

# ManagelQ Bot

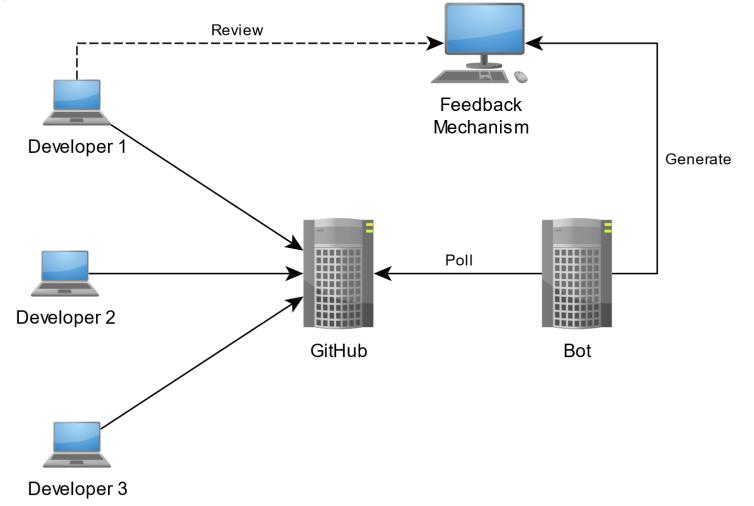
Adrián Tóth



### Introduction

- How does the bot work?
- What are the building elements of the bot?
- Which enhancements were proposed and added?

## Workflow



### **Fundamentals**

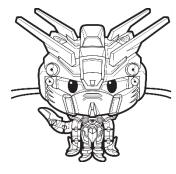
Sidekiq



• Travis CI



Octokit



Linters



## MiqBot & Sidekiq

- Workers
  - nonrecurring
  - recurring
- Types
  - miq\_bot
  - miq\_bot\_glacial
- A worker launches a new worker



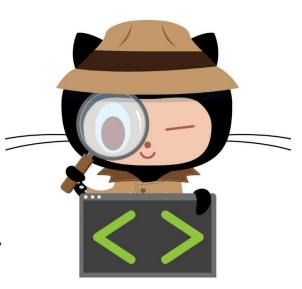
```
| 2018-05-09T06:29:52.566Z 10606 TID-gsSh3jggk INFO: Starting processing, hit Ctrl-C to stop
| 2018-05-09T06:30:00.698Z 10608 TID-go2qms2u0 INFO: [Sidetiq] Enqueue: BatchJobMonitor (at: 1525847460.0) (last: 1525847400.0)
| 2018-05-09T06:30:00.710Z 10608 TID-own8v8s88 INFO: [Sidetiq] Enqueue: CommitMonitor (at: 1525847700.0) (last: 1525847400.0)
| 2018-05-09T06:30:00.723Z 10608 TID-go2qms2u0 INFO: [Sidetiq] Enqueue: GithubNotificationMonitorWorker (at: 1525847460.0) (last: 1525847400.0)
| 2018-05-09T06:30:00.737Z 10608 TID-go2qms2u0 INFO: [Sidetiq] Enqueue: PullRequestMonitor (at: 1525847700.0) (last: 1525847400.0)
| 2018-05-09T06:30:00.767Z 10608 TID-go2qms2u0 INFO: [Sidetiq] Enqueue: TravisBuildKiller (at: 1525847700.0) (last: 1525847400.0)
| 2018-05-09T06:30:05.074Z 10606 TID-gsSisfweo BatchJobMonitor JID-508304f2bee489bd116912e2 INFO: start
   8:30:00 sidekiq_glacial.1
   8:30:00 sidekiq_glacial.1
  8:30:00 sidekiq_glacial.1
08:30:00 sidekiq_glacial.1
08:30:00 stdektq_gt
08:30:05 sidekiq.1
08:30:05 sidekiq.1
08:30:05 sidekiq.1
08:30:05 sidekiq.1
                                                                       2018-05-09T06:30:05.092Z 10606 TID-gs5i8fw7g GithubNotificationMonitorWorker JID-ae7d42537c6be4cbdf9af7d3 INFO: start
                                                                      2018-05-09T06:30:05.099Z 10606 TID-gs5i8fvzo BatchJobMonitor JID-1e048e8c6678a942d7b6f8a7 INFO: start
                                                                       The PGconn, PGresult, and PGError constants are deprecated, and will be
08:30:05 sidekiq.1
                                                                       removed as of version 1.0.
08:30:05 sidekiq.1
08:30:05 sidekiq.1
                                                                        You should use PG::Connection, PG::Result, and PG::Error instead, respectively.
08:30:05 sidekiq.1
08:30:05 sidekiq.1
08:30:05 sidekiq.1
08:30:05 sidekiq_glacial.1
                                                                       Called from /root/.rbenv/versions/2.3.6/lib/ruby/gems/2.3.0/gems/activesupport-4.2.10/lib/active_support/dependencies.rb:240:in `load_dependency'
                                                                      2018-05-09T06:30:05.115Z 10608 TID-go2rbnje4 CommitMonitor JID-2a897bca8a42c9635294684b INFO: start
   8:30:05 sidekiq_glacial.1
                                                                      The PGconn, PGresult, and PGError constants are deprecated, and will be
   3:30:05 sidekiq_glacial.1
                                                                      removed as of version 1.0.
  8:30:05 sidekiq_glacial.1
08:30:05 sidekiq_glacial.1
08:30:05 sidekiq_glacial.1
08:30:05 sidekiq_glacial.1
                                                                      You should use PG::Connection, PG::Result, and PG::Error instead, respectively.
                                                                     Called from /root/.rbenv/versions/2.3.6/lib/ruby/gems/2.3.0/gems/activesupport-4.2.10/lib/active_support/dependencies.rb:240:in `load_dependency' 2018-05-09706:30:05.144Z 10606 TID-gs5i8fvsg GithubNotificationMonitorWorker JID-25da21d3a5316220ddf6d551 INFO: start 2018-05-09706:30:05.151Z 10608 TID-go2rbnj1w PullRequestMonitor JID-07a8c4ac5fc455F638a141bf INFO: start 2018-05-09706:30:05.159Z 10606 TID-gs5i8fxc0 TravisBuildKiller JID-06763d9aa38f91c2fa334fbb INFO: start
08:30:05 sidekiq.1
08:30:05 sidekiq_gla
08:30:05 Sidekiq_g
08:30:05 sidekiq.1
08:30:05 sidekiq.1
08:30:05 sidekiq.1
                                                                       2018-05-09T06:30:05.528Z 10606 TID-gs5i8fweo BatchJobMonitor JID-508304f2bee489bd116912e2 INFO: done: 0.454 sec
                                                                      2018-05-09T06:30:05.529Z 10606 TID-gs5i8fvzo BatchJobMonitor JID-1e048e8c6678a942d7b6f8a7 INFO: done: 0.43 sec 2018-05-09T06:30:05.531Z 10606 TID-gs5i8fxc0 TravisBuildKiller JID-06763d9aa38f91c2fa334fbb INFO: done: 0.372 sec
08:30:05 sidekiq.1
08:30:06 sidekiq.1
                                                                       I, [2018-05-09T08:30:06.318386 #10606] INFO --: Executed GET https://api.github.com/repos/xtest123/testrepo/notifications?all=false&per_page=100...api calls remaining 4999
                                                                      I, [2018-05-09708:30:06.478771 #10606] INFO --: Executed GET https://api.github.com/repos/xtest123/testrepo/notifications?all=false&per_page=100...api calls remaining 4998
I, [2018-05-09708:30:07.027382 #10606] INFO --: Executed GET https://api.github.com/repos/xtest123/testrepo/issues/7...api calls remaining 4997
I, [2018-05-09708:30:07.078692 #10606] INFO --: Executed GET https://api.github.com/repos/xtest123/testrepo/issues/7...api calls remaining 4996
I, [2018-05-09708:30:07.757946 #10606] INFO --: Executed GET https://api.github.com/repos/xtest123/testrepo/issues/7/comments?per_page=100...api calls remaining 4994
 08:30:06 sidekig.1
08:30:07 sidekiq.1
08:30:07 sidekiq.1
08:30:07 sidekiq.1
                                                                  I, [2018-05-09T08:30:07.757946 #10606] INFO --: Executed GET https://api.github.com/repos/xtest123/testrepo/issues/7/comments?per_page=100...api calls remaining 4994
| I, [2018-05-09T08:30:07.885266 #10606] INFO --: Executed GET https://api.github.com/repos/xtest123/testrepo/issues/7/comments?per_page=100...api calls remaining 4995
| 2018-05-09T06:30:08.160Z 10608 TID-go2rbnje4 CommitMonitor JID-2a897bca8a42c9635294684b INFO: Processing xtest123/testrepo/prs/4/head
| 2018-05-09T06:30:08.280Z 10608 TID-go2rbnje4 CommitMonitor JID-2a897bca8a42c9635294684b INFO: Processing xtest123/testrepo/prs/4/head
| 2018-05-09T06:30:08.280Z 10608 TID-go2rbnje4 CommitMonitor JID-2a897bca8a42c9635294684b INFO: Processing xtest123/testrepo/prs/7/head
| 2018-05-09T06:30:08.280Z 10608 TID-go2rbnje4 CommitMonitor JID-2a897bca8a42c9635294684b INFO: Detected new commits ["61d24360a2bddb3d43b9af717d79d0457d0fb82d"]
| 2018-05-09T06:30:08.293Z 10608 TID-go2rbnje4 CommitMonitor JID-2a897bca8a42c9635294684b INFO: Queueing BugzillaPrChecker for commit range 61d24360a2bddb3d43b9af717d79d0457d0fb82d on branch prs/7/head
| 2018-05-09T06:30:08.294Z 10608 TID-go2rbnje4 CommitMonitorHandlers::CommitRange::BugzillaPrChecker JID-82eba1b9616614ed5a205716 INFO: start
| 2018-05-09T06:30:08.306Z 10608 TID-go2rbnje4 CommitMonitor JID-2a897bca8a42c9635294684b INFO: Queueing PathBasedLabeler for commit range 61d24360a2bddb3d43b9af717d79d0457d0fb82d on branch prs/7/head
| 2018-05-09T06:30:08.306Z 10608 TID-go2rbnje4 CommitMonitor JID-2a897bca8a42c9635294684b INFO: Queueing PivotalPrChecker for commit range 61d24360a2bddb3d43b9af717d79d0457d0fb82d on branch prs/7/head
| 2018-05-09T06:30:08.330Z 10608 TID-go2rbnje4 CommitMonitor JID-2a897bca8a42c9635294684b INFO: Queueing PivotalPrChecker for commit range 61d24360a2bddb3d43b9af717d79d0457d0fb82d on branch prs/7/head
| 2018-05-09T06:30:08.3330Z 10608 TID-go2rbnje4 CommitMonitor JID-2a897bca8a42c9635294684b INFO: Queueing RubocopChecker for commit range 61d24360a2bddb3d43b9af717d79d0457d0fb82d on branch prs/7/
08:30:07 sidekiq.1
   3:30:08 sidekiq_glacial.1
  8:30:08 sidekiq_glacial.1
08:30:08 sidekiq_glacial.1
08:30:08 sidekiq_glacial.1
08:30:08 sidekiq_glacial.1
08:30:08 sidekiq.1
08:30:08 sidekiq_glacial.1
08:30:08 Sidekiq_g
08:30:08 sidekiq_glacial.1
  8:30:08 sidekiq_glacial.1
08:30:08 sidekiq_glacial.1
                                                                     2018-05-09T06:30:08.334Z 10608 TID-go2rbnje4 CommitMonitor JID-2a897bca8a42c9635294684b INFO: Queueing CommitMonitorHandlers::CommitRange::GithubPrCommenter for branch prs/7/head 2018-05-09T06:30:08.366Z 10606 TID-gs5i8fwks CommitMonitorHandlers::CommitRange::PivotalPrChecker JID-fe20f797c2cd8d80f9541de9 INFO: start 2018-05-09T06:30:08.403Z 10606 TID-gs5i8fwks CommitMonitorHandlers::CommitRange::PivotalPrChecker JID-fe20f797c2cd8d80f9541de9 INFO: done: 0.037 sec
08:30:08 sidekiq.1
08:30:08 sidekiq.1
08:30:08 sidekiq.1
                                                                      2018-05-09T06:30:08.407Z 10606 TID-gs5i8fxc0 CommitMonitorHandlers::CommitRange::BugzillaPrChecker JID-82eba1b9616614ed5a205716 INFO: done: 0.113 sec
                                                                     2018-05-09706:30:08.4072 10000 1D-gs518fvls CommitMonitorHandlers::CommitRange::PathBasedLabeler JID-320240300140303431 INFO: done: 0.106 sec I, [2018-05-09706:30:08.526307 #10606] INFO: -: Executed PATCH https://api.github.com/notifications/threads/334924169...api calls remaining 4993 2018-05-09706:30:08.528Z 10606 TID-gs518fw7g GithubNotificationMonitorWorker JID-ae7d42537c6be4cbdf9af7d3 INFO: done: 3.436 sec I, [2018-05-09706:30:08.709028 #10606] INFO --: Executed PATCH https://api.github.com/notifications/threads/334924169...api calls remaining 4992 2018-05-09706:30:08.711Z 10606 TID-gs518fvsg GithubNotificationMonitorWorker JID-25da21d3a5316220ddf6d551 INFO: done: 3.566 sec
08:30:08 sidekiq.1
08:30:08 sidekiq.1
08:30:08 sidekiq.1
08:30:08 sidekiq.1
08:30:08 sidekiq.1
08:30:08 sidekiq.1
                                                                   2018-05-09706:30:08.711Z 106006 TID-gs518fysg GithubNotificationMonitorWorker JID-25da21d3a5316220ddf6d551 INFO: done: 3.566 sec
2018-05-09706:30:08.729Z 106006 TID-gs518fys0 CommitMonitorHandlers::CommitRange::GithubPrCommenter::DiffContentChecker JID-13ca61e95de58ec1a5e8443 INFO: start
2018-05-09706:30:09.0848Z 106008 TID-go2rbndok CommitMonitorHandlers::CommitRange::GithubPrCommenter::DiffFortentChecker JID-185a53597d06d231976a2163 INFO: start
2018-05-09706:30:09.095Z 106006 TID-gs518fys0s CommitMonitorHandlers::CommitRange::GithubPrCommenter::DiffContentChecker JID-13cac61e95de58ec1a5e8443 INFO: done: 0.366 sec
I, [2018-05-09706:30:09.095Z 106006 TID-gs518fys0s CommitMonitorHandlers::CommitRange::GithubPrCommenter::DiffContentChecker JID-13cac61e95de58ec1a5e8443 INFO: done: 0.366 sec
I, [2018-05-09706:30:09.271011 #10608] INFO -- : Executed GET https://api.github.com/repos/xtest123/testrepo/pulls?per_page=100...api calls remaining 4991
2018-05-09706:30:10.032Z 106008 TID-go2rbncvo CommitMonitorHandlers::CommitRange::GithubPrCommenter:DiffFilenameChecker JID-18ca53559706d231976a2163 INFO: done: 1.302 sec
2018-05-09706:30:10.053Z 106008 TID-go2rbncvo CommitMonitorHandlers::CommitRange::GithubPrCommenter JID-ddb014ad8c241d8fb5bfce1a INFO: Adding batch comment to PR 7.
2018-05-09706:30:10.141Z 106008 TID-go2rbncvo CommitMonitorHandlers::CommitRange::GithubPrCommenter JID-ddb014ad8c241d8fb5bfce1a INFO: Adding batch comment to PR 7.
2018-05-09706:30:10.141Z 106008 TID-go2rbncvo CommitMonitorHandlers::CommitRange::GithubPrCommenter JID-ddb014ad8c241d8fb5bfce1a INFO: Adding batch comment to PR 7.
2018-05-09706:30:10.141Z 106008 TID-go2rbncvo CommitMonitorHandlers::CommitRange::GithubPrCommenter JID-ddb014ad8c241d8fb5bfce1a INFO: Adding batch comment to PR 7.
2018-05-09706:30:10.141Z 106008 TID-go2rbncvo CommitMonitorHandlers::CommitRange::GithubPrCommenter JID-ddb014ad8c241d8fb5bfce1a INFO: Adding batch comment to PR 7.
  8:30:08 sidekiq_glacial.1
   8:30:09 sidekiq_glacial.1
 08:30:09 sidekiq.1
  8:30:09 sidekiq_glacial.1
08:30:10 sidekiq_glacial.1
08:30:10 sidekiq_glacial.1
                                                                      I, [2018-05-09708:30:10.710065 #10608] INFO --: Executed GET https://api.github.com/repos/xtest123/testrepo/issues/7/comments?per_page=100...api calls remaining 4990
                                                                      2018-05-09T06:30:10.744Z 10608 TID-go2rbncvo CommitMonitorHandlers::CommitRange::GithubPrCommenter JID-ddb014ad8c241d8fb5bfce1a INFO: done: 0.713 sec
                                                                     + [/root/miq_bot/repos/xtest123/testrepo] git rev-parse --git-dir --show-toplevel # => ".git\n/root/miq_bot/repos/xtest123/testrepo\n"
                                                                     + git fetch --all
                                                                     + git diff --patience -U0 --no-color origin/master...61d24360a2bddb3d43b9af717d79d0457d0fb82d
                                                                     2018-05-09T06:30:13.782Z 10608 TID-go2rbnjk8 CommitMonitorHandlers::CommitRange::RubocopChecker JID-33965c8aed53029133fd0615 INFO: Updating PR 7 with rubocop comment.
08:30:14 sidekiq_glacial.1 | I, [2018-05-09708:30:14.586982 #10608] INFO --: Executed GET https://api.github.com/repos/xtest123/testrepo/issues/7/comments?per_page=100...api calls remaining 4988 08:30:17 sidekiq_glacial.1 | I, [2018-05-09708:30:15.835290 #10608] INFO --: Executed DELETE https://api.github.com/repos/xtest123/testrepo/issues/comments/388790349...api calls remaining 4988 08:30:17 sidekiq_glacial.1 | I, [2018-05-09708:30:17.500472 #10608] INFO --: Executed POST https://api.github.com/repos/xtest123/testrepo/issues/7/comments...api calls remaining 4987
    :30:17 sidekiq_glacial.1 | 2018-05-09T06:30:17.503Z 10608 TID-go2rbnjk8 CommitMonitorHandlers::CommitRange::RubocopChecker JID-33965c8aed53029133fd0615 INFO: done: 9.172 sec
^CSIGINT received
08:30:33 system
                                                                      sending SIGTERM to all processes
08:30:33 thin.1
                                                                     exited with code 0
```

8:29:52 sidekiq.1

[root@localhost mig bot]# |

### **Enhancements**

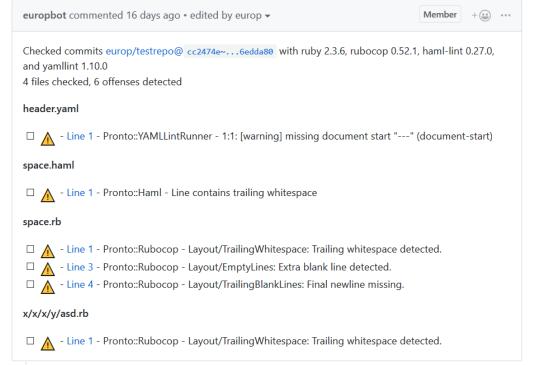
- Pronto
  - MiqBot's Formatter
- Gitter
- GitHub Status API
- Missing commands for GitHub's interface
  - unassign
  - add\_reviewer
  - remove\_reviewer
- Automated pull request review requests
- Removal of "old" unmergeable comments



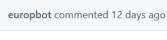


# Pronto =









Member + 😐 ···

Commits europ/testrepo@ cc2474e~...5514a32 checked with ruby 2.3.6 and:

Pronto Runners	Version	Linters	Version	
pronto-rubocop	0.9.0	rubocop	0.52.1	
pronto-haml	0.9.0	haml_lint	0.27.0	
pronto-yamllint	0.1.0	yamllint	1.10.0	

6 offenses detected in 4 files.

#### space.haml

#### space.rb

#### x/x/x/y/asd.rb

- Line 1 - Rubocop - Layout/TrailingWhitespace: Trailing whitespace detected.

#### header.yaml



travis\_monitor: branches:

- repo: "owner/name" branch: "name"

gitter\_room: "owner/name"

- repo: "owner/name" branch: "name"

gitter\_room: "owner/name"

- repo: "owner/name"

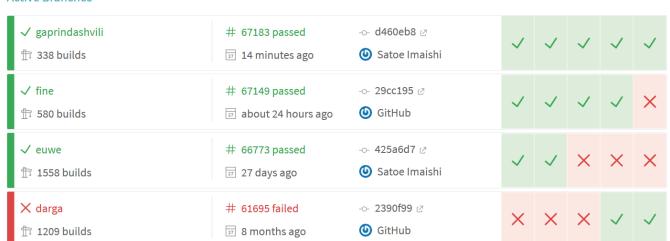
branch: "name"

gitter\_room: "owner/name"

#### **Default Branch**

✓ master	# 67166 passed	-o- e915a3f ♂	,	,	,	,	,
∄ 12627 builds	about 19 hours ago	GitHub	~	<b>~</b>	~	<b>✓</b>	<b>~</b>

#### **Active Branches**





#### Adrián Tóth BOT @europbot

<u>sss</u> 🔔 "master" in "xtest123/testrepo" is broken 👖 💥



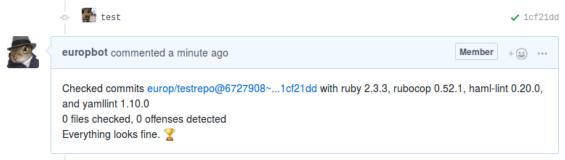
✓ Broken branch has been fixed ❤



16:11

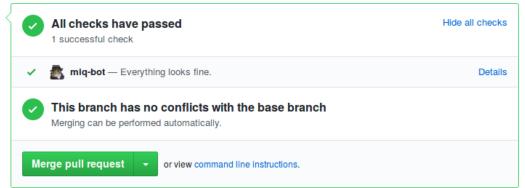
### GitHub Status API

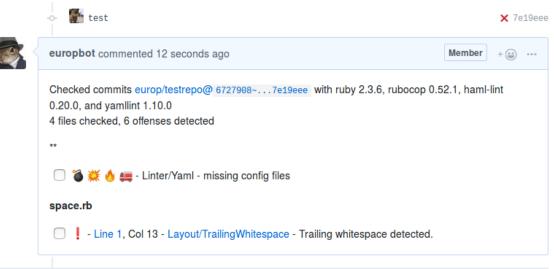




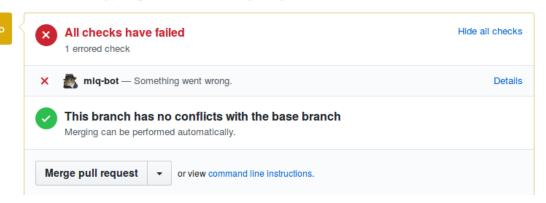
Add more commits by pushing to the new branch on europ/testrepo.



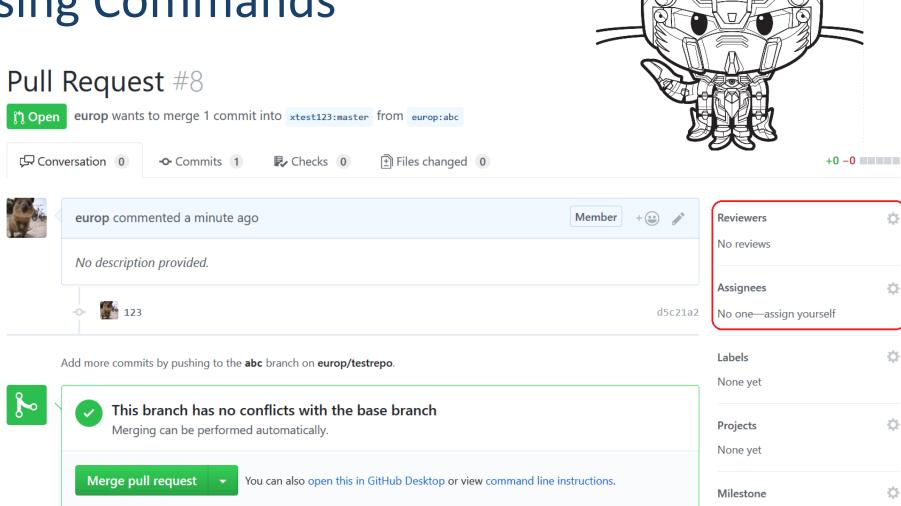




Add more commits by pushing to the new branch on europ/testrepo.



## Missing Commands



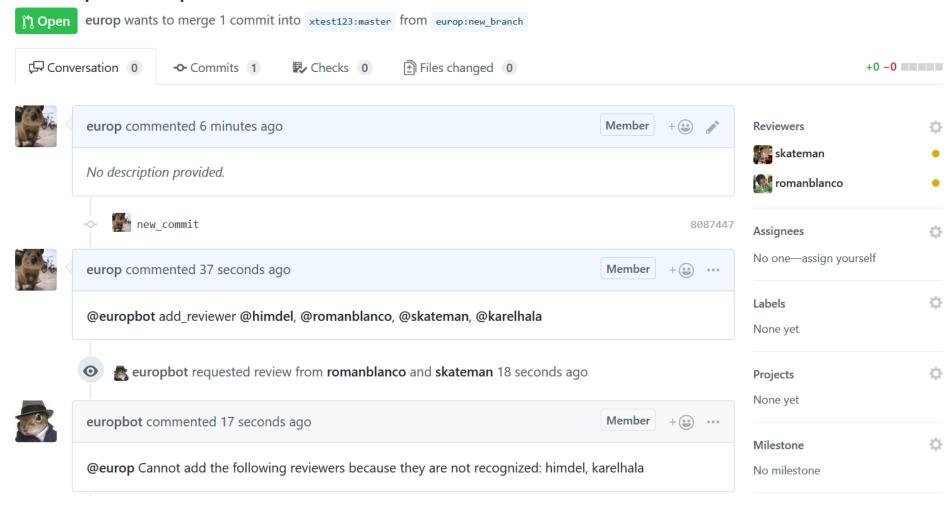
Ö

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No milestone

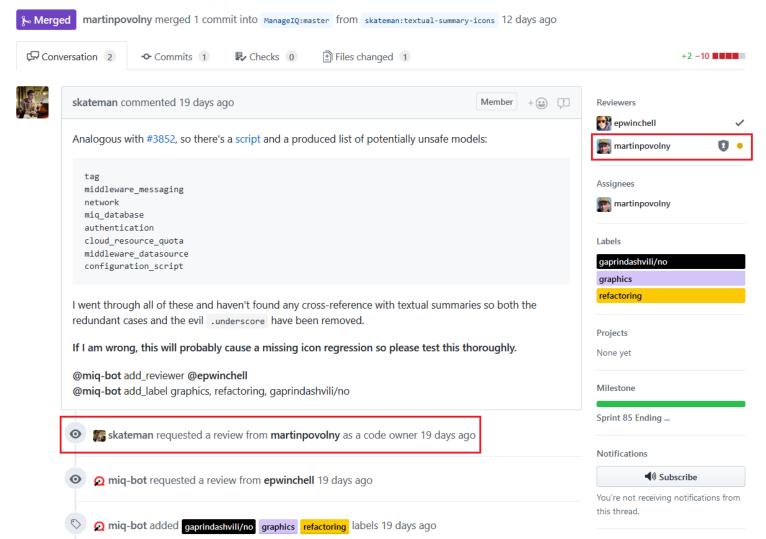
## **Pull Request Review**

### New pull request #9



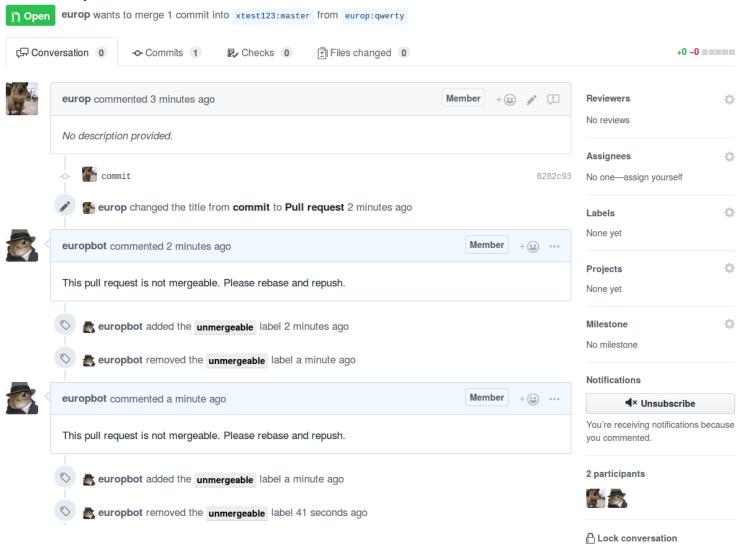
### Automated review request

Rely only on decorators when determining icons/images in text summaries #3862



### Unmergeable status problem

### Pull request #10



# Thank you!

