

Git Basics

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Why using version control

- ▶ Tracking changes `git diff` 





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- ▶ Accountability `git blame` 
- ▶ "Documentation" via commit messages `git log` 

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- ▶ Accountability `git blame` 
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- ▶ Safe experiments `git branch` 

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- ▶ Accountability `git blame` 
- ▶ "Documentation" via commit messages `git log` 
- ▶ Safe experiments `git branch` 
- ▶ Easy release management (tags, branches, CI/CD, ...) 

Hosting

Git hosting platforms

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▶ Bitbucket 

▶ Gitea 

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▶ Gitlab 

git clone



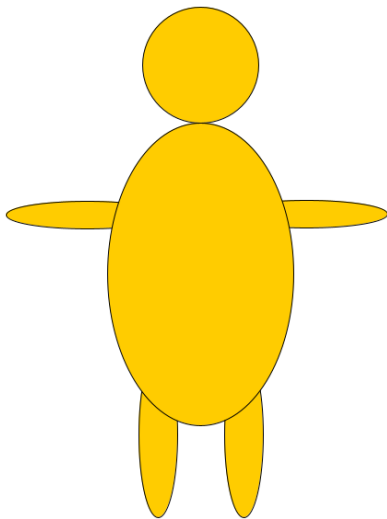
git clone



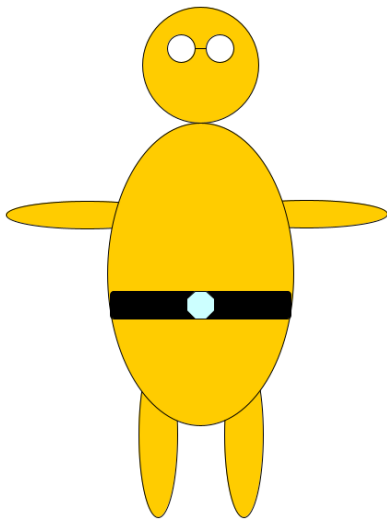
git clone



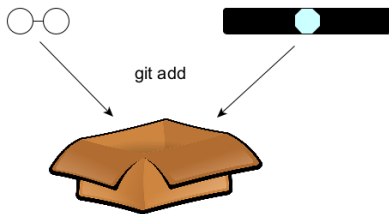
Modifications



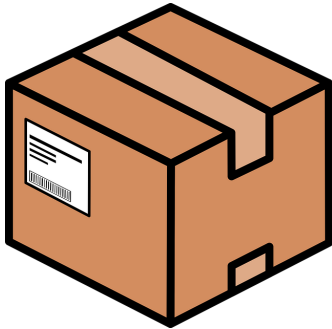
Modifications



git add



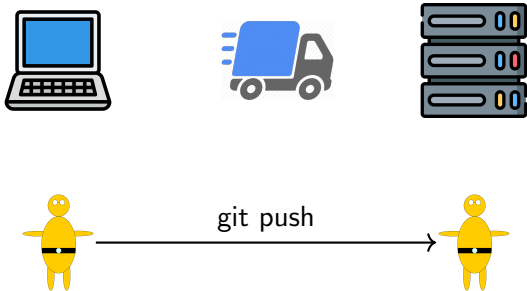
git commit



git push



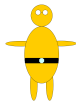
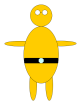
git push



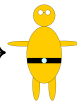
git pull



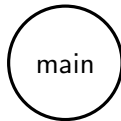
git pull



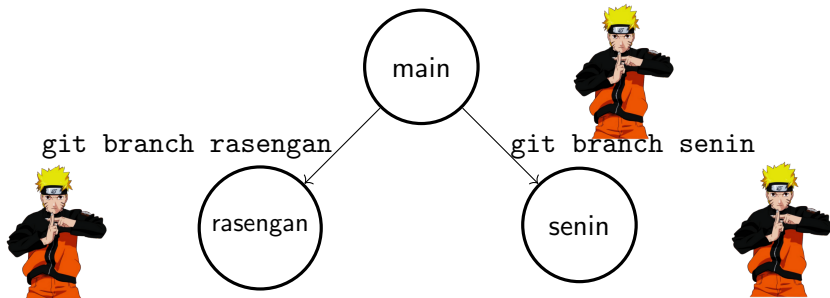
git pull



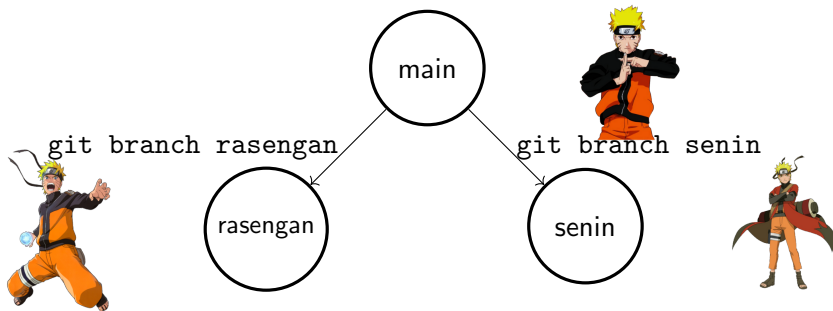
git branch



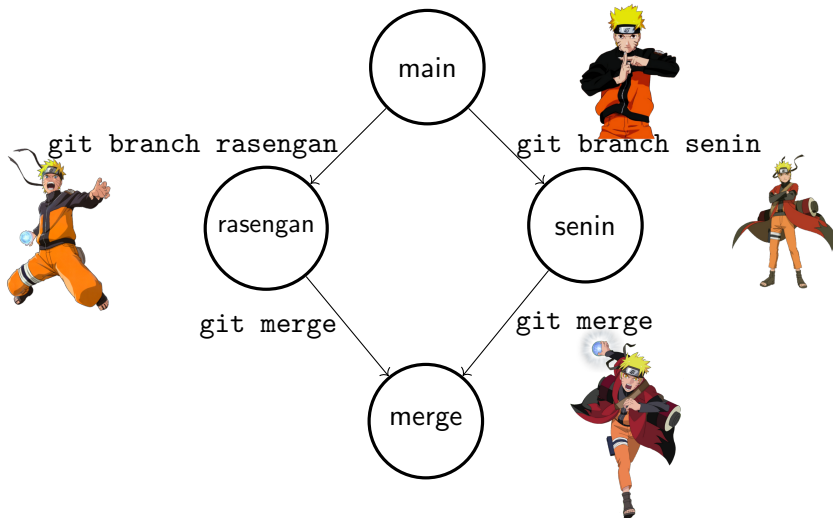
git branch



git branch



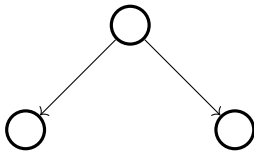
git merge



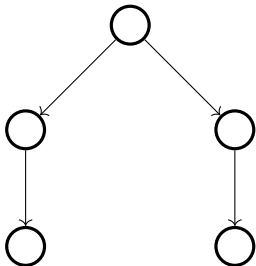
conflicts



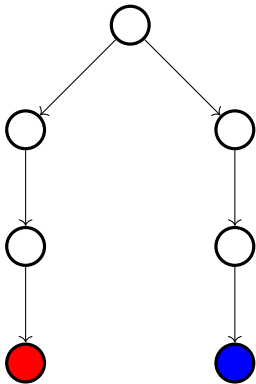
conflicts



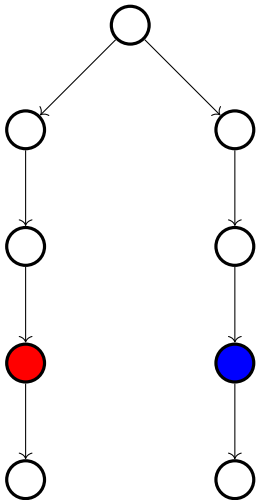
conflicts



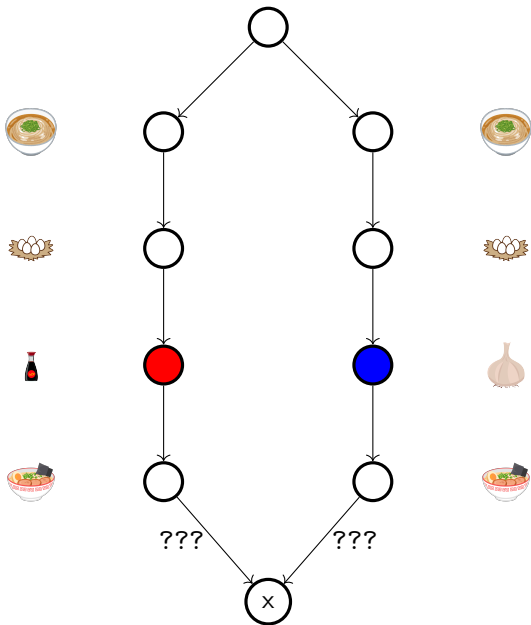
conflicts



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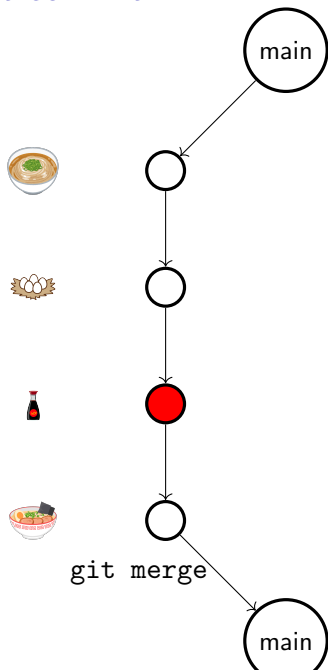
conflicts



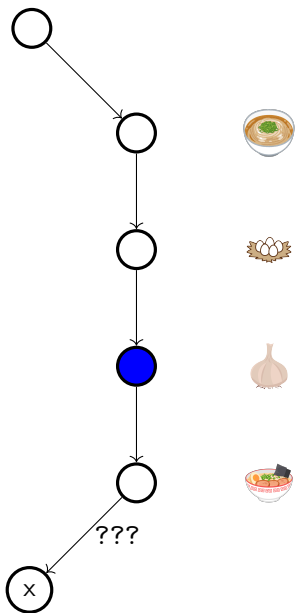
First commit



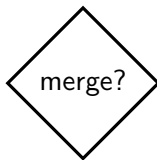
First commit



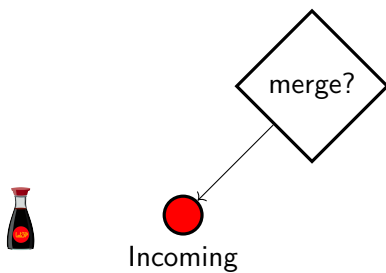
2nd commit conflict



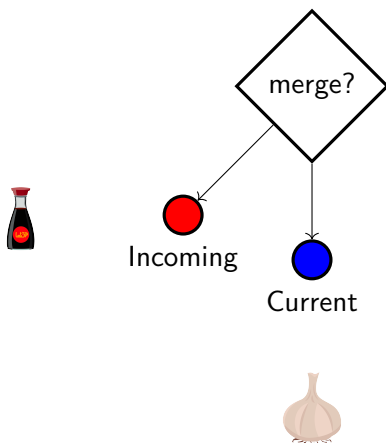
Resolving Conflicts



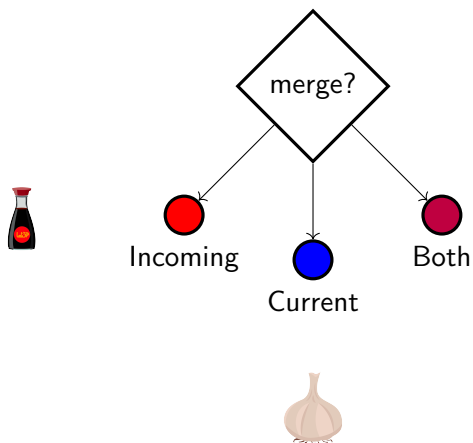
Resolving Conflicts



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Resolving Conflicts



Getting further

► `git status`

Getting further

- ▶ `git status`
- ▶ submodules

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Getting further

- ▶ `git status`
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- ▶ Cheat Sheet

Questions ?



Credits

- ▶ flaticon.com authors: Freepik, Flat Icons, ultimatearm, Wahyu.Setyanto, iconixar
- ▶ pngwing.com
- ▶ pngegg.com