SHA vno
10. Push
11. Pull
12. Merge

Command Syntax

Assuming the object file name is git, you will run the commands in following manner

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|-------------|--|
| 1. init | - ./git init <Other parameters...> |
| 2. add | - ./git add <Other parameters...> |
| 3. status | - ./git status |
| 4. commit | - ./git commit <Other parameters...> |
| 5. rollback | - ./git rollback <Other parameters...> |
| 6. diff | - ./git diff <Other parameters...> |
| 7. log | - ./git log |
| 8. Push | - ./git push <Other parameters...> |
| 9. Pull | - ./git pull <Other parameters...> |
| 10. Merge | - ./git merge <Other parameters...> |