

# GIT

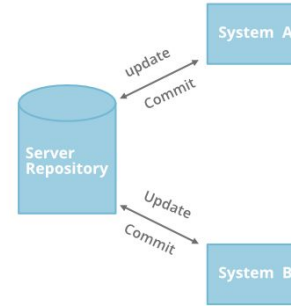
Dayana Edwin  
Devi Gopinath  
Rashad K



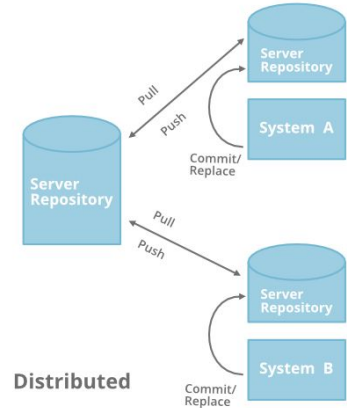


# Version Control System

- Record changes to a file
- Track Project History
- Nearly every operation is local
- GIT comes under the distributed version control system



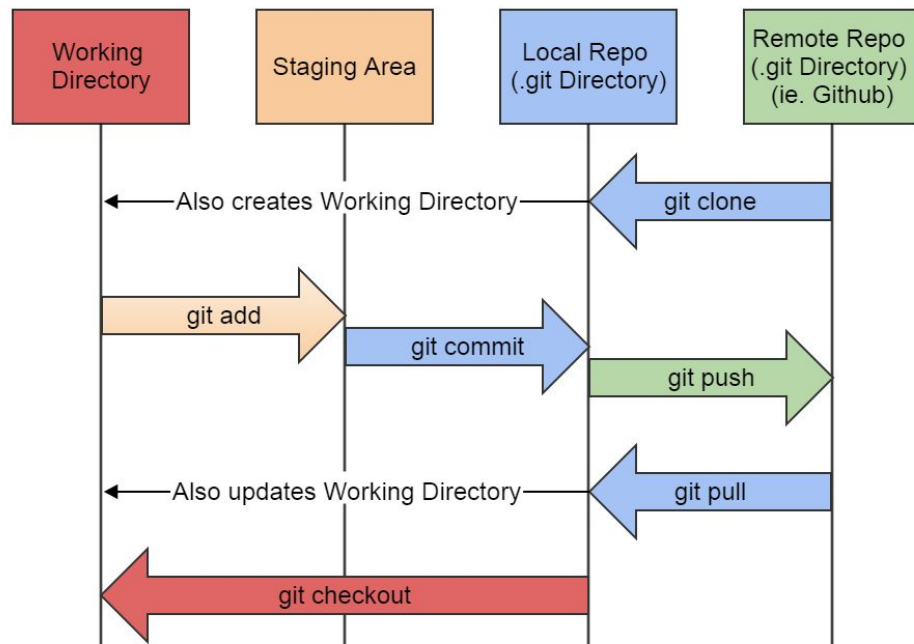
Centralized



Distributed



# Workflow





# GIT Commands

- `git init`- create a new local GIT repository
- `git add ./` / `git add <filename>`- add the changes to the staging area
- `git commit -m "message"`-commit changes to local repo
- `Git show <commit>`- shows the metadata and content changes of the specified commit
- `git reset <commit>`- undoes all the commits after the specified commit
- `git remote add origin <server>`- clone an existing remote repo with a local repo
- `git push` -push changes to remote repository
- `git clone <path to repository>`- to obtain a local copy of a remote repository
- `git rm <file>`- deletes a file



# GIT Commands

- `git branch`- shows the list of branches in the current repository
- `git branch<branchname>`- to create a new branch
- `git checkout <branchname>` -to switch to a new branch
- `git branch -d <branchname>`- delete the branch
- `git merge<branch>`-to merge another branch into your active branch



# GIT Commands

- `git log`- used to list the version history for the current branch
  - `git log --all`
  - `git log -<n>`
  - `git log --author=<name>`
  - `git log --before <date>`
  - `git log --after <date>`
  - `git log --oneline`
- `git tag`- used to give tags to the specified commit
  - `git tag -a <tagname> -m <tagmessage>` - annotated tag
  - `git tag -a <tagname> -lw` -light weight tag
  - `git tag`
- `git show` - Outputs metadata and content changes of the specified commit
  - `git show HEAD`
  - `git show HEAD~<n>`
- `git pull <repo link>`-fetches and merges changes on the remote directory to your working directory