

Git

(and some other stuff)

Recapping last week

Any lingering administrative issues?

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The readings

- Biculturalism
- Command-line "bullshittery"

What's version control?

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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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- first — `init`
- 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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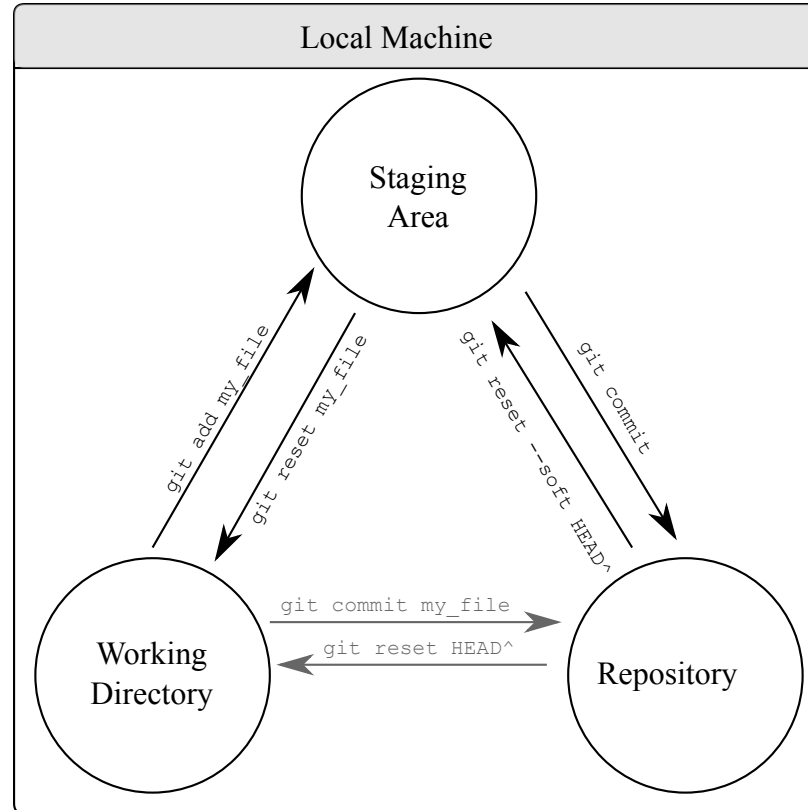
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I'm lazy, let's make `git st == git status`

- `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

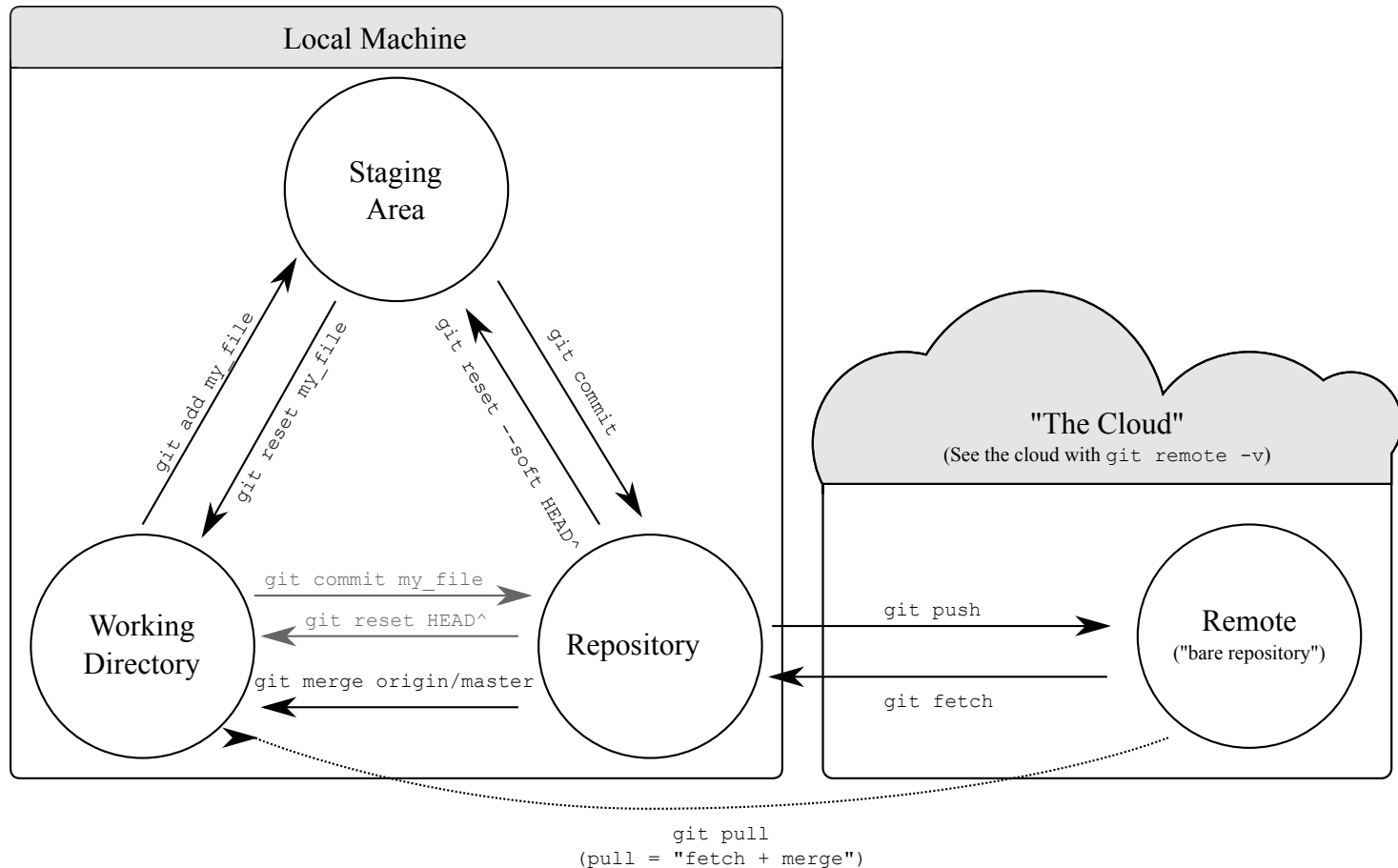


Collaborating with git

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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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 - (magic)
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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/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 06)