Intermediary git

Joachim Desroches

GNU Generation

2019-03-27
This is git. It tracks collaborative work on projects through a beautiful distributed graph theory tree model.

Cool. How do we use it?

No idea. Just memorize these shell commands and type them to sync up. If you get errors, save your work elsewhere, delete the project, and download a fresh copy.
One-man git

- `git init`, `git add`, `git commit`
One-man git

- `git init`, `git add`, `git commit`
- `git status`, `git log`, `git checkout`, `git diff`

Do NOT confuse with project management systems like Microsoft Github or Gitlab!

Joachim Desroches (GNU Generation)
One-man git

- `git init`, `git add`, `git commit`
- `git status`, `git log`, `git checkout`, `git diff`
- Do NOT confuse with project management systems like Microsoft Github or Gitlab!
Two man team

- Remember about the central server?
Two man team

- Remember about the central server?
- `git push`, `git pull`, `git merge`
- Conflict resolution!
Some more commit possibilities

- `git commit --amend`, `git add --patch`
Some more commit possibilities

- `git commit --amend`, `git add --patch`
- `git commit --verbose`, `git commit -S`
Some more commit possibilities

- `git commit --amend, git add --patch`
- `git commit --verbose, git commit -S`
- `git bisect start/good/bad/...`
Branches

- So what is a branch?
Branches

- So what is a branch?
- `git branch`, `git checkout`
Branches

- So what is a branch?
- `git branch`, `git checkout`
- `master`: branch, work, merge model.
Rebase: your complicated best friend

- Moving trees around...
Rebase: your complicated best friend

- Moving trees around...
- Avoiding Merge Commits: `git rebase <branch>`
Rebase: your complicated best friend

- Moving trees around...
- Avoiding Merge Commits: `git rebase <branch>`
- Fixing the past: `git rebase -i`
Rebase: your complicated best friend

- Moving trees around...
- Avoiding Merge Commits: `git rebase <branch>`
- Fixing the past: `git rebase -i`
- **THIS REWRITES YOUR HISTORY**
New work model

- Remember branch, work, merge?
New work model

- Remember branch, work, merge?
- Now branch, work, rebase, work, rebase, clean merge!
Tig

Use the tig tool for your repos!

- Beautiful history
- Easy to see a file at a commit
- Easy to see diffs
Remember man pages are your friend!
Conclusion

- Remember man pages are your friend!
- Read the Git Book: more depth and more possibilities
Conclusion

- Remember man pages are your friend!
- Read the Git Book: more depth and more possibilities
- Most of all, use git! Practice makes perfect.
Remember man pages are your friend!
Read the Git Book: more depth and more possibilities
Most of all, use git! Practice makes perfect.
Questions?