

# Git

(and some other stuff)

# Recapping last week

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## The readings

- Biculturalism
- Command-line "bullshittery"

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Why is it important?

And how might we build a version control system?

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Why doesn't everyone use version control for everything?

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- making commits — `add`, `commit`
- viewing work/history — `status`, `log`

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- History is a linked list
- What's `master`, `HEAD`?
- Where's the old versions?



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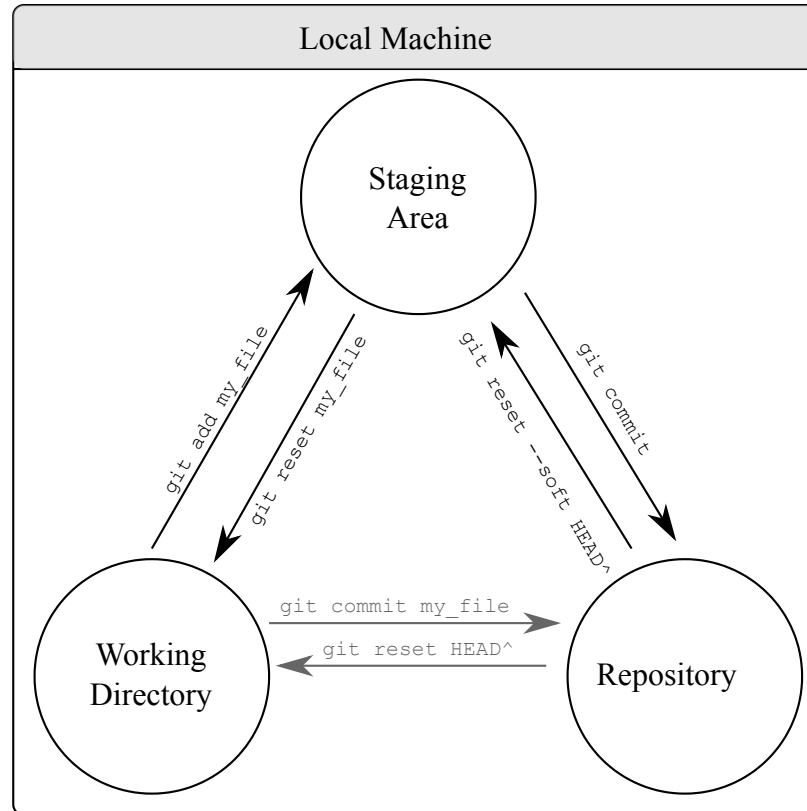
- History is a linked list
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## I'm lazy, let's make `git st == git status`

- `git config --global --edit`
  - (Fancy way of saying `editor ~/.gitconfig`)
  - (Fancy way of saying `editor /home/ppannuto/.gitconfig`)
  - (Fancy way of saying `[nano/vim/emacs/...] /home/ppannuto/.gitconfig`)

```
[alias]
st = status
```

# Using git locally

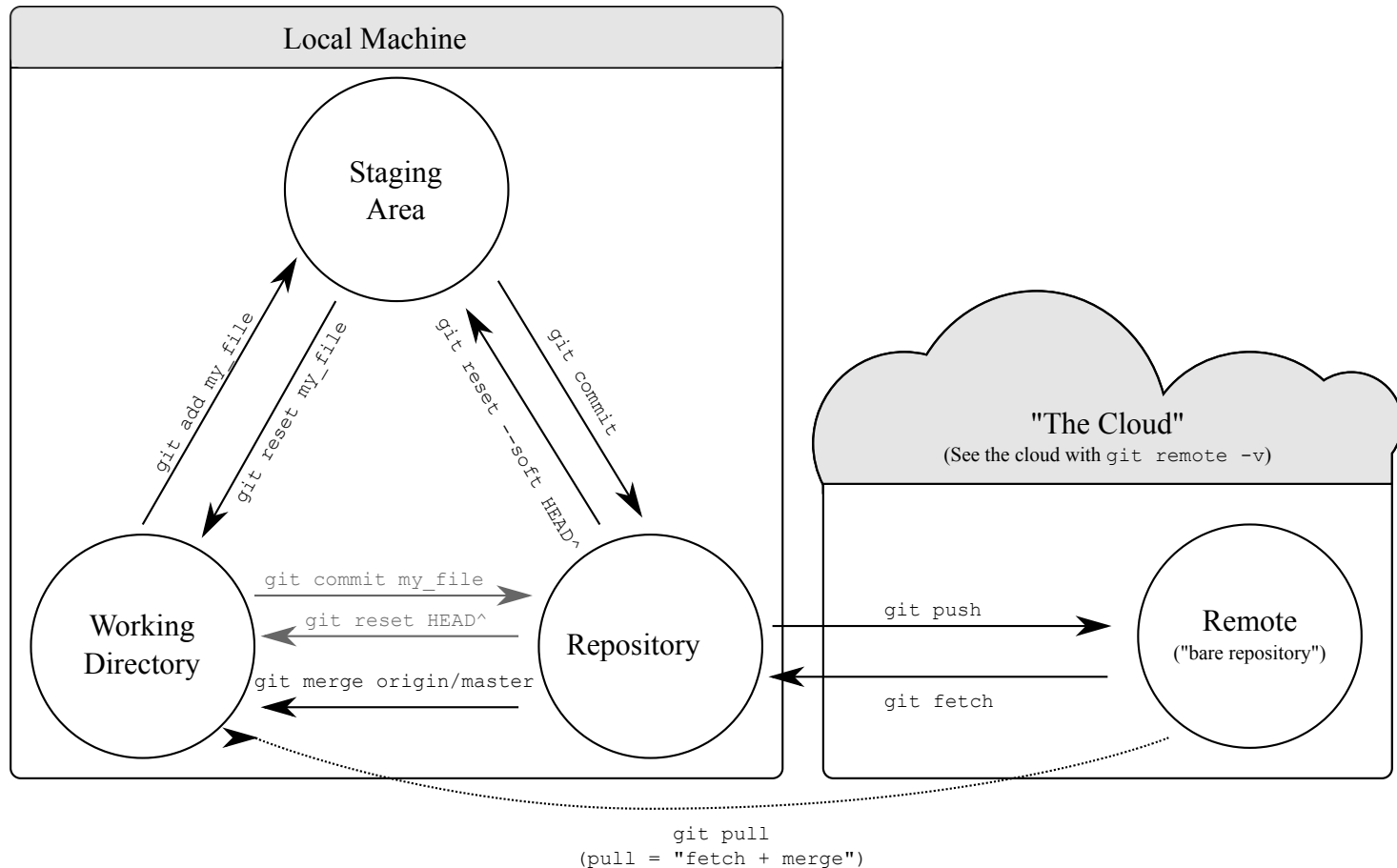


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# Why is git cool?

## Let's debug a real-world problem

**Phony** is a `ruby` library for pretty-printing phone numbers. It's used by a bunch of websites (AirBnB, ZenDesk, etc)

1. `git clone https://github.com/floere/phony`

```
# US phone number
ruby -e 'require "./lib/phony"' -e 'puts Phony.format("17345551212")'
+ 1 (734) 555-1212
# French phone number
ruby -e 'require "./lib/phony"' -e 'puts Phony.format("33123456789")'
+33 1 23 45 67 89
# Emergency phone number in the UK
ruby -e 'require "./lib/phony"' -e 'puts Phony.format("999")'
```

```
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  - `git checkout v1.9.0`

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  - The `git bisect` command will help keep track of progress
  - `git bisect start`
  - `git bisect good`
  - `git checkout master`
  - `git describe`
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  - `git bisect run ruby -e 'require "./lib/phony"' -e 'puts Phony.normalize("+999")'`

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- But I'm *still* lazy
  - `git bisect run ruby -e 'require "./lib/phony"' -e 'puts Phony.normalize("+999")'`
- So what changed?
  - `git log -p` — or — [github.com/floere/phony/commit/9b4234...](https://github.com/floere/phony/commit/9b4234...)
  - <https://github.com/floere/phony/issues/219>

# Closing remarks

## You must use git for something non-trivial this term

- You *should* use version control for all your class projects
  - And I don't mean folder-copying
- Not in any programming classes?
  - Try using it for other homework or a side project!
- Deadline for this is Week 5 — Git II (Oct 05)