

Git Rebase Workflow

Knowledge Share

D. C. M. Shi¹ P. Thieu²

¹Software Engineering Intern
AdeptMind

²Technical Writer
AdeptMind

May 2018



Table of Contents

- 1 What's a Github?
- 2 Merge Workflow
- 3 Rebase Workflow
- 4 Pre-Demo Warmup

Table of Contents

1 What's a Github?

2 Merge Workflow

3 Rebase Workflow

4 Pre-Demo Warmup

What's a Github?



adeptmind

What's a version control?

version control [vər'zHən kən'trōl] *noun*

records changes to a file or set of files and allows you to recall the specific version of the file you want later

What's a version control?

version control [vər'zHən kən'trōl] *noun*

records changes to a file or set of files and allows you to recall the specific version of the file you want later

Pros

- multiple people can work on the same files
- can restore to backup if you made a boo boo
- see exactly what was changed, when and by who

What's a version control?

version control [vər'zHən kən'trōl] *noun*

records changes to a file or set of files and allows you to recall the specific version of the file you want later

Pros

- multiple people can work on the same files
- can restore to backup if you made a boo boo
- see exactly what was changed, when and by who

Cons

- Nothing :^)

What's a version control?

version control [vər'zHən kən'trōl] *noun*

records changes to a file or set of files and allows you to recall the specific version of the file you want later

Pros

- multiple people can work on the same files
- can restore to backup if you made a boo boo
- see exactly what was changed, when and by who

Cons

- Nothing :^)
- a little bit of a learning curve :^(|

Table of Contents

1 What's a Github?

2 Merge Workflow

3 Rebase Workflow

4 Pre-Demo Warmup

Typical Merge Flow

Write some code

Commit to branch

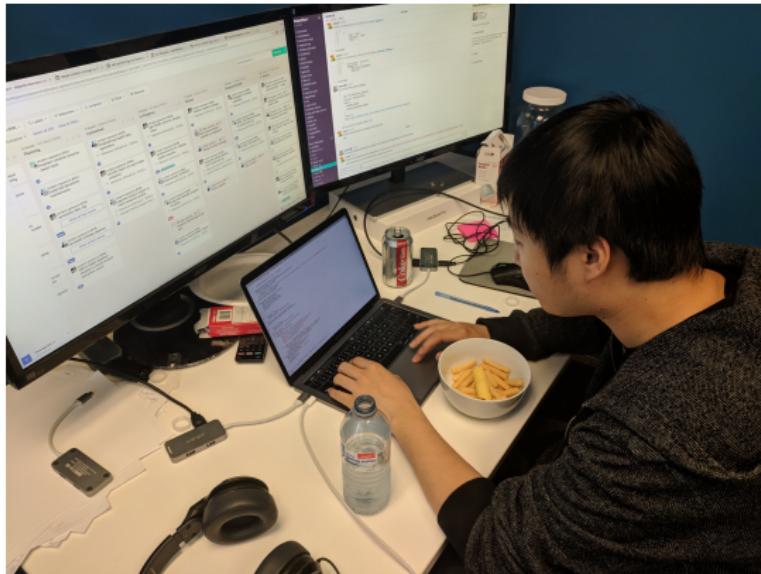
Merge in to master

Start working on a new
feature

Check in your changes to
a Git repository

Finish feature and bring
changes in to master

Typical Merge Flow - Solo Developer



- commit directly to master
- no conflicts
- no wait time for merging

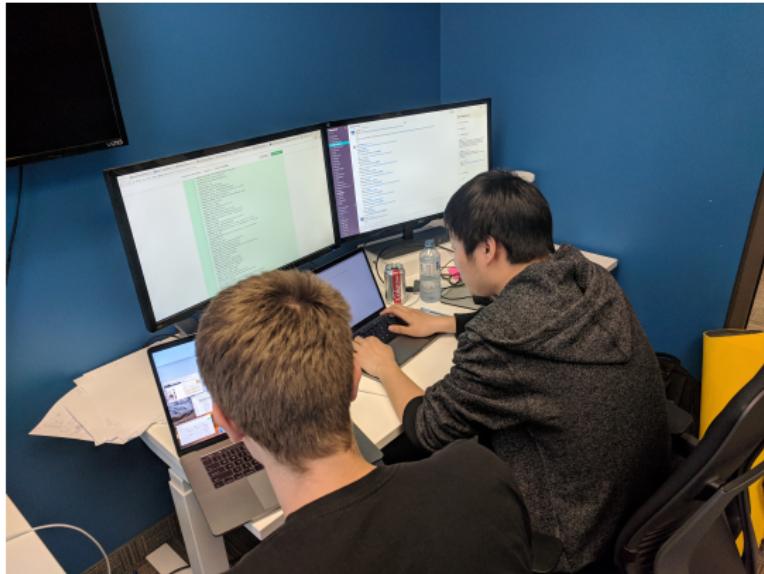
adeptmind

Typical Merge Flow - Solo Developer Git History

- Merge pull request #2 from AdeptMind/URL
 - url filtering based on regex/xpath
 - add canadagoose
 - fix config spider
 - add new spiders
 - fix bug
 - avoid invalid keys
 - merging
 - fix
- extracting configurations
 - prepare for another round of extraction
 - do local color normalization
 - update persistence
 - update color extractor
 - working on color
 - add facts resolver
 - fix color extractor
 - command-line fix
 - got macys colors
 - fix filter url
 - fix routes management; apply url filter universally
- labeler fix
 - primitive labeler
 - wip
- move to ubuntu
 - adding random review text to test set
 - adding search expansion
 - remove redundant url management
 - updated response checking
 - adopt the document model
 - add primary url index; move broken page out of tests
 - split amazon spider; add extraction tests
 - extraction optimization
 - further optimization
 - performance improvements
 - no url expansion for now
 - upgrading amazon search crawler with separate storage and search group management
- price extractor update
 - update extraction storage
 - fix extraction
 - update
 - mre restrictive link chasing
 - continues on to property extraction
 - decoding search results
 - add noahsnaturalfoods; cosmetic fixes
 - macys api decoded; speed fix
 - deal with page inconsistency
 - fix
 - db as dependency injection
 - much more sites; generalized evaluator
 - first commit with tests

Siwei Yang <yangsiwei880813@gmail.com>
Huangxiao Li <tony@adeptmind.ai>
Siwei Yang <yangsiwei880813@gmail.com>
Siwei Yang <s8yangi@uwaterloo.ca>
Siwei Yang <s8yangi@uwaterloo.ca>
Siwei Yang <s8yangi@uwaterloo.ca>
Siwei Yang <s8yangi@uwaterloo.ca>
Siwei Yang <yangsiwei880813@gmail.com>
Siwei Yang <yangsiwei880813@gmail.com>

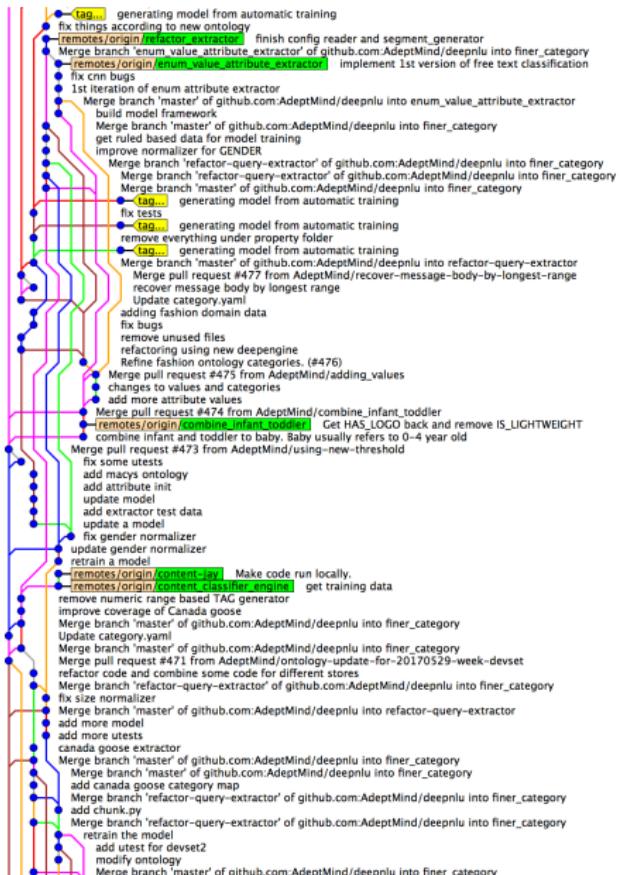
Typical Merge Flow - 2-4 Developers



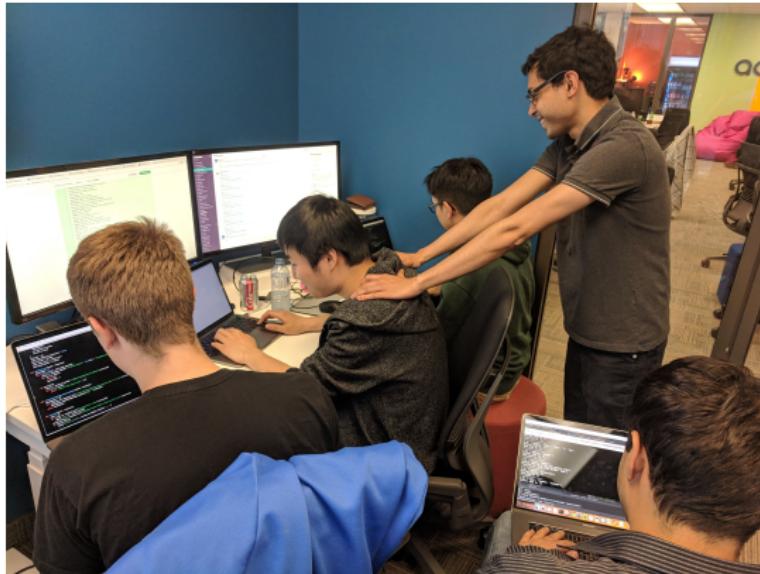
- start to use branching strategy
- start to see conflicts
- need to wait between merges
- git history gets more complex, but manageable

adeptmind

Typical Merge Flow - 2-4 Developers Git History



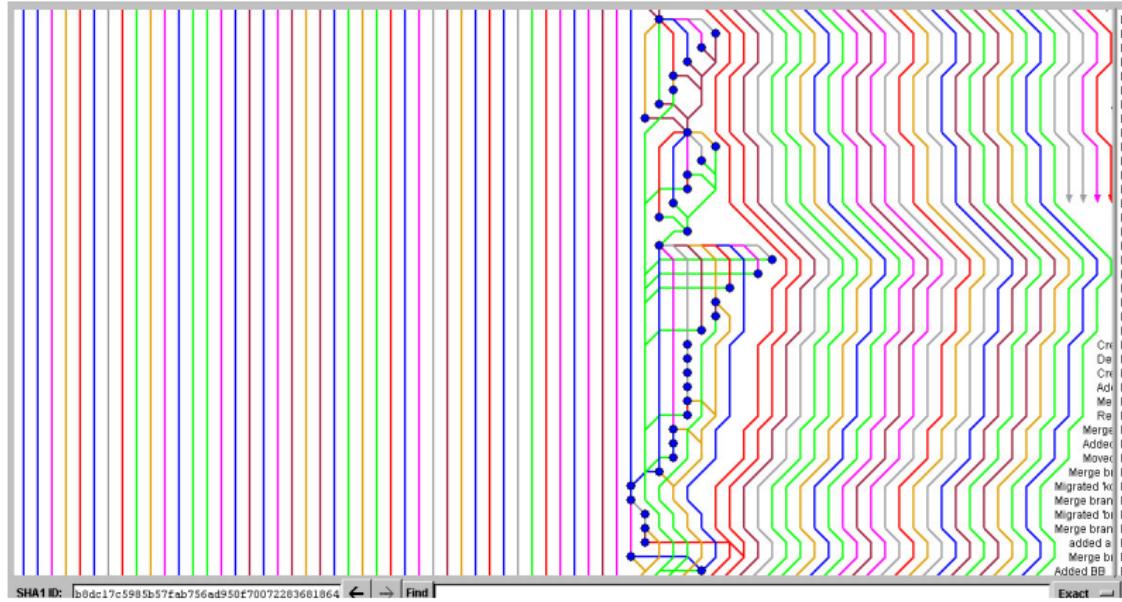
Typical Merge Flow - 5+ Developers



- lots of branches
- start to see conflicts
- one developer dedicated to merging

adeptmind

Typical Merge Flow - 5+ Developers Git History



adeptmind



stahp non



adeptmind

Table of Contents

1 What's a Github?

2 Merge Workflow

3 Rebase Workflow

4 Pre-Demo Warmup

What do?

Solution

- `git pull --rebase origin master`
- `git rebase -i origin/master`

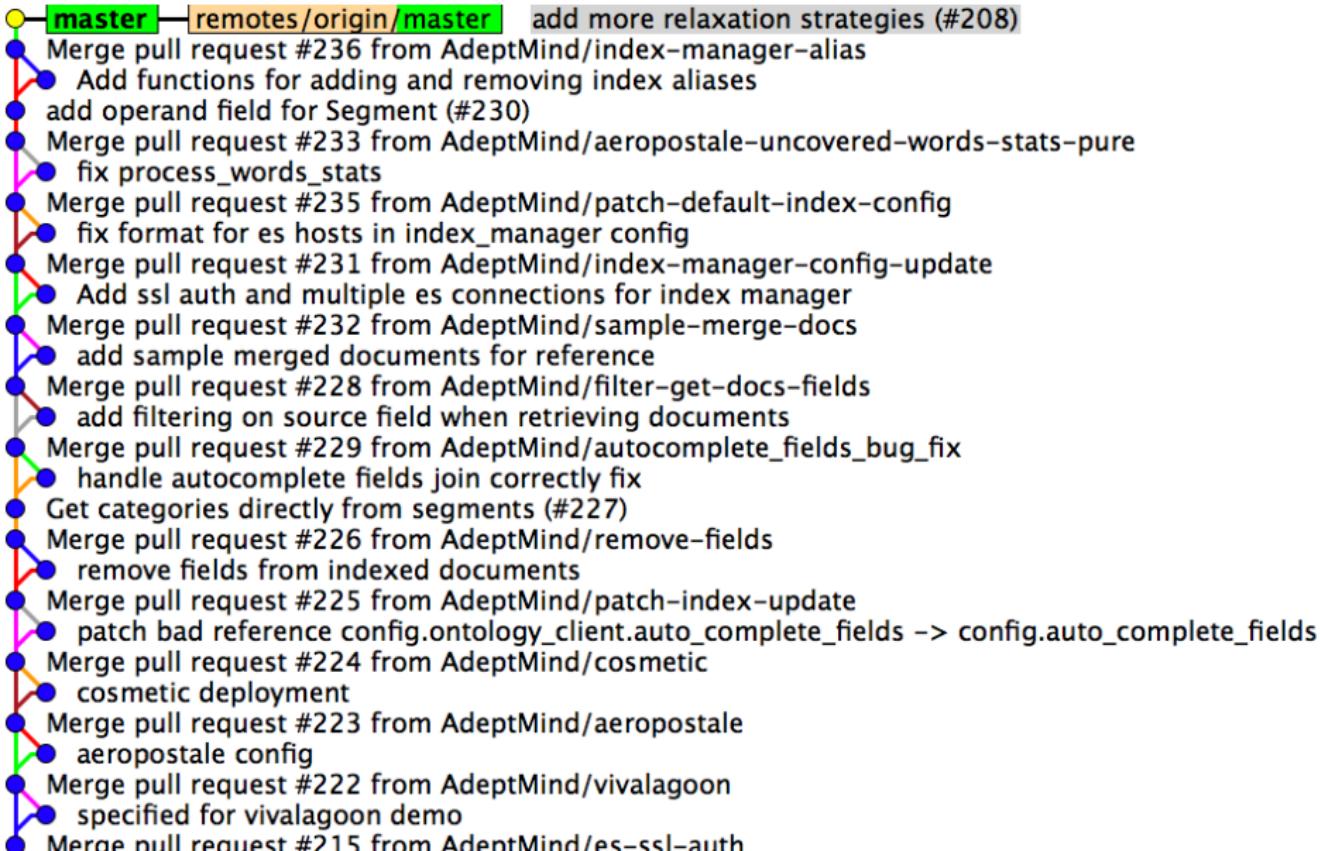
What do?

Solution

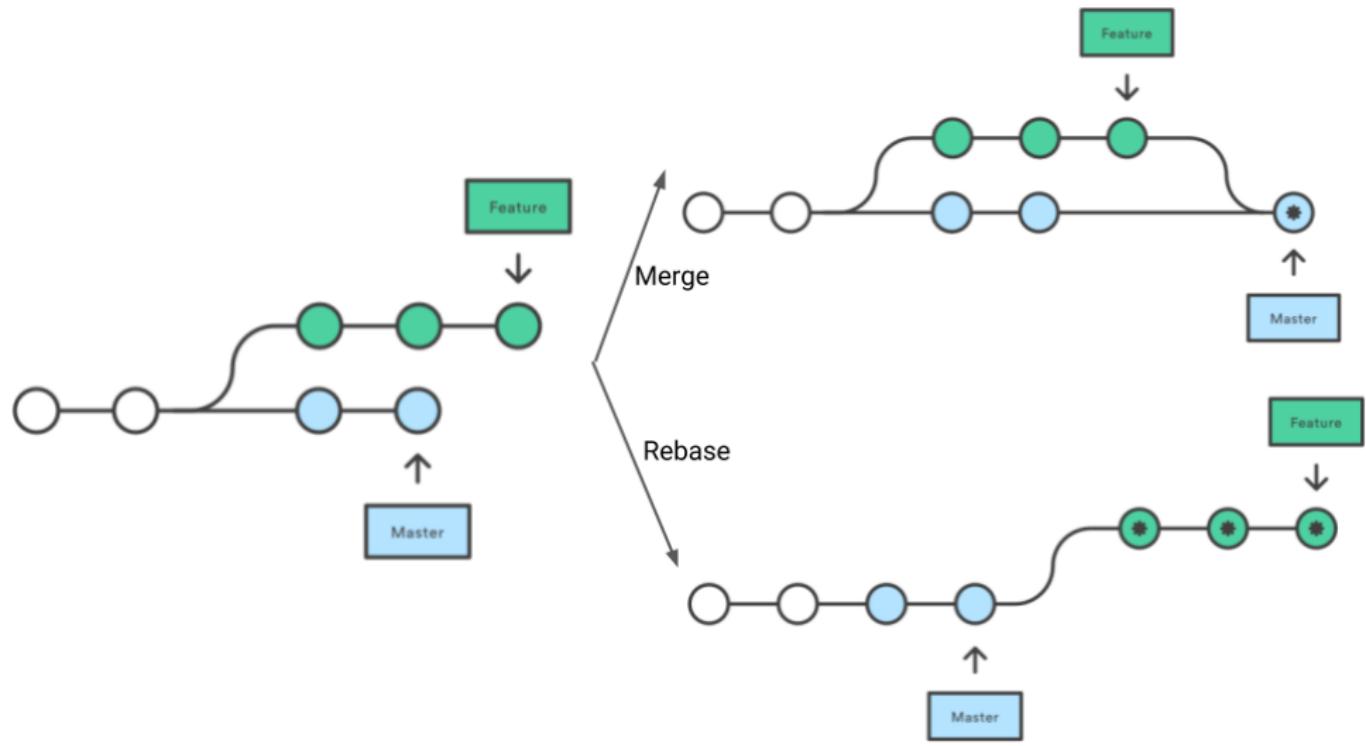
- `git pull --rebase origin master`
- `git rebase -i origin/master`

- Creates a linear history
- Easy to handle product release, backporting and release
- Conflicts are solved by one developer, and everyone else gets resolutions for free (mostly)
- Proven to scale, as proven by all large open source projects

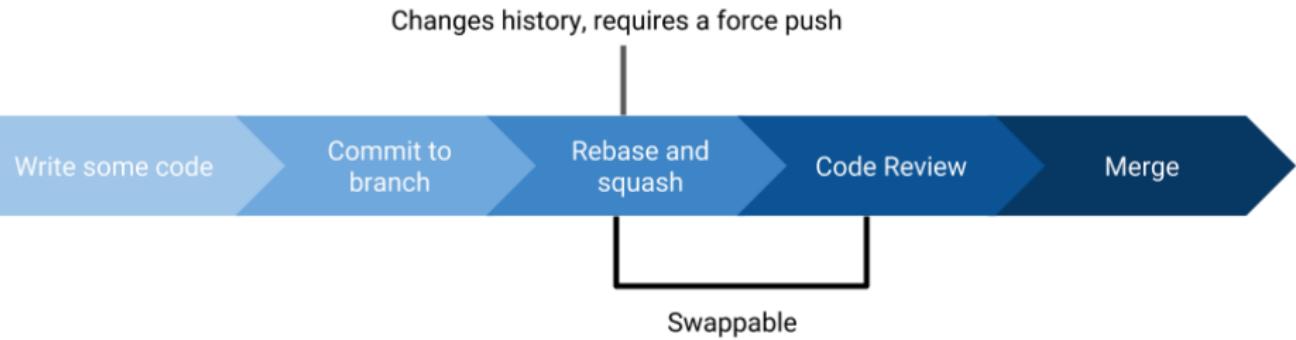
Rebase Flow - Taste the Teamwork



What's the Difference, Actually?



Rebase Flow



Only You Can Prevent Forest Fires



adeptmind

Table of Contents

- 1 What's a Github?
- 2 Merge Workflow
- 3 Rebase Workflow
- 4 Pre-Demo Warmup

Recap Git Fundamentals

what am I doing?

- git branch
- git status
- git diff
- gitk --all

making changes

- git checkout
- git commit
- git push

rewriting history

- git pull --rebase
- git rebase -i

TEAM?!

Thank you
(demo time?)

adeptmind