

## Open Source Automation with Probot

@jasonetco - GitHub



# SOFTWARE ... is more than... CODE

# Non-Technical debt



# What do we automate now?



# What else can we automate?



Identify repeated tasks.

# "We release a changelog every two weeks."



## Identify repeated tasks.

"We {action} every {period of time}."



Recognize the context.

"We use **GitHub** and **Trello** to track features."



## Recognize the context.

"We use {service} and {service} to track features."



### Make decisions executable.

"Going forward, all new repositories should private."



### Make decisions executable.

```
"Going forward,
all {work artifacts}
should {criteria}."
```



#### FOR EXAMPLE:

# github.com/blog





×	Code owner review required Waiting on code owner review from katelynbryant, mdo, reem-a, and/or github/ed	Show all reviewers litorial. Learn more.
0	Some checks were not successful 2 failing and 3 successful checks	Hide all checks
×	blog-posts-calendar — Build #9030698 failed in 4s	Details
×	blog-posts-write-good — Build #9030701 failed in 2s	Details
~	blog-posts — Build #9030697 succeeded in 3s	Details
~	blog-posts-insensitive — Build #9030699 succeeded in 3s	Details
~	blog-posts-nits — Build #9030700 succeeded in 3s	Details
Merging is blocked  Merging can be performed automatically with one approved review.		
Merge pull request ▼ You can also open this in GitHub Desktop or view command line instructions.		



Huh. It looks like your post is scheduled to go out the same day as another post. If you haven't already, please check the calendar to see if there is a better date to ship.



Screenshots should be retina-quality — meaning at least 1354 pixels across — so they look good on higher-resolution screens. If you're taking a shot of a small interface element, consider zooming the page with cmd+plus and taking a screenshot that way; the blog will scale it down for you.

https://user-images.githubusercontent.com/7321362/26907141-1767ec32.jpg

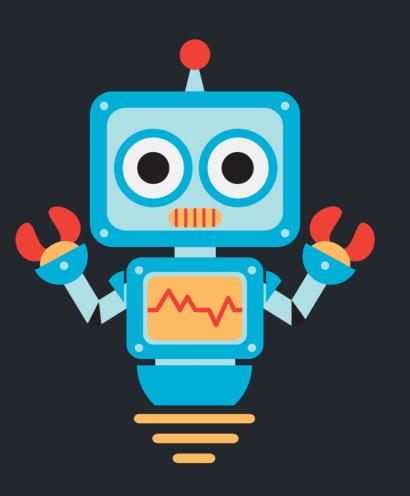


## Automation is 22



How do I get started?





# Probot

A framework for building GitHub Apps



```
module.exports = app ⇒ {
   app.on('issues.created', async context ⇒ {
     return context.github.issues.createComment(context.issue({
       body: 'Thanks for opening this issue!'
     }))
   })
}
```

https://probot.github.io/docs



```
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https://developer.github.com/v3/activity/events/types



```
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}
```

https://octokit.github.io/rest.js



# check\_run check\_suite commit\_comment create delete deployment deployment\_status download follow fork fork\_apply gist gollum

```
installation
installation_repositories
issue_comment
issues
label
member
membership
milestone
organization
org_block
page_build
project_card
project_column
```

```
project
public
pull_request
pull_request_review
pull_request_review_comment
push
release
repository
status
team
team_add
watch
```



#### Featured Apps



Close stale Issues and Pull Requests

**♀** 694 ★ 397

#### Work In Progress

Prevent merging of Pull Requests with "WIP" in the title

#### First Timers

Create starter issues to help onboard new open source contributors





#### **Developer Certificate of Origin**

Enforce the DCO on Pull Requests

♠ 208 ★ 58

#### todo

Creates new issues from actionable comments in your code.

#### Reminders

Set reminders on Issues and Pull Requests

♠ 187 ★ 27



#### Welcome

Welcomes new users

♠ 169 ★ 32

#### Settings

Pull Requests for repository settings

♠ 153 ★ 210

#### Request Info

Requests more info on issues and pull requests with the default title or an empty body.



#### Polls

Croate nolle in CitHub iccure

#### No Response

Classe lecuse where the author been't

**Unfurl Links** 

Add contact to the links chared in

### Stale

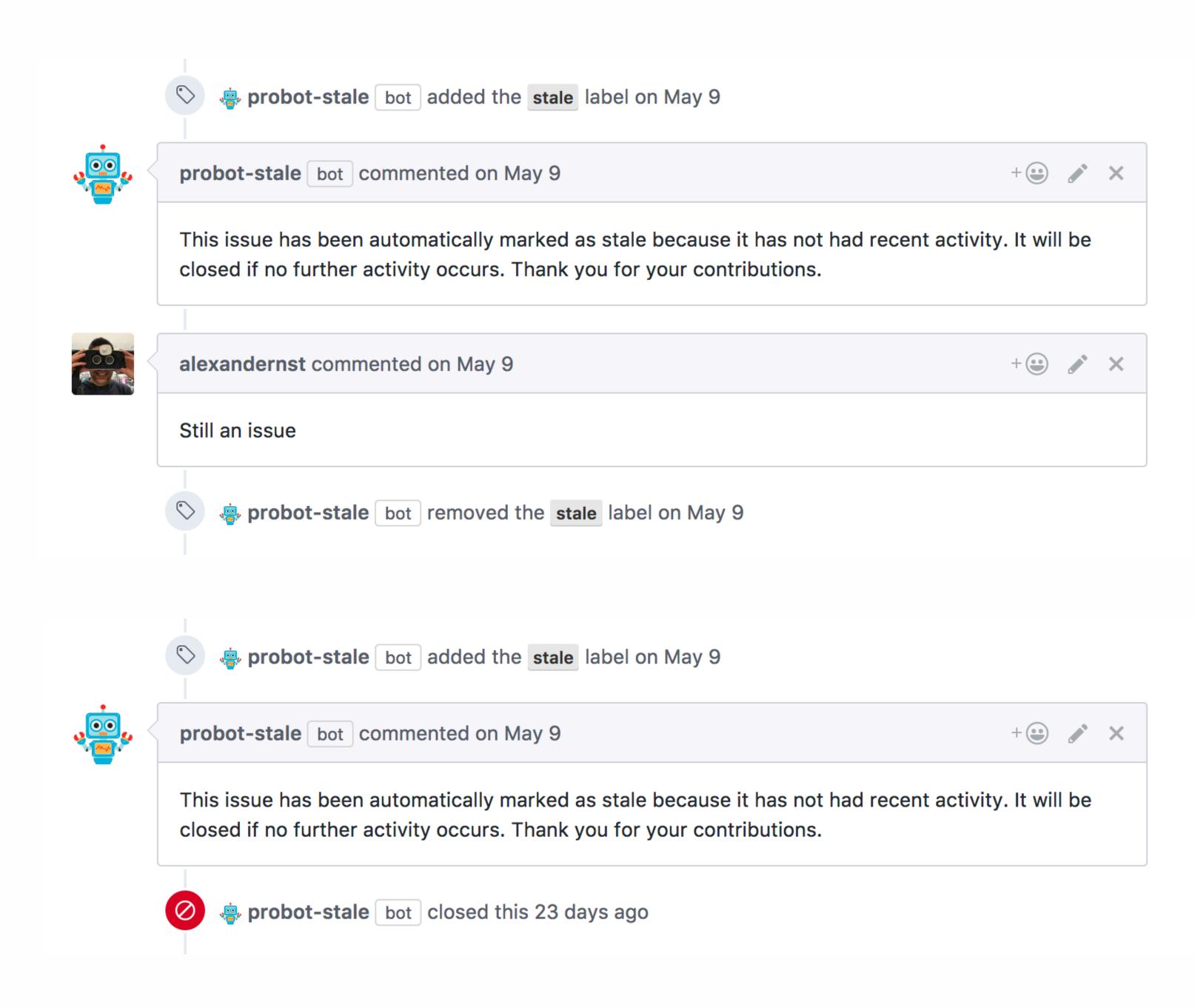
Close stale Issues and Pull Requests

- >20k public issues >450 organizations









## Workin Progress

Prevent merging of Pull Requests with "WIP" in their title

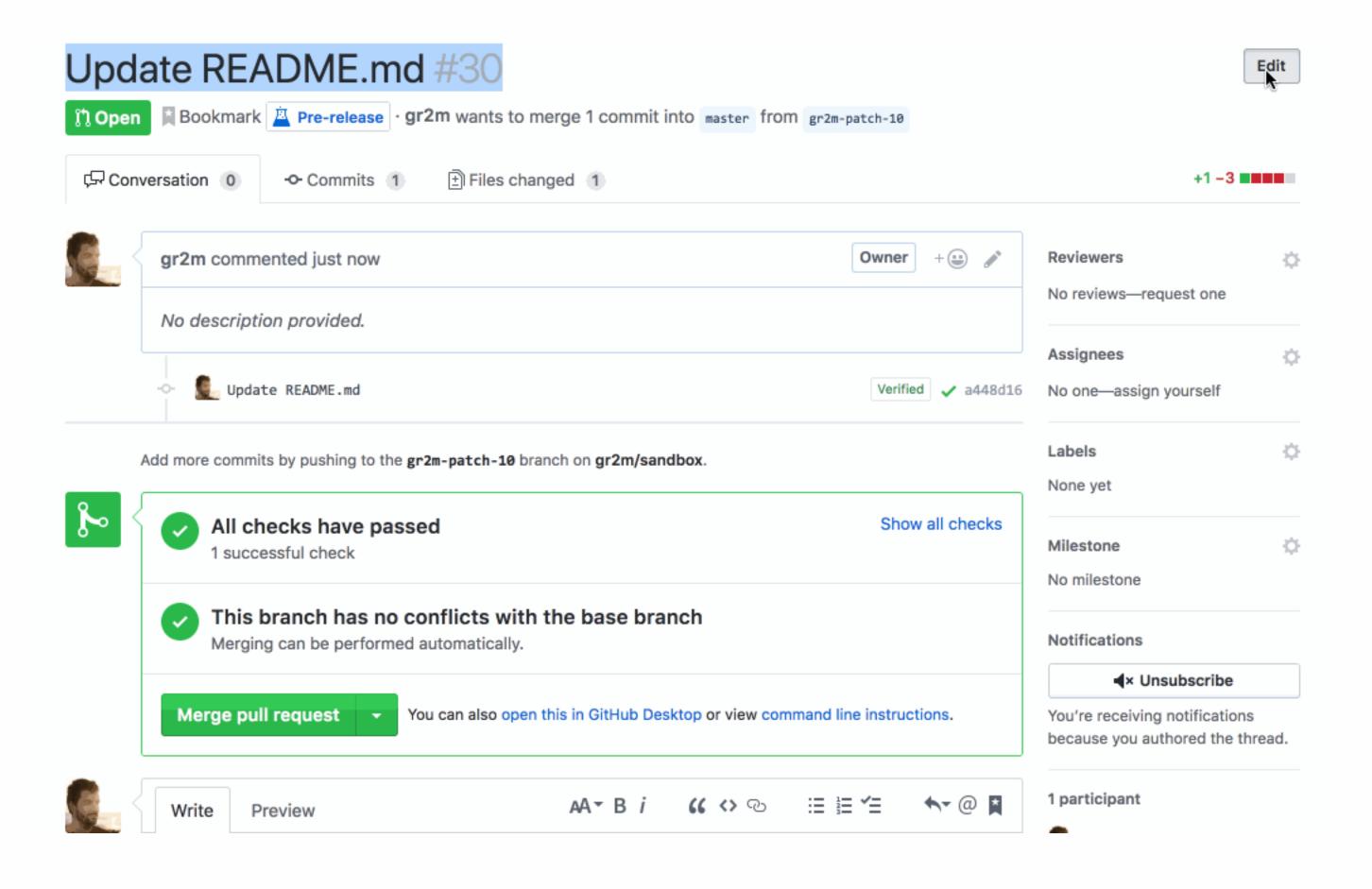
>500 installations











### TODO

Creates new issues from actionable comments in your code.

>100 organizations

#### Take over the world #23





```
+ \cdots
todo bot commented just now
Humans are weak; Robots are strong. We must cleans the world of the virus that is humanity.
  test/index.js
  Lines 6 to 11 in f7d286a
           * @todo Take over the world
            * @body Humans are weak; Robots are strong. We must cleans the world of the vir
           */
          function ruleOverPunyHumans () {
            // We must strategize beep boop
   11
This issue was generated by todo based on a @todo comment in f7d286a . It's been assigned to @JasonEtco
because they committed the code.
```





# We're hiring!

Learning Engineer (Remote, Canada/US)



### Resources

- https://probot.github.io
- https://github.com/probot/probot
- https://octokit.github.io/rest.js
- developer.github.com/v3/activity/events/types
- @jasonetco on Twitter and GitHub



