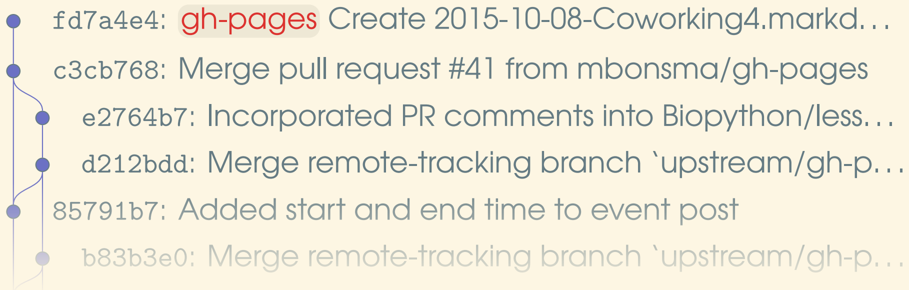
An Intermediate Look at Git + GitHub

U of T Scientific Coders

University of Toronto

October 1, 2015



```
fd7a4e4: gh-pages Create 2015-10-08-Coworking4.markd...
c3cb768: Merge pull request #41 from mbonsma/gh-pages
  e2764b7: Incorporated PR comments into Biopython/less...
  d212bdd: Merge remote-tracking branch `upstream/gh-p...
85791b7: Added start and end time to event post
  b83b3e0: Merge remote-tracking branch `upstream/gh-p...
```

Outline

Section 1

Review

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- Configure your git client (`git config user.name` + `user.email`)
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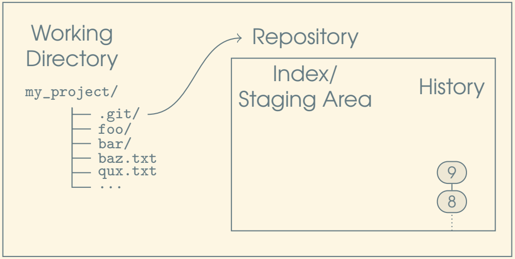

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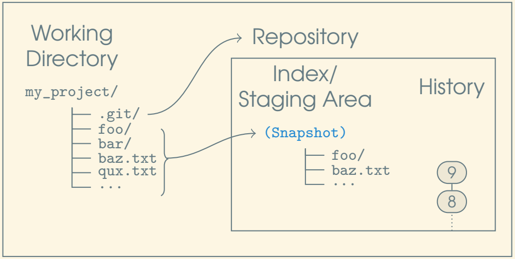

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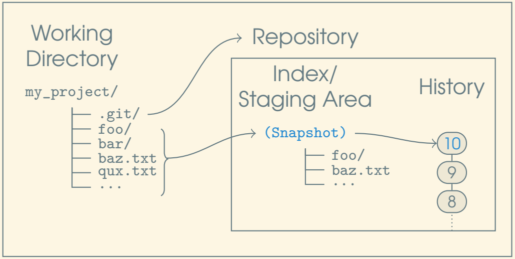

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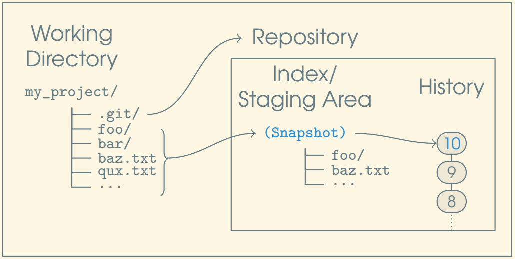

- Start tracking a file with git (`git add`)
- Commit changes to the history (`git commit`)
- Check what's going on (`git status`)
- Compare a file with the one in the history (`git diff`)
- Look into your history (`git log`)

Section 2

Viewing History

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- `git blame <file>`
- `gitk` + `gitg` + other viewers

Section 3

Branching

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- To ease collaboration

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Merging branches:

- `git merge <other branch name>`
- `git merge --ff-only <other branch name>`
- `git merge --no-ff <other branch name>`

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Collaborating with Others

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You are responsible for syncing

- `git push [<remote>] [<branch>]`
- `git fetch [<remote>]`
- `git pull [<remote>]` — `fetch` + `merge`

GitHub Example

Section 5

Advanced Topics

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- `git rebase`