

EXPERIMENT 7

Version Control System setup and usage using GIT.

1. Creating a repository
2. Checking out a repository
3. Adding content to the repository
4. Committing the data to a repository
5. Updating the local copy
6. Comparing different revisions
7. Revert
8. Conflicts and Solving a conflict

Introduction:

Git allows groups of people to work on the same documents (often code) at the same time, and without stepping on each other's toes. It's a distributed version control system.

Procedure:

1. `git init <directory>` : Create empty Git repo in specified directory
2. `git checkout <branch name>` :To checkout to another branch
3. `git add <directory>` : Stage all changes in <directory> for the next commit. Replace <directory> with <file> to change a specific file
`git add .` : stage all the changes
4. `git commit -m "message"` :
5. `git pull <remote repo> <branch>`
6. `git diff <commit 1> <commit 2>` : show the difference between 2 commits
7. `git revert <commit>` :Generate a new commit that undoes all of the changes introduced in <commit>, then apply it to the current branch.
8. When 2 person commit changes in the same file at the same time, and one person pull that changes to repo. Then there is a chance for conflict. Git will show us the conflict portion. Maintain what we need in code and save it.