


Building a Better Browser Engine on GitHub

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talks.edunham.net/githubuniverse2017

 @qedunham





About Me

- DevOps at

moz://a

- Rust

- Servo

- VR+AR

- Opinions mine, not theirs

- FOSS background, OSUOSL

About You

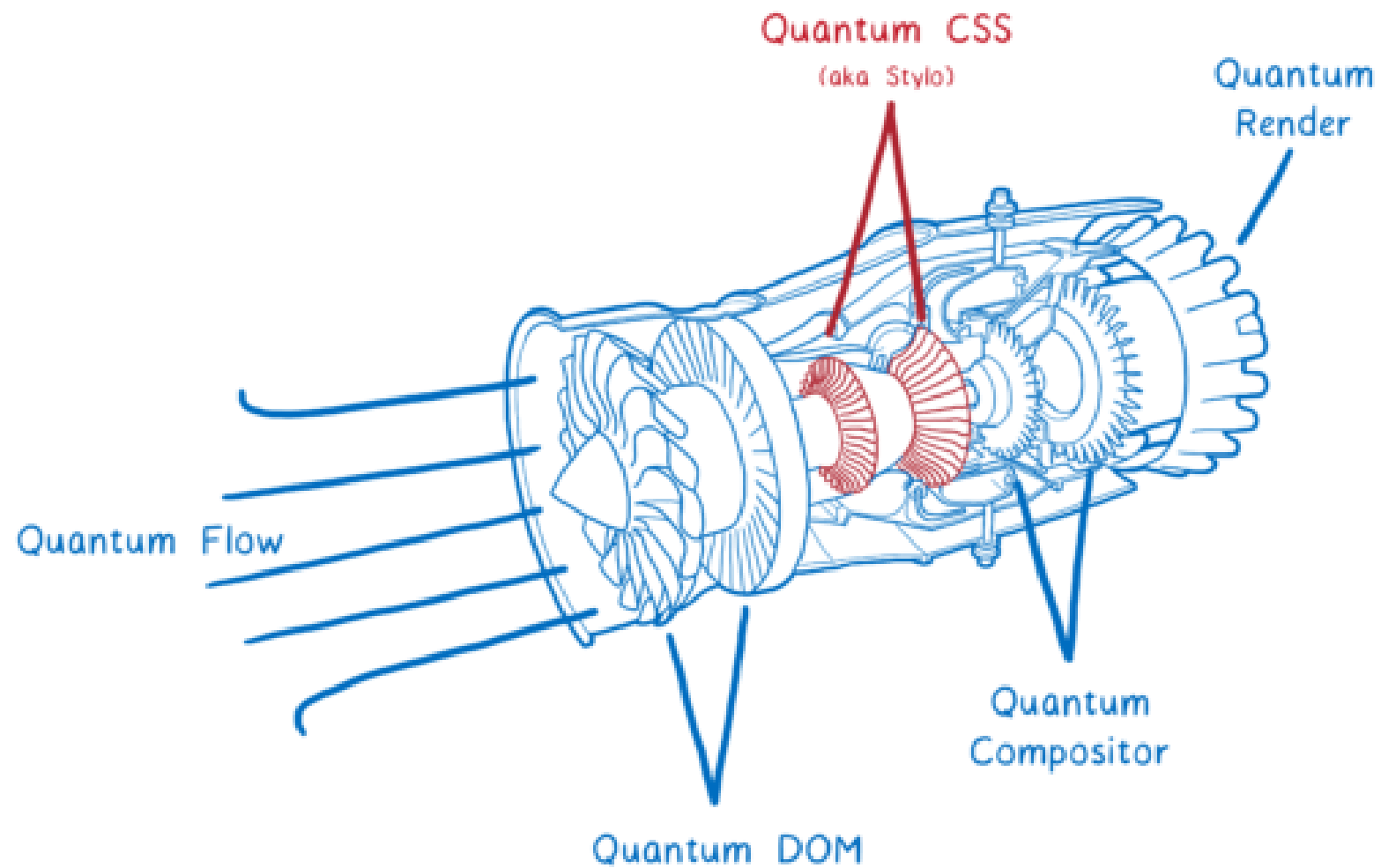
- Software users?
- Software contributors?
- Software maintainers?



- Community FOSS?
- Enterprise FOSS?
- Enterprise proprietary?











Projects with the most reviews



DEFINITELYTYPED/DEFINITELYTYPED

800



KUBERNETES/KUBERNETES

680



HOMEBREW/HOMEBREW-CORE

580



ANSIBLE/ANSIBLE

550



NODEJS/NODE

480



NIXOS/NIXPKGS

480



APACHE/SPARK

450



RUST-LANG/RUST

390



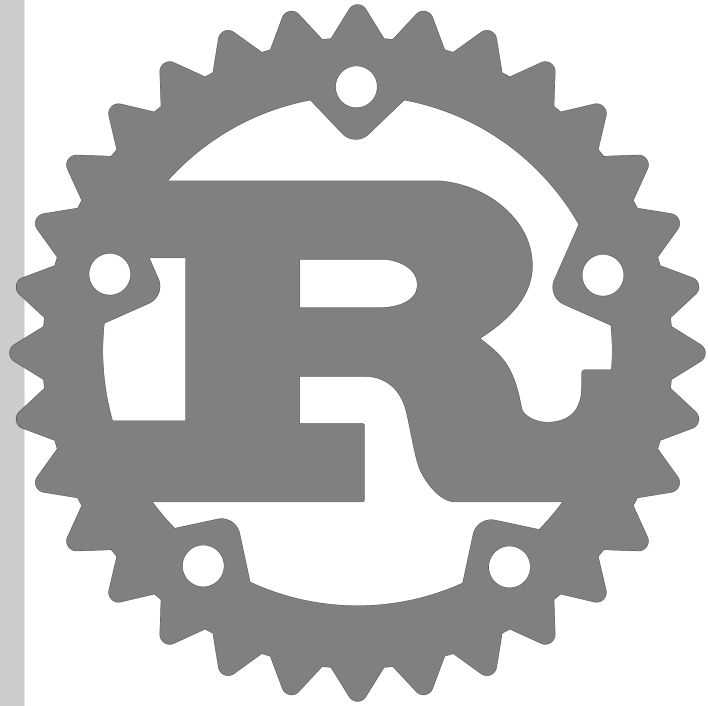
SYMFONY/SYMFONY

340



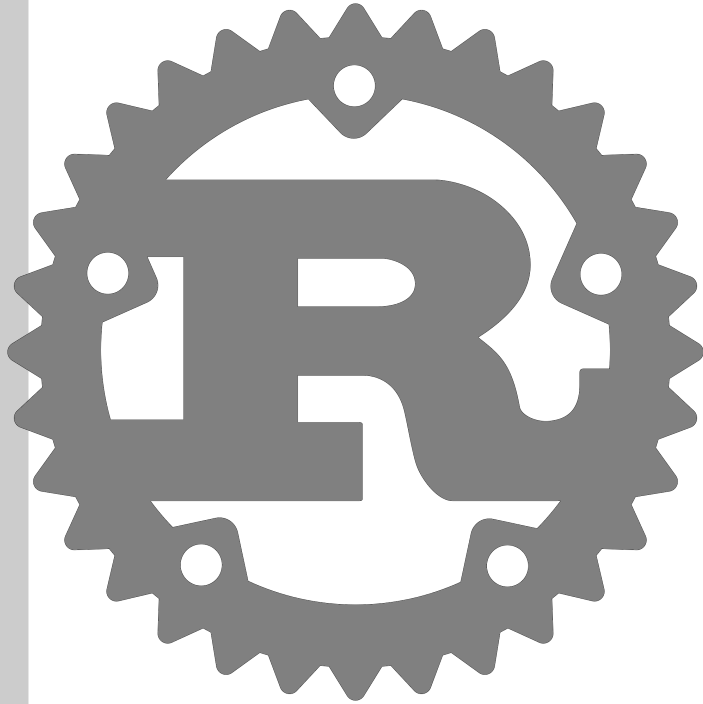
TENSORFLOW/TENSORFLOW

340



rust-lang.org

- Safe, concurrent, fast
- Systems programming, fewer footguns
- Hack Without Fear



Community

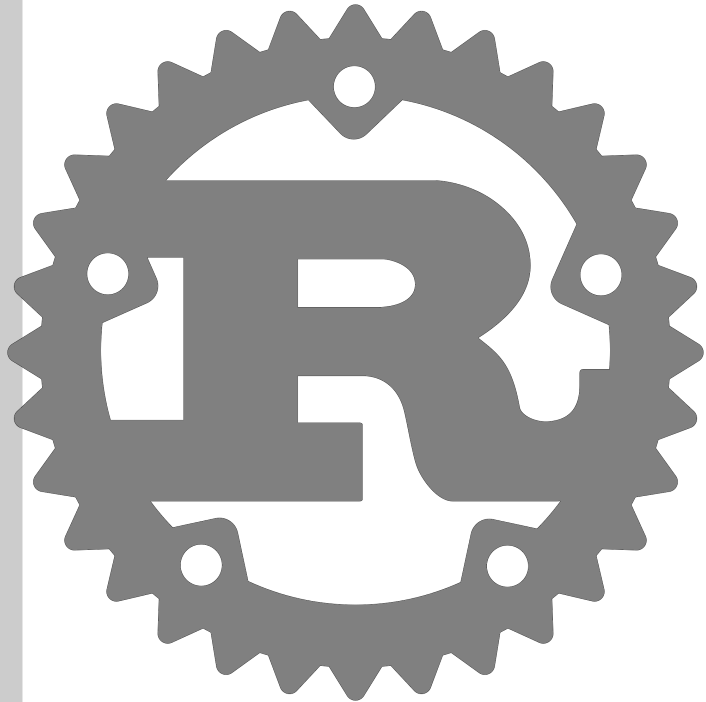
"The Rust community seems to be populated entirely by human beings. I have no idea how this was done."



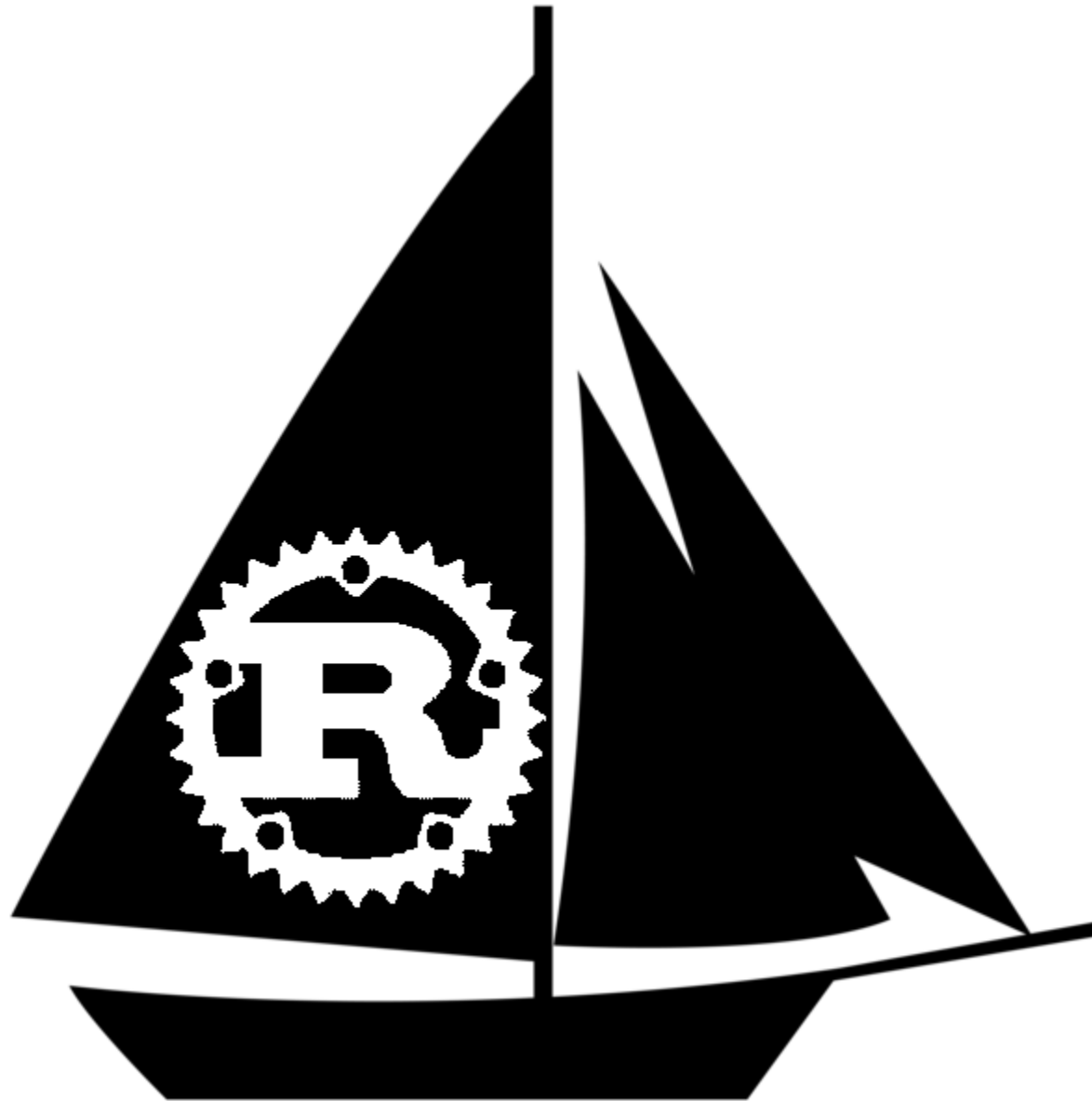
Conduct

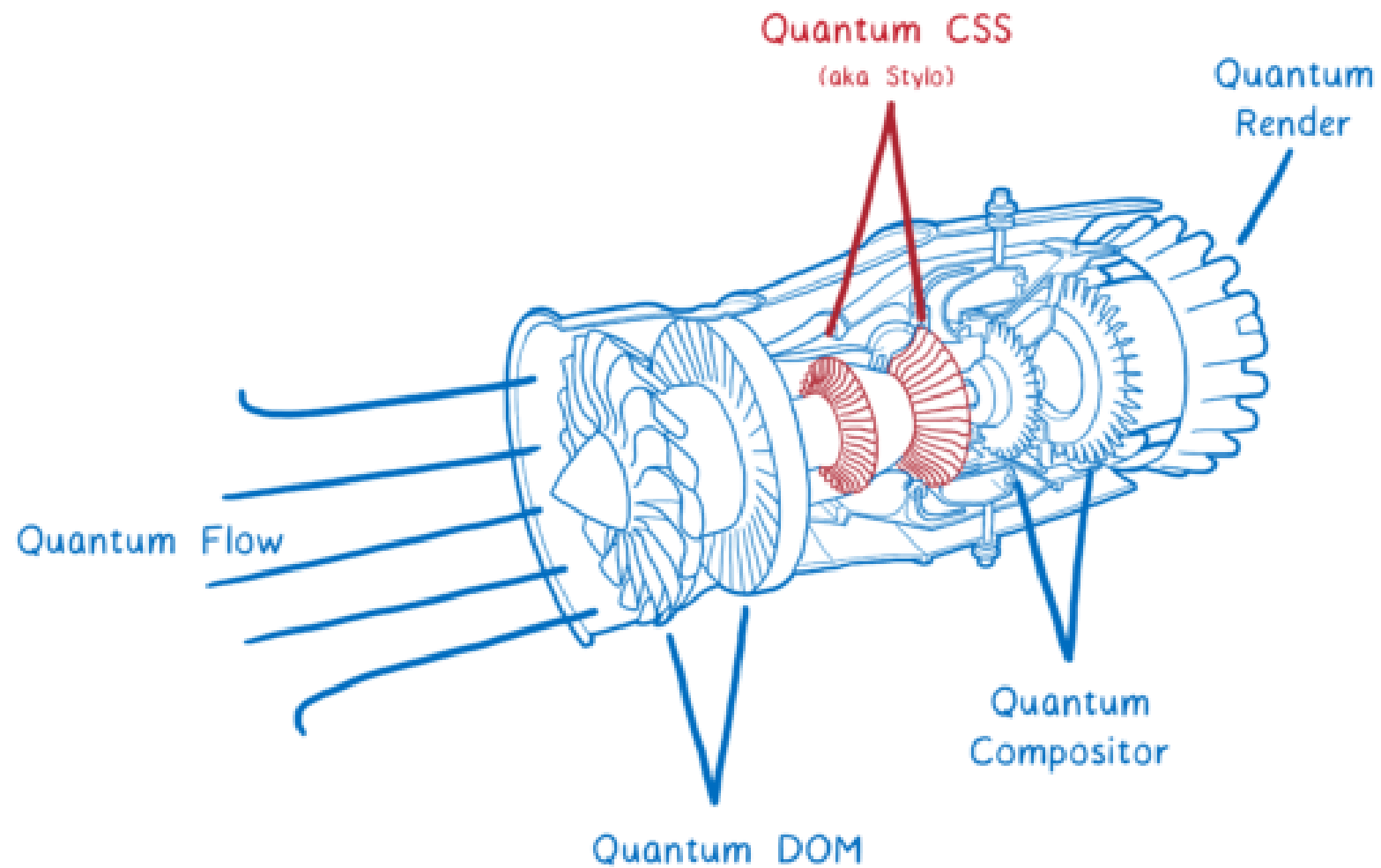
- "Please be kind and courteous."
- "Please keep unstructured critique to a minimum"
- Dedicated moderation team
- "We will exclude you from interaction if you insult, demean or harass anyone"

Communication



- Weekly updates
- Mandatory RFC process
- Consistent PR review
- Distributed team & public discussions





SERVO

such parallel

WOW

much browser

very safe

layout layout
layout layout

Ten most-discussed repositories



KUBERNETES/KUBERNETES

388.1K



OPENSIFT/ORIGIN

91.1K



CMS-SW/CMSSW

80.1K



MICROSOFT/VSCODE

78.7K



RUST-LANG/RUST

75.6K



DOTNET/COREFX

75.2K



TGSTATION/TGSTATION

74.8K



NODEJS/NODE

66.3K



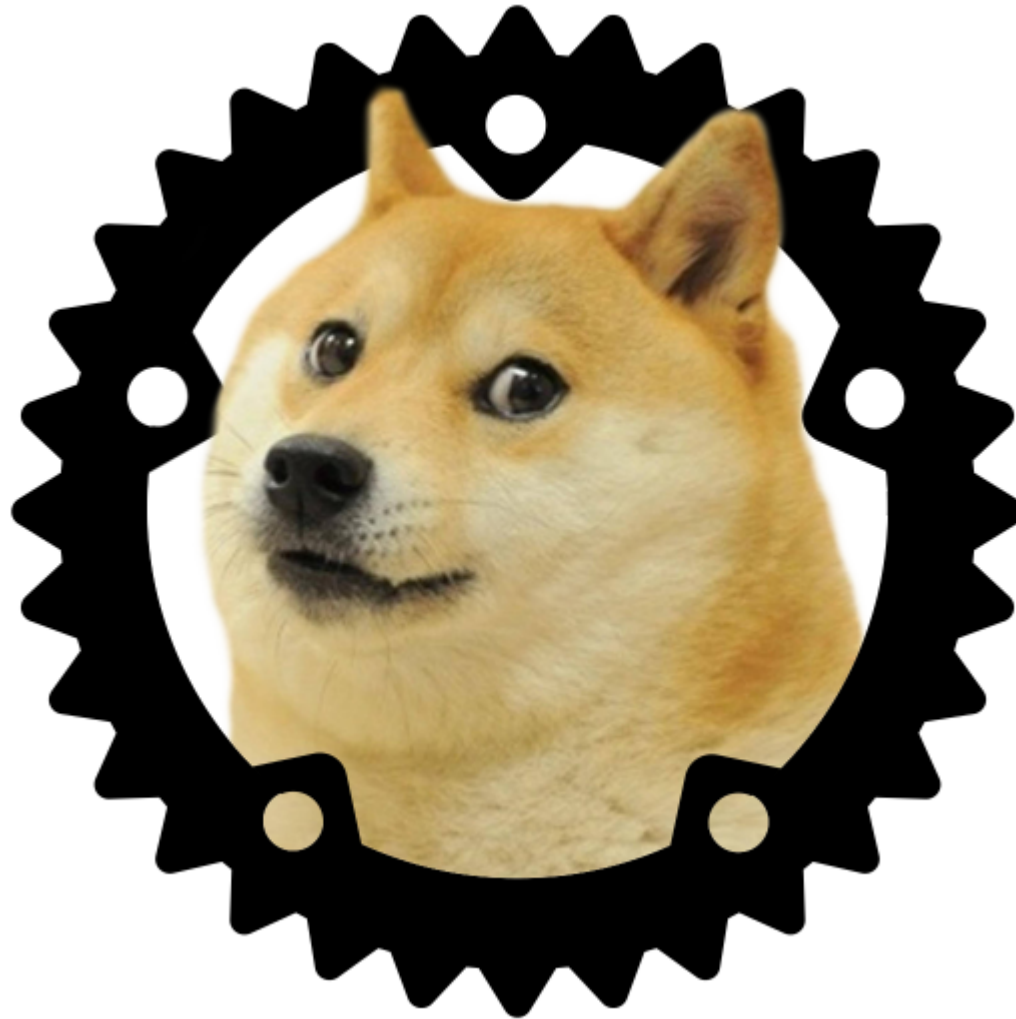
SERVO/SERVO

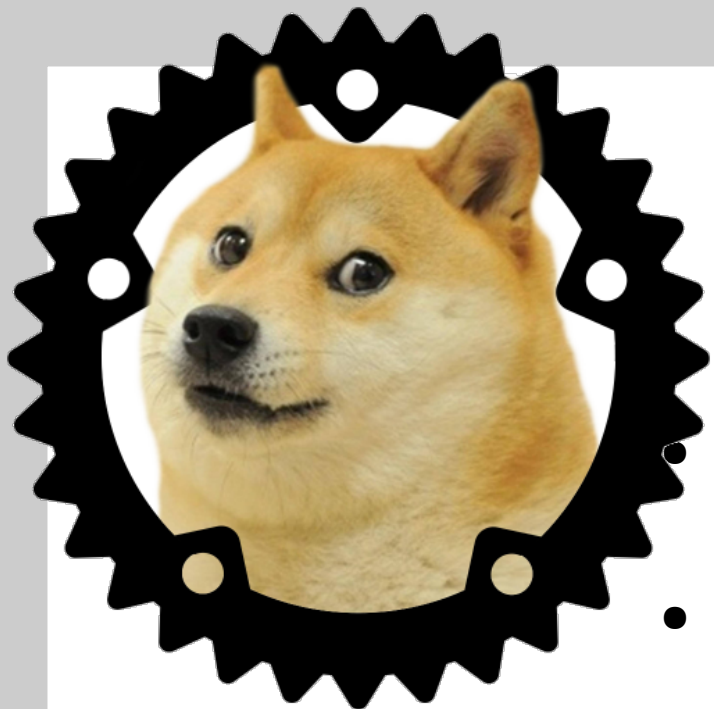
54.9K



ANSIBLE/ANSIBLE

53.9K





servo.org

- ~12 full-time engineers
- ~612 code contributors
- ~21k commits into servo/servo
- ~4% of contributors, ~25% of commits from @mozilla.com







**Open
The Pipeline**

**Mentor New
Contributors**

Communicate Issue State

**Automatically maintain a repository
of code that always passes all the tests.**

Code In Public.

Servo's Success Strategies

- What?
- Why?
- How did we?
- How can you?

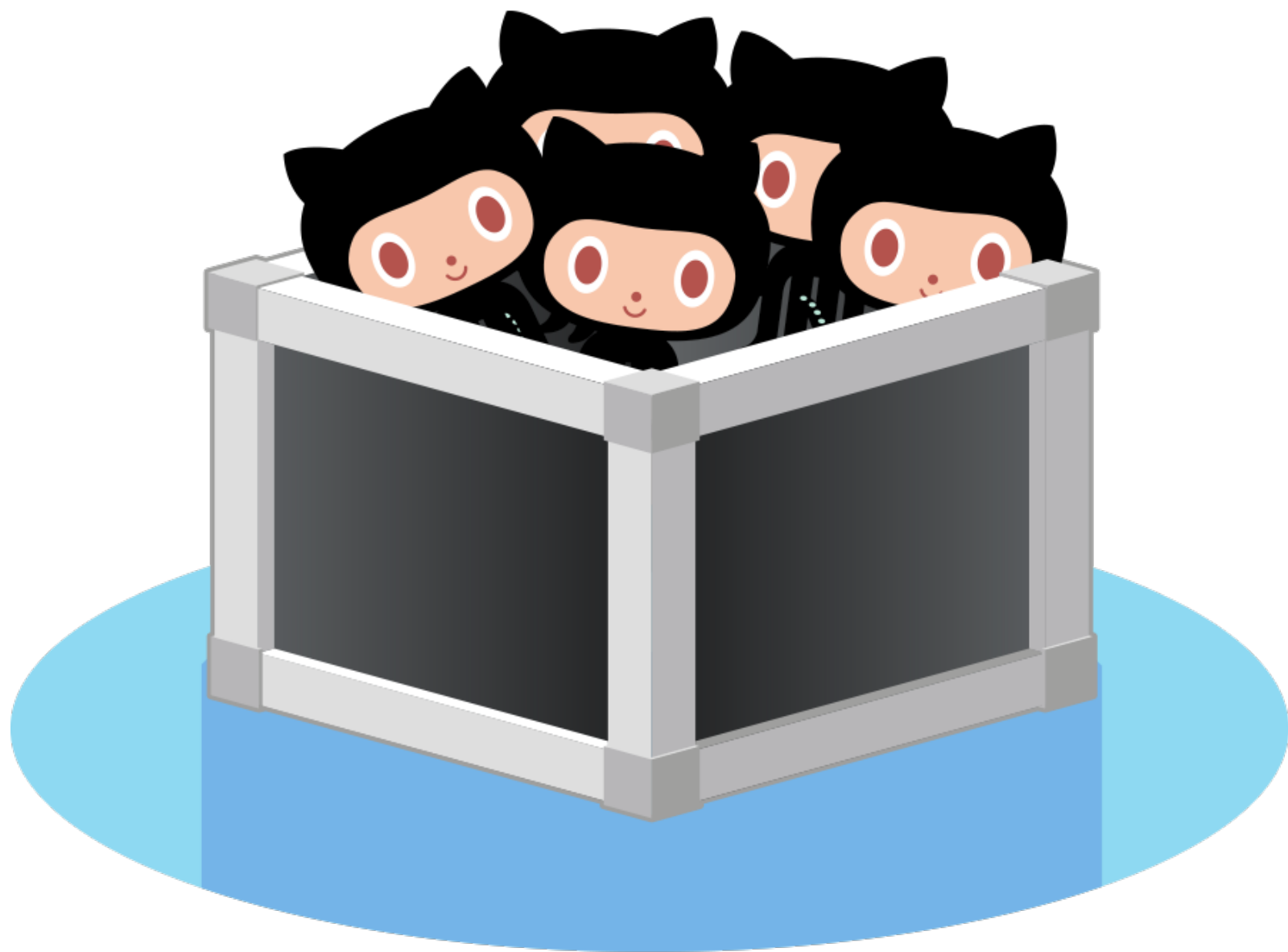
Code In Public.



Why GitHub? (2012)

- Adequate functionality
- Easy for developers
- Extensible
- *Everyone* has accounts







Where are your contributors?

Code In Public.

**Automatically maintain
a repository of code that
always passes all the tests**

– <http://graydon.livejournal.com/186550.html>



Bors & Homu

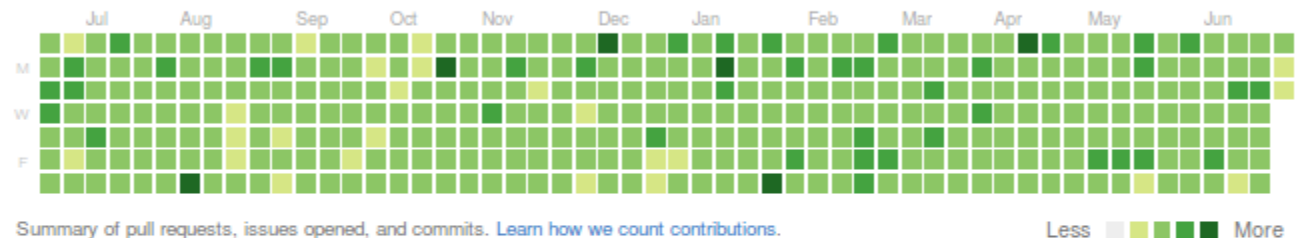
- “Would the tests pass if we landed this?”
- Github.com/servo/homu



bors
bors

📍 -49.585787,69.505005
🔗 <http://en.wikipedia.org/wiki/The...>
📅 Joined on Jan 24, 2013

20,297 contributions in the last year



Summary of pull requests, issues opened, and commits. [Learn how we count contributions.](#)

Less More

Contribution activity

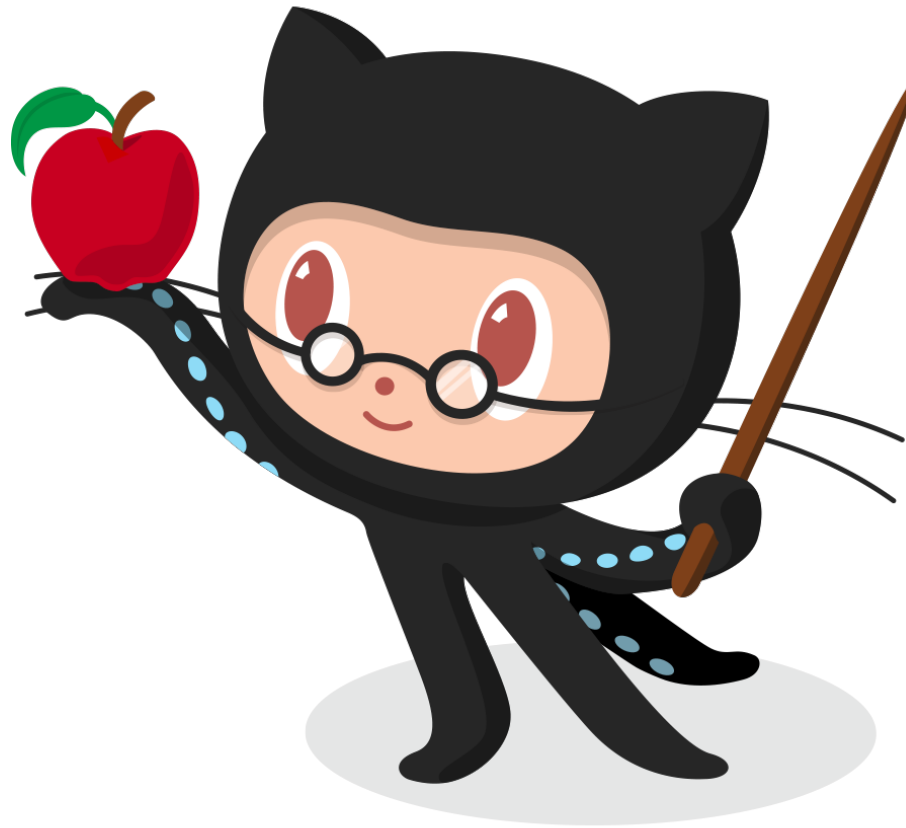
Period: 1 week ▾

🔗 363 commits

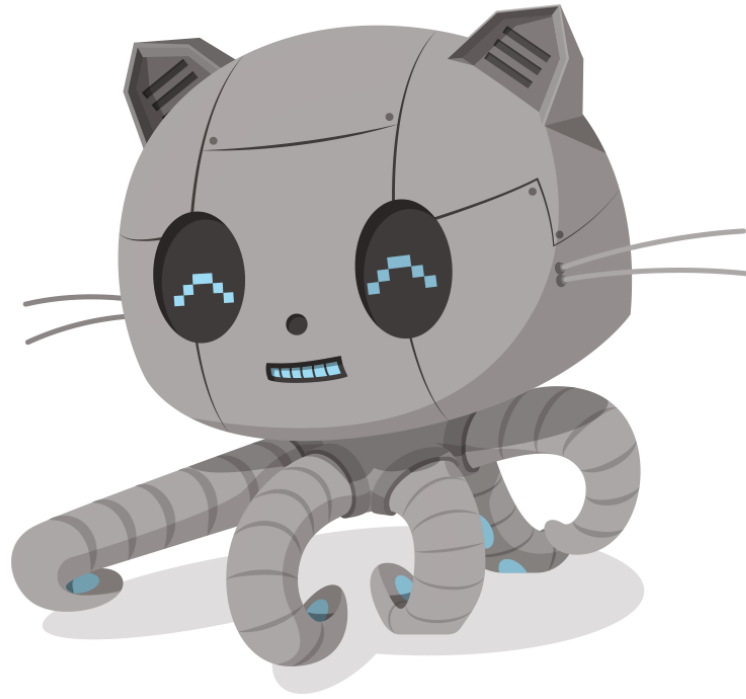
Pushed 330 commits to [rust-lang/crates.io-index](#) Jun 21 – Jun 28

Pushed 30 commits to [rust-lang/rust](#) Jun 21 – Jun 27

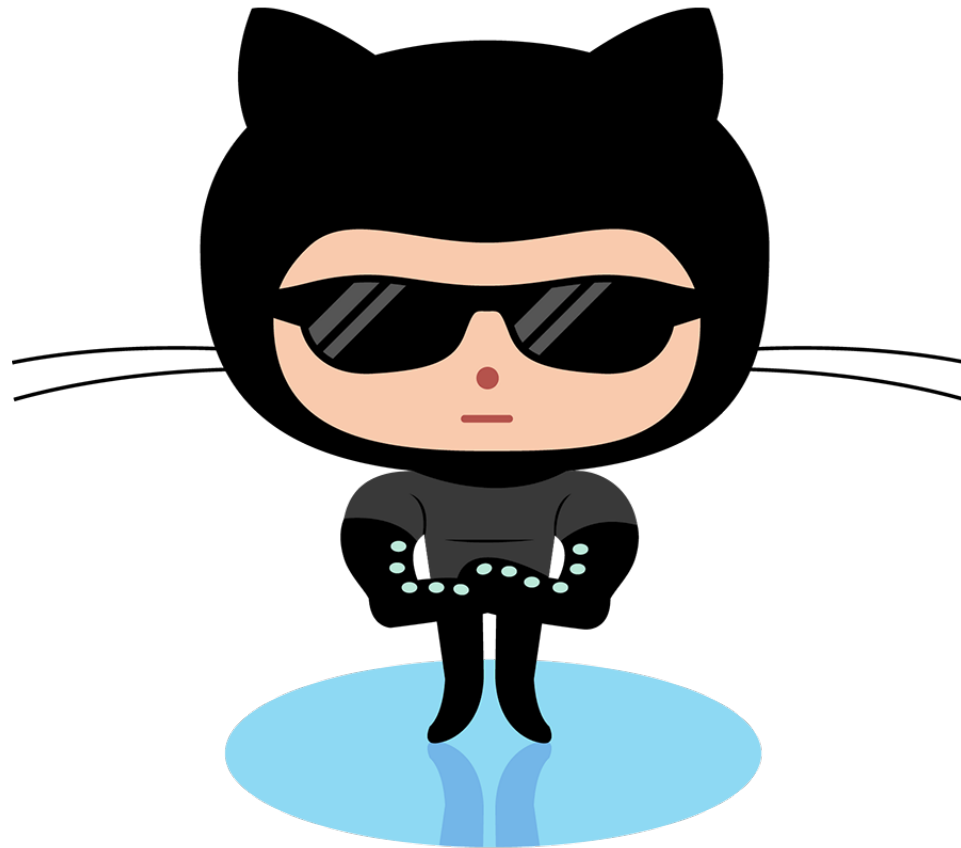
Write tests.



Run the tests.



Use the results.



Protect branches.

Branch protection for **master**

☒ **Protect this branch**

Disables force-pushes to this branch and prevents it from being deleted.

☒ **Require status checks to pass before merging**

Choose which [status checks](#) must pass before branches can be merged into **master**. When enabled, commits must first be pushed to another branch, then merged or pushed directly to **master** after status checks have passed.

☐ **Include administrators**

Enforce required status checks for repository administrators.

☒ **Require branches to be up to date before merging**

This ensures the branch has been tested with the latest code on **master**.

Status checks found in the last week for this repository

☐ **continuous-integration/travis-ci**

Save changes

**Automatically maintain
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– <http://graydon.livejournal.com/186550.html>

**Communicate
Issue State.**

[Code](#)[Issues 1](#)[Pull requests 0](#)[Projects 0](#)[Wiki](#)[Insights](#)[Settings](#)

Please add a LICENSE file #3

[Edit](#)[New Issue](#)[Open](#)

edunham opened this issue on Jun 4, 2015 · 0 comments



edunham commented on Jun 4, 2015

[Owner](#)

The repo is public, but it's not easy to find out how I'm allowed to use or share the code.

Could you add a LICENSE file to make it easier for users to understand how you'd like it to be used?

<http://choosealicense.com/> might be helpful here.

Thanks!

Assignees



No one—assign yourself

Labels



None yet

Projects



None yet

Milestone



No milestone

Notifications

Unsubscribe

You're receiving notifications because you authored the thread.

1 participant

[Write](#)[Preview](#)

AA[^] B *i*



Leave a comment

Attach files by dragging & dropping, [selecting them](#), or pasting from the clipboard.

Styling with Markdown is supported

[Close issue](#)[Comment](#)

<> Code

Issues 1

Pull requests 0

Projects

Please add a LICENSE

Open

edunham opened this issue on Jun 4, 2015



edunham commented on Jun 4, 2015

The repo is public, but it's not easy to find

...consider to ...
...ere.

Jun 4, 2015

None yet

Milestone

No milestone

Notifications

Unsubscribe

You're receiving notifications
because you authored the thread.

1 participant

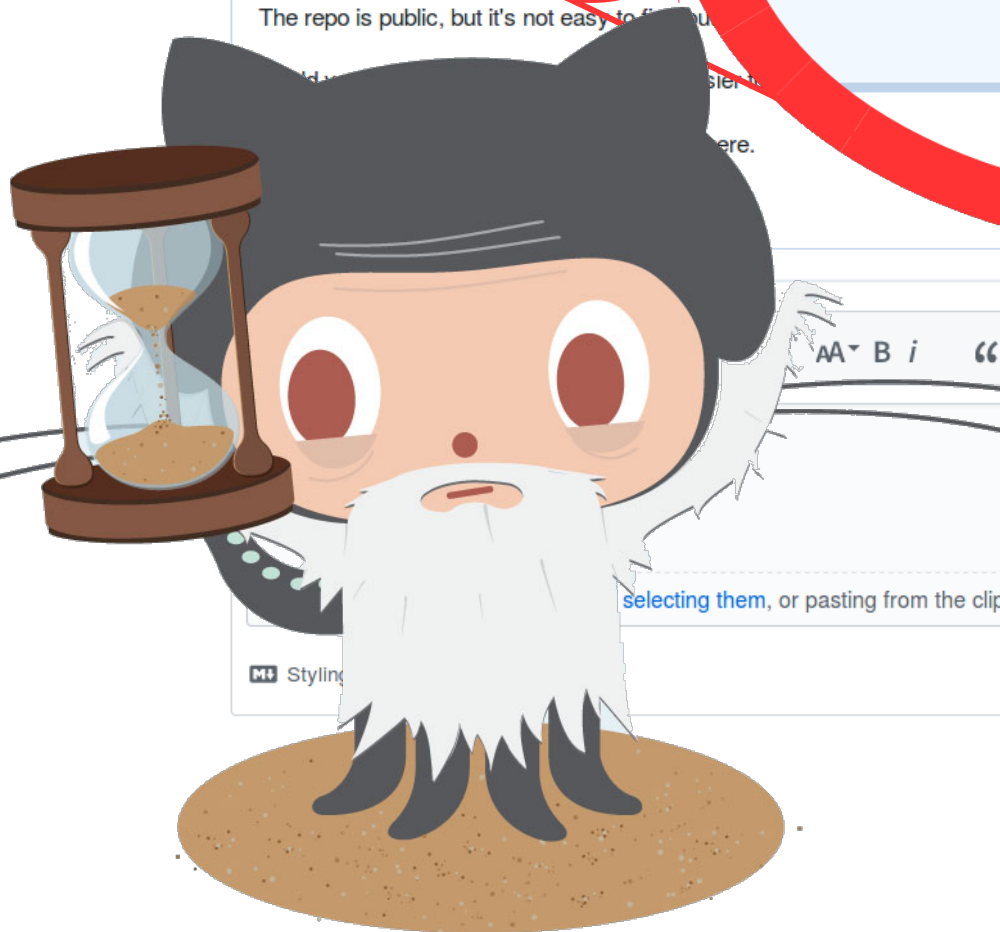


Close issue

Comment

selecting them, or pasting from the clipboard.

Styling



Highfive the Robot



highfive commented 12 hours ago

Member



Heads up! This PR modifies the following files:

- @asajeffrey: components/webdriver_server/keys.rs
- @paulrouget: ports/glutin/window.rs, ports/glutin/Cargo.toml



highfive commented 12 hours ago

Member



 **Warning** 

- These commits modify **unsafe code**. Please review it carefully!
- These commits modify style, layout, gfx, and script code, but no tests are modified. Please consider adding a test!




highfive added the **S-awaiting-review** label 12 hours ago

File → Discuss → Implement

Use Issue & PR Templates.

Please review the [guidelines for contributing](#) to this repository.



Title

Write

Preview

AA B i “ <> 🔗 ☰ ☷ ✓ @ ★

Expected behavior

Actual behavior

Steps to reproduce the behavior

Attach files by dragging & dropping, [selecting them](#), or pasting from the clipboard.

📄 Styling with Markdown is supported

Submit new issue

Enable notifications.

Server

irc.freenode.net

Port

6667

Room

#any-channel-name-you-can-imagine

Manage expectations.




Categorize issues.


Labels


Milestones


New label


124 labels


 A-browserhtml/P1

 A-browserhtml/P2



 A-browserhtml/P3

 A-browserhtml



 A-build

 A-constellation



39 open issues

 Edit  Delete

48 open issues

 Edit  Delete

33 open issues

 Edit  Delete

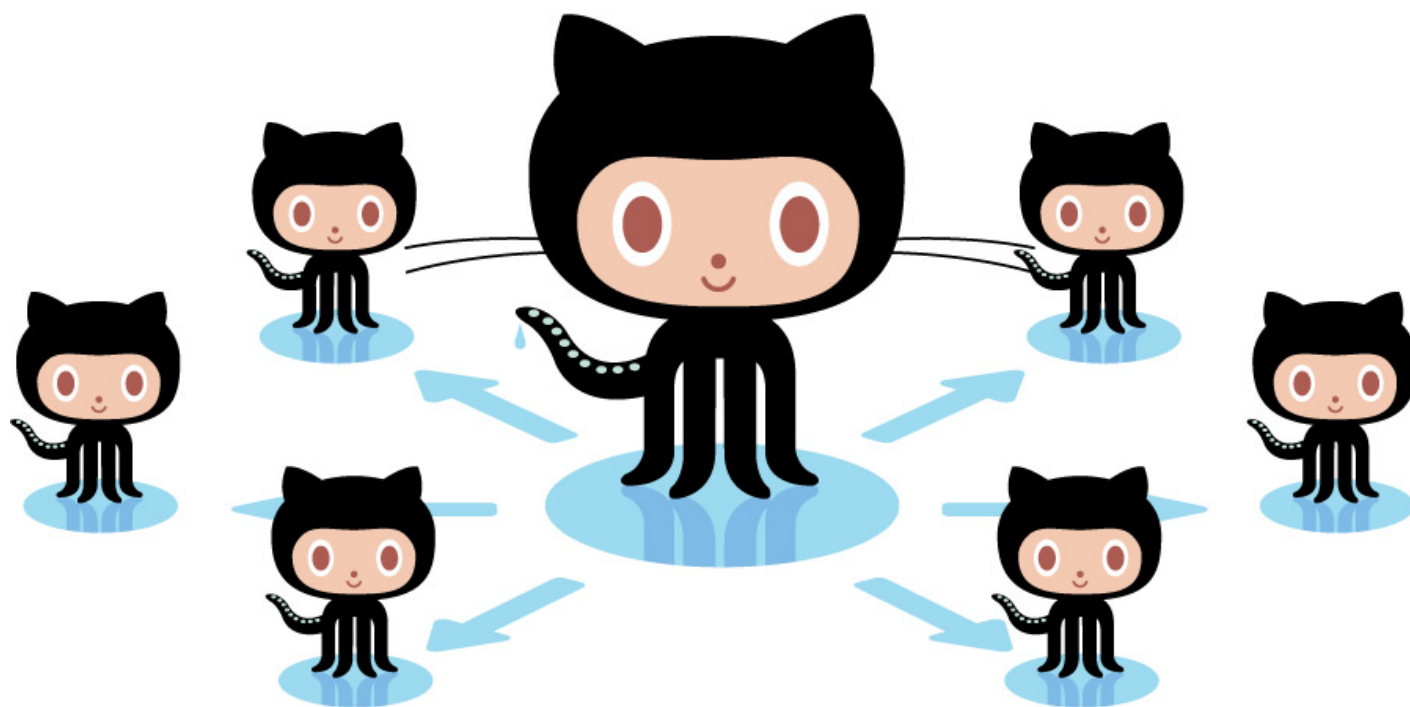
Add labels for new contributors

Now, GitHub will help potential first-time contributors discover issues labeled with **help wanted** or **good first issue**

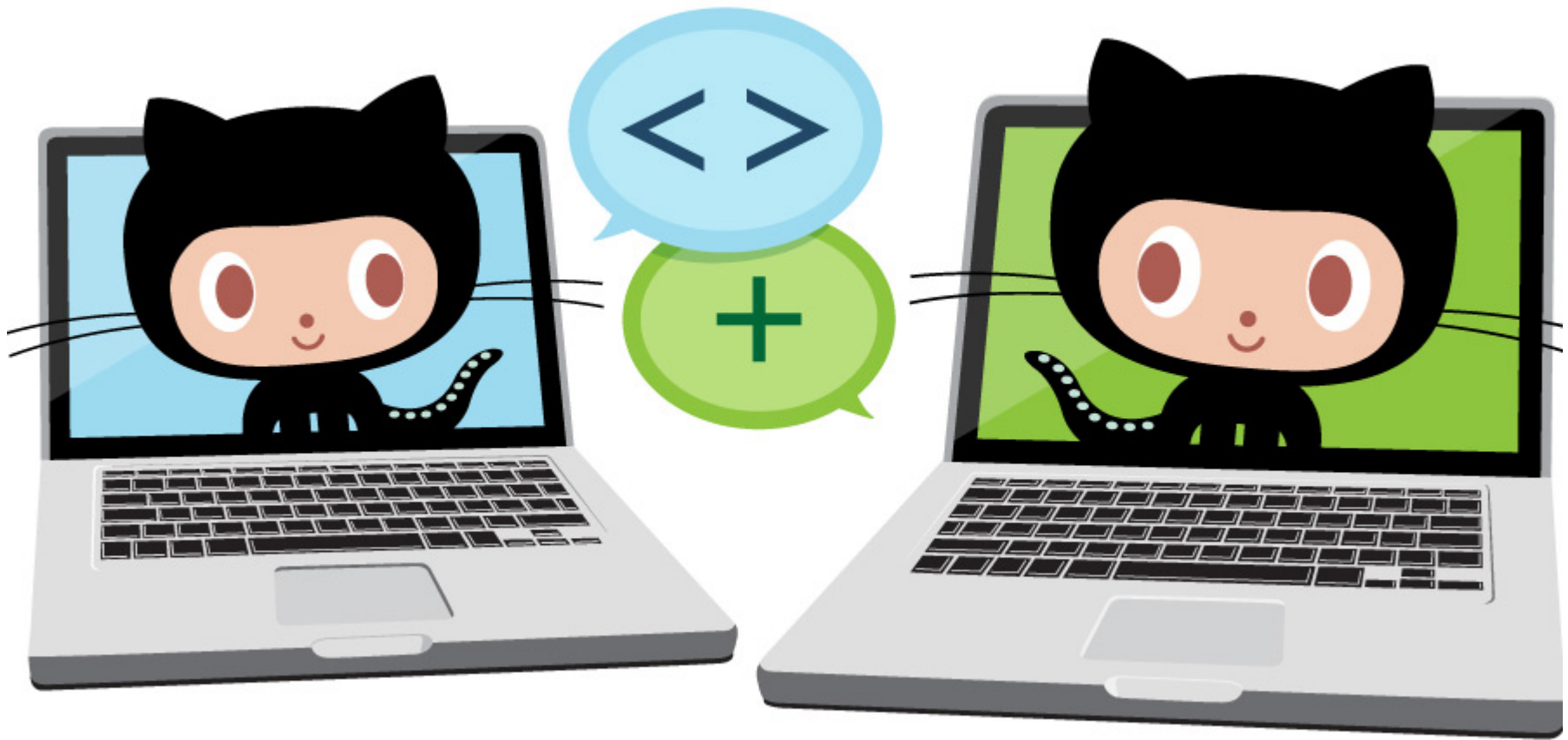
Got it!

**Communicate
Issue State.**

**Mentor New
Contributors.**



Value mentorship.



Documentation gardening.



The next slide has a picture that people who hate bugs will not want to look at. Look away now.



Bite Sized Bugs

Starters.servo.org

Servo Starters

Contributing to Mozilla **Servo** is fun!

Sometimes it's hard to know where to get started, though. *Servo Starters* is a list of easy tasks that are good for beginners to rust or servo.

Issue tags are explained **here**.

To help find issues that follow your interests, make sure to look over our list of **tags**

If you want to work on an issue, make sure to claim it by commenting on it before working on it! Check out our **CONTRIBUTING.md** for more helpful tips on how to contribute to Servo.

I'm Feeling Adventurous...

and I want to work with:

Language: rust

Language: python

Language: javascript

Language: saltstack

Open Issues

[**servo 17584**] - Paint worklets: Mark nondeterministic registration as invalid

Area: content/css

Area: content/script

Mentored

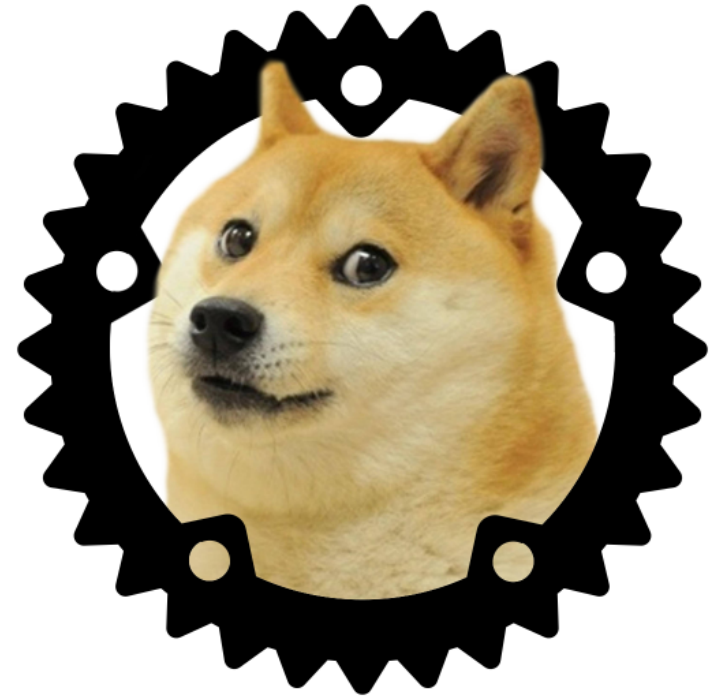
Language: rust

🕒 Last activity: 2 days ago

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Contributors.**

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- ~612 code contributors

Meaningful mission



Hacktoberfest.digitalocean.com



Openhatch.org



log in / [sign up](#) [people](#) [projects](#) [events](#) [training](#) [donate](#)



OpenHatch is a **non-profit** dedicated to matching prospective free software contributors with communities, tools, and education.

We provide online tools for new contributors

Build skills

practice with common FOSS technologies with our [training missions](#) »

Find a project

browse tasks across open source [by skill, difficulty, or project](#) »

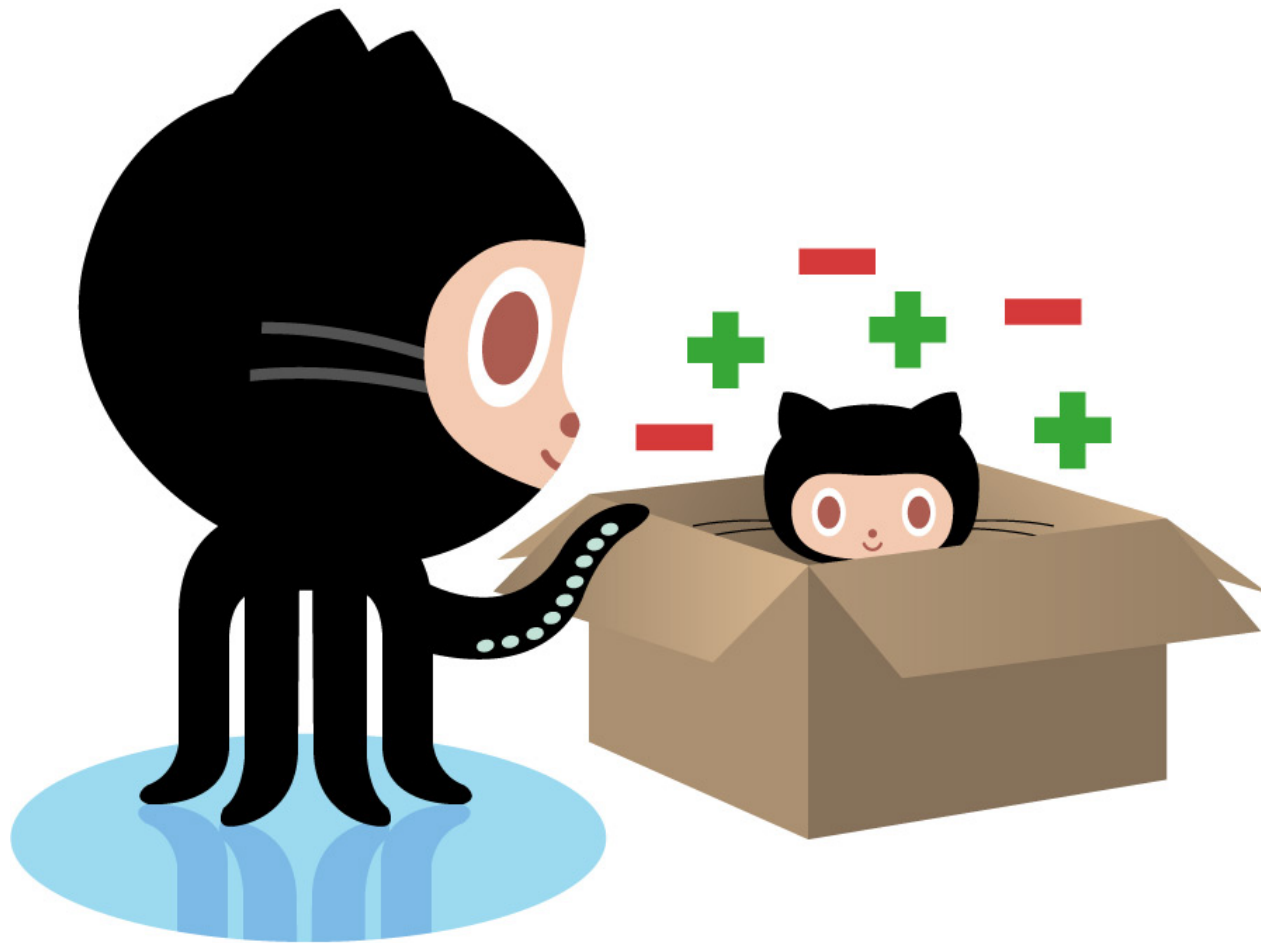
Get help

ask us questions about [finding projects and contributing](#) »

Add your project

use this site to [make your favorite project more welcoming](#) »

Offer Internships.



Outreachy.org



Photo CC-BY-NC-SA Sarah Sharp.

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Pipeline.**



**Open
The Pipeline**

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Communicate Issue State

**Automatically maintain a repository
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Code In Public.

Thank you!

@qedunham

universe2017@edunham.net

talks.edunham.net/githubuniverse2017

