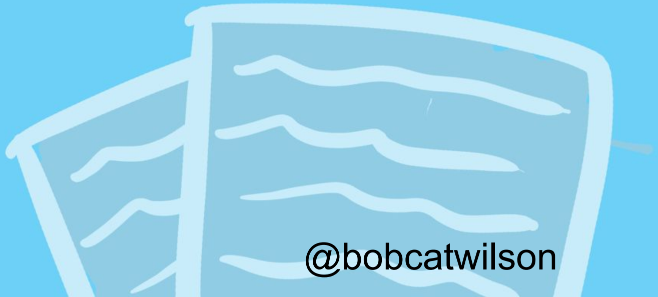
Write Better Docs

Moar inclusivity!
Moar quality!

Open Source Summit 2018

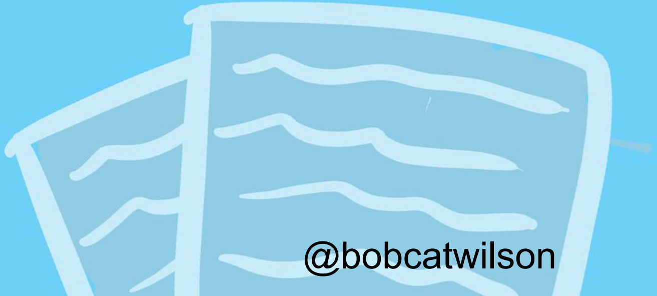


@bobcatwilson

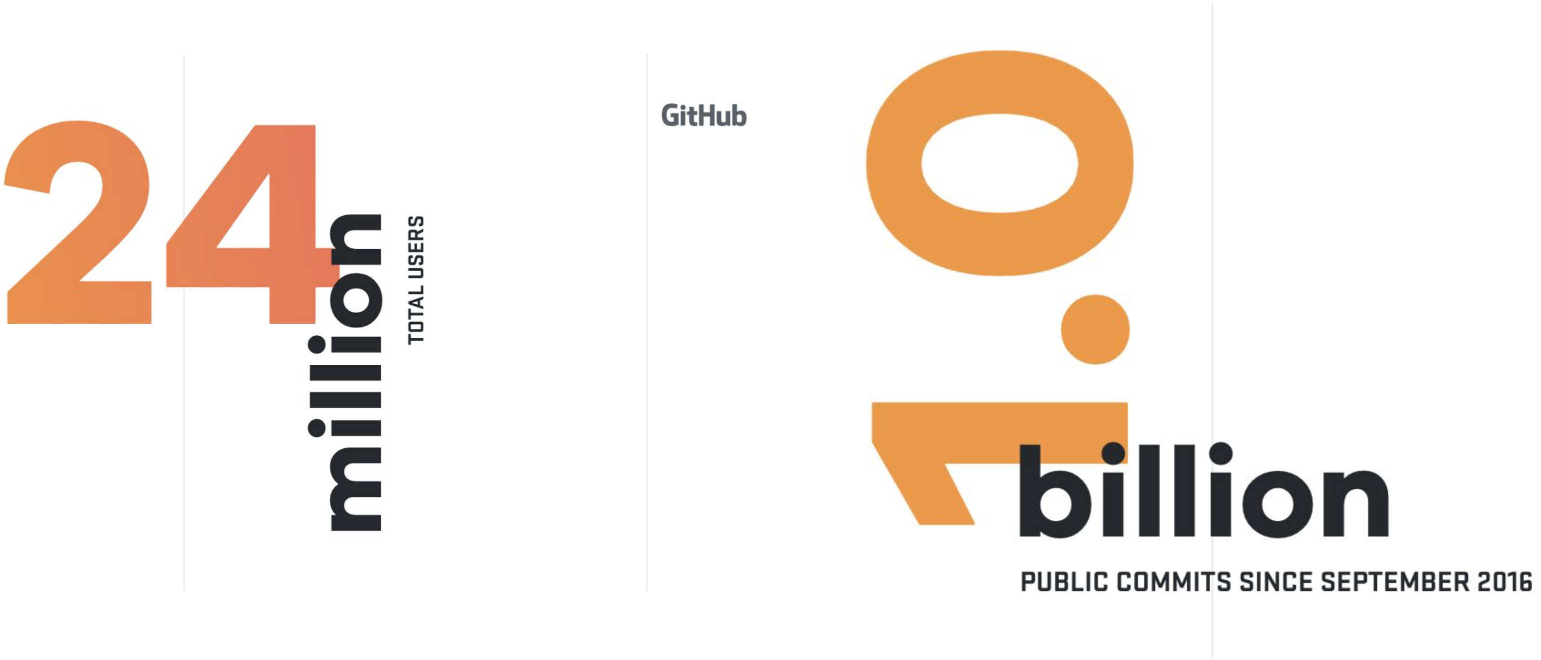
Hi!

I’m Christie Wilson!
Engineer @ Google
Container Tools Team

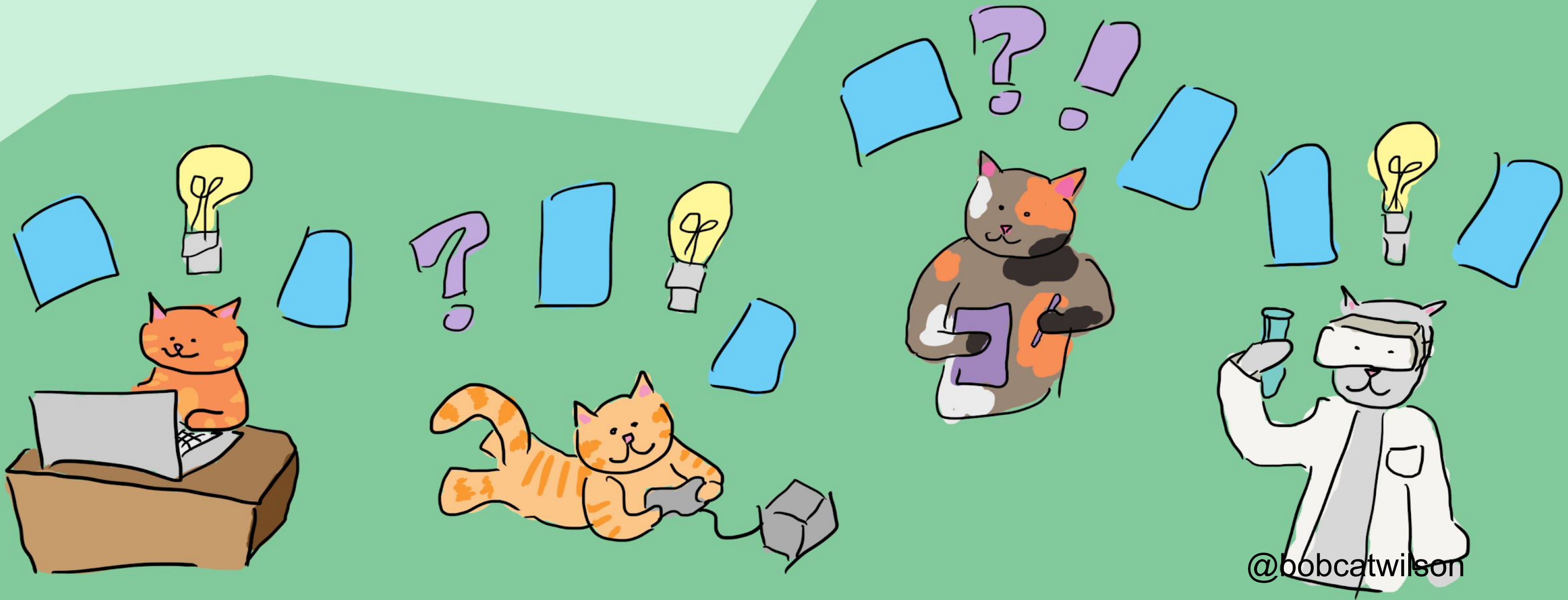
The Open Source Dream



Github 2017 stats



The Open Source Dream



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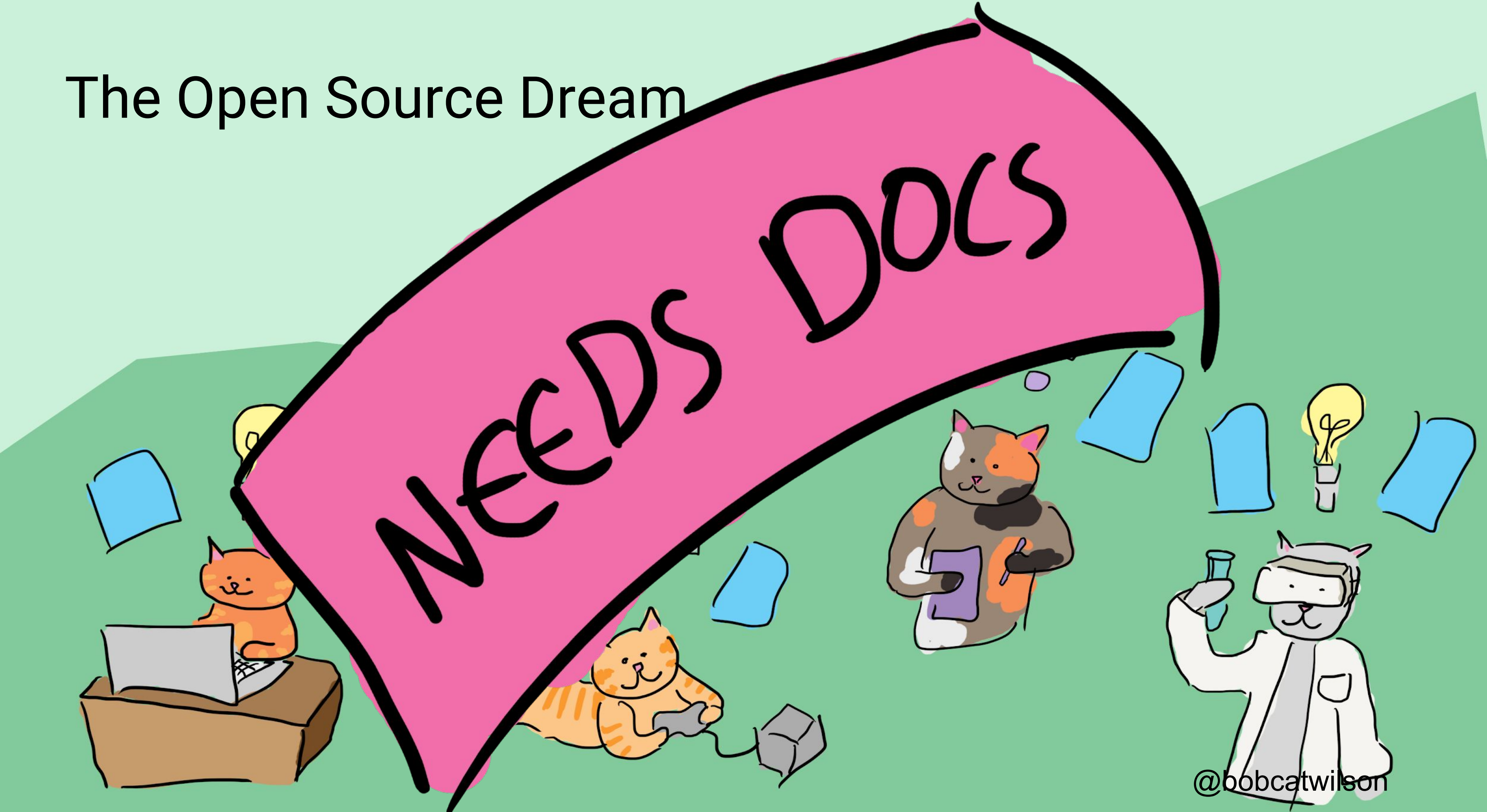
The Open Source Dream



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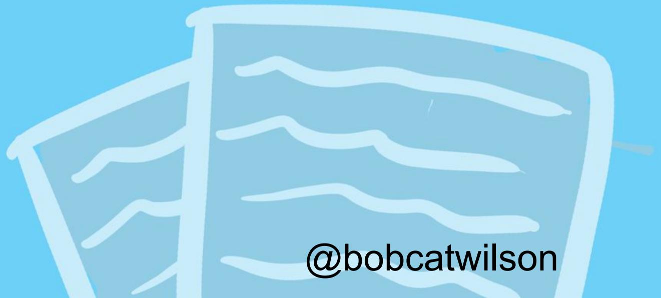
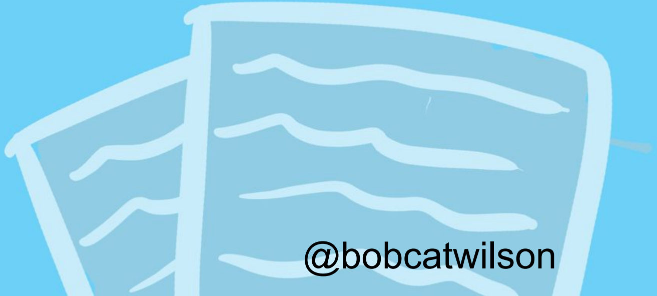
Docs for Developers

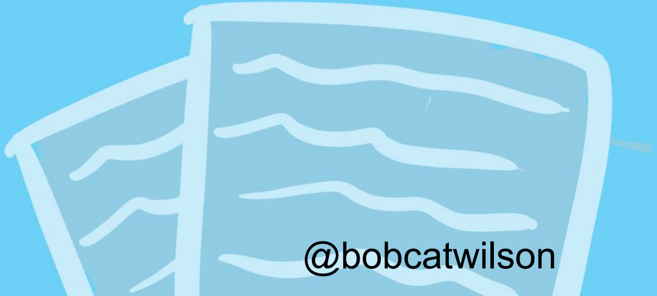


@bobcatwilson

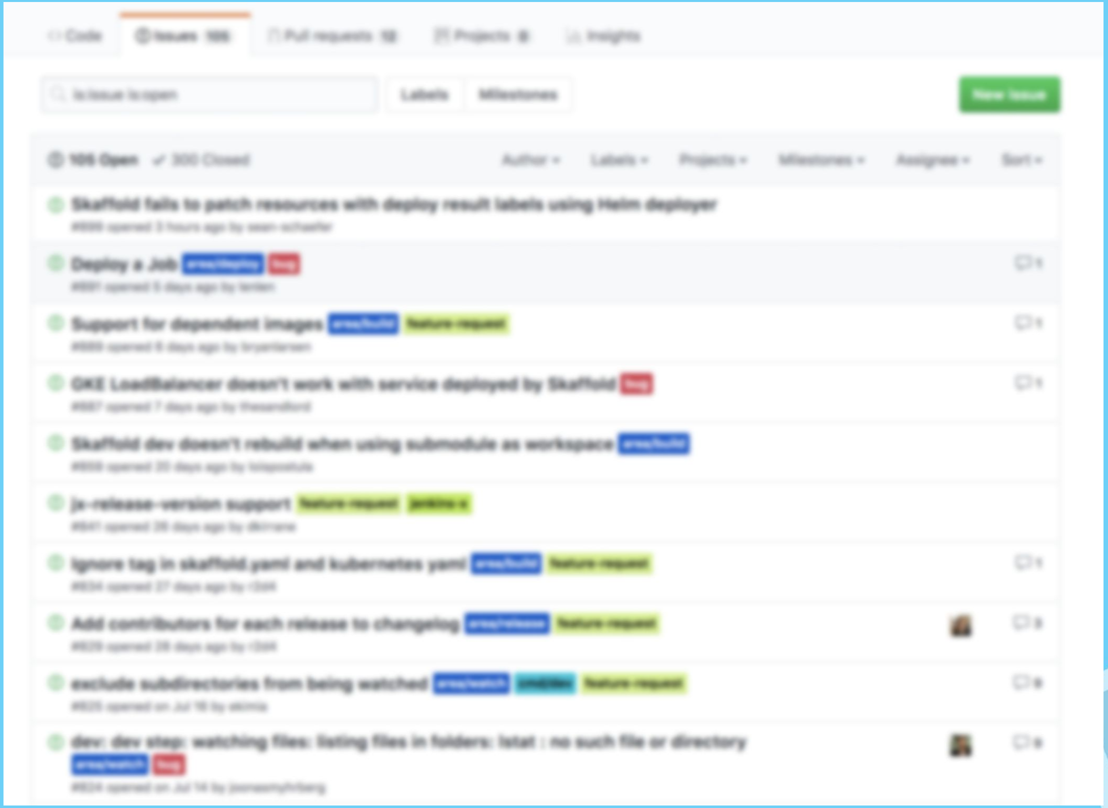
1. Issues
2. CONTRIBUTING.md + DEVELOPMENT.md
3. A surprise!



Issues



Contributing: finding an issue



Skaffold fails to patch resources with deploy result labels using Helm deployer
#899 opened 3 hours ago by sean-schaefer

Deploy a Job area/deploy bug
#891 opened 5 days ago by tenlen

Support for dependent images area/build feature request
#889 opened 6 days ago by bryanlarsen

GKE LoadBalancer doesn't work with service deployed by Skaffold bug
#887 opened 7 days ago by thesandlord

Skaffold dev doesn't rebuild when using submodule as workspace area/build
#858 opened 20 days ago by lolapostula

jx-release-version support feature request jenkins-x
#841 opened 26 days ago by dkirrane

Ignore tag in skaffold.yaml and kubernetes yaml area/build feature request
#834 opened 27 days ago by r2d4

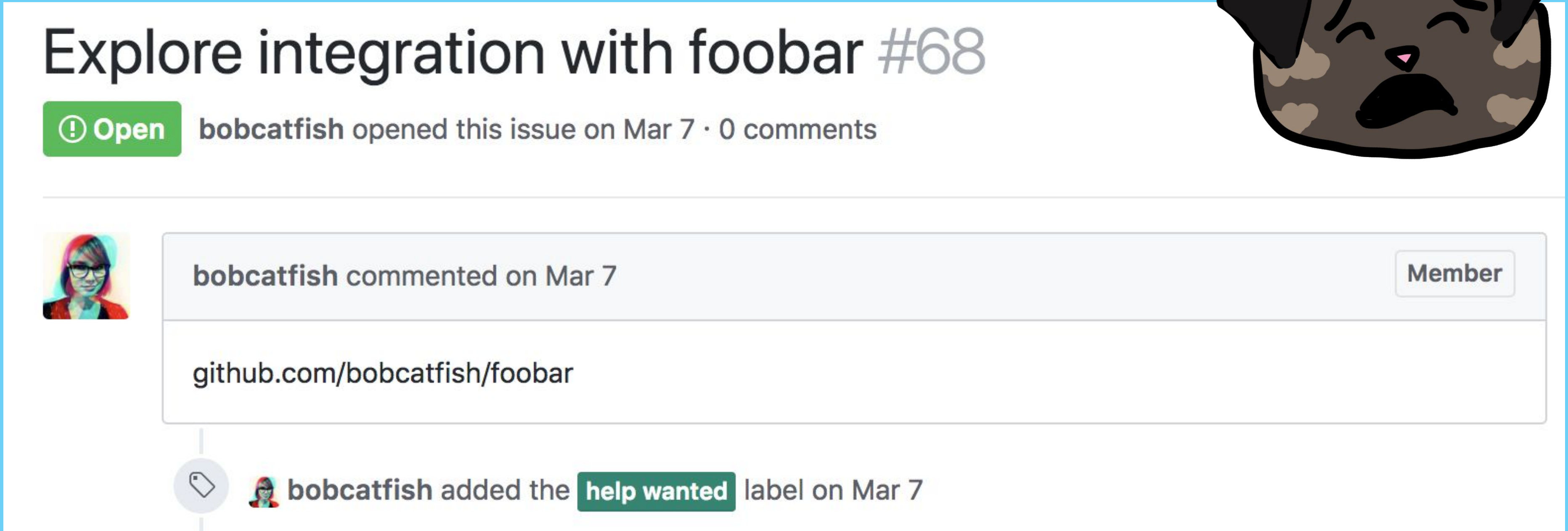
Add contributors for each release to changelog area/release feature request
#829 opened 28 days ago by r2d4

exclude subdirectories from being watched area/watch cmd/dev feature request
#825 opened on Jul 16 by ekimia

dev: dev step: watching files: listing files in folders: lstat : no such file or directory area/watch bug
#824 opened on Jul 14 by joonasmyhrberg

@bobcatwilson

?



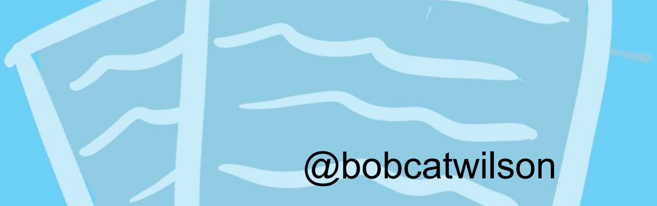
Explore integration with foobar #68

ⓘ Open bobcatfish opened this issue on Mar 7 · 0 comments

bobcatfish commented on Mar 7 Member

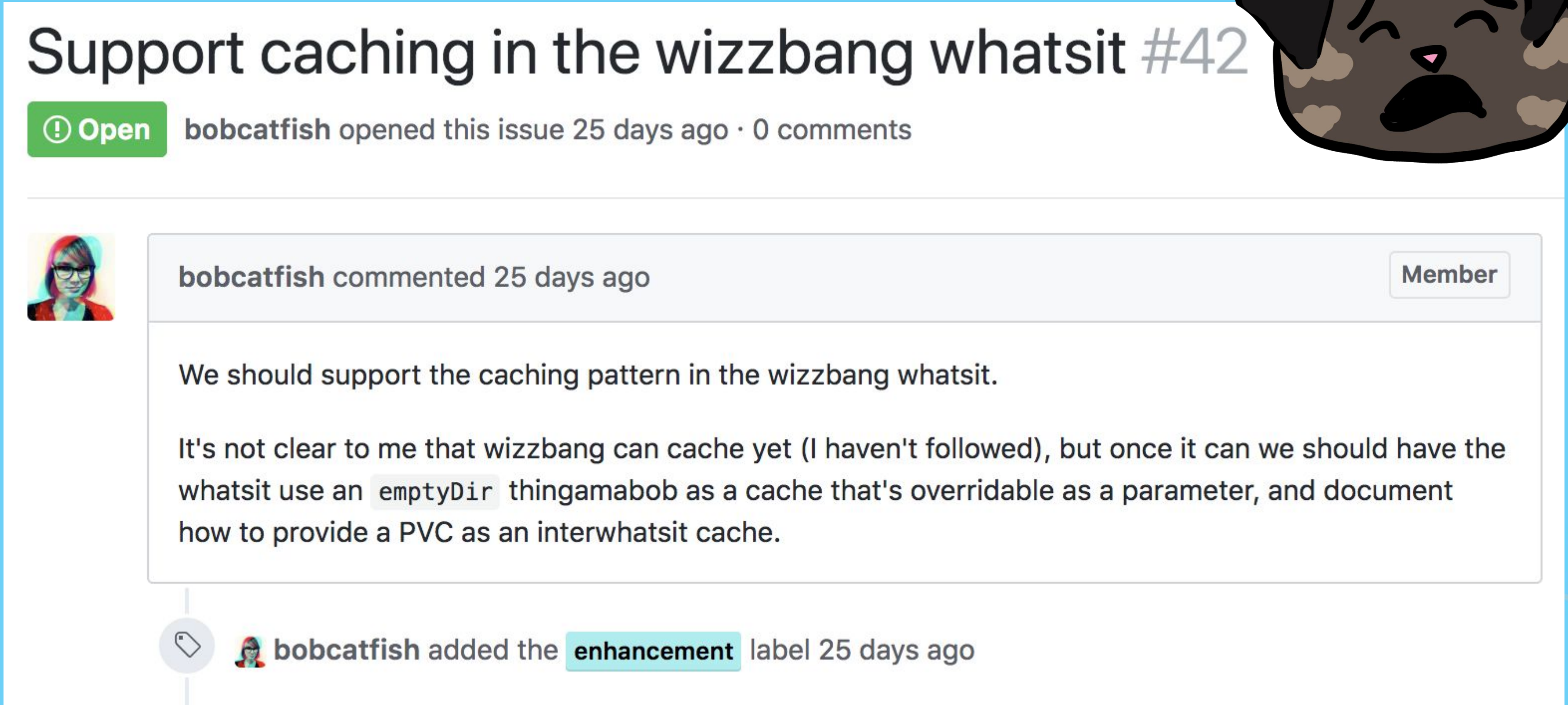
github.com/bobcatfish/foobar

bobcatfish added the help wanted label on Mar 7



@bobcatwilson

:(



Support caching in the wizzbang whatsit #42

ⓘ Open **bobcatfish** opened this issue 25 days ago · 0 comments

bobcatfish commented 25 days ago — Member

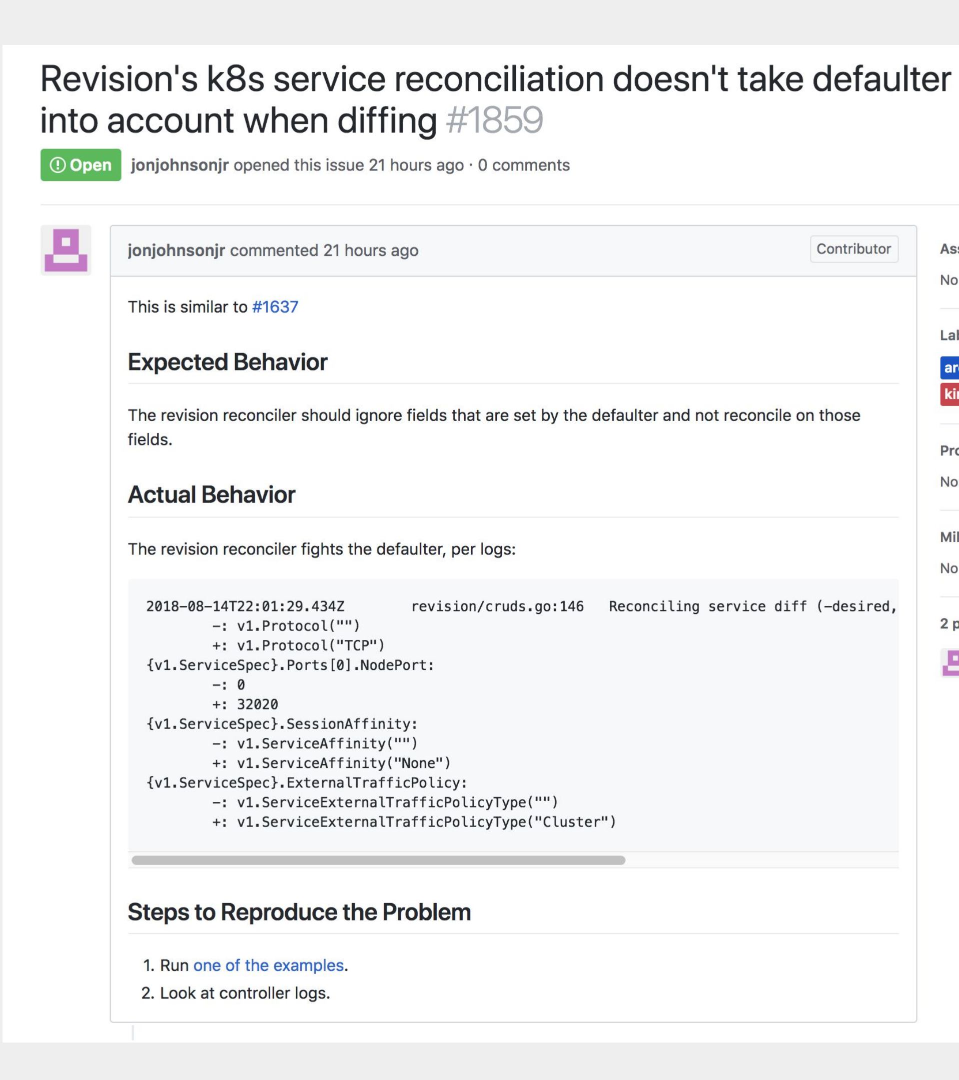
We should support the caching pattern in the wizzbang whatsit.

It's not clear to me that wizzbang can cache yet (I haven't followed), but once it can we should have the whatsit use an `emptyDir` thingamabob as a cache that's overridable as a parameter, and document how to provide a PVC as an interwhatsit cache.

bobcatfish added the **enhancement** label 25 days ago

Example of a good issue

github.com/knative/serving/issues/1859



Revision's k8s service reconciliation doesn't take defaulter into account when diffing #1859

ⓘ Open **jonjohnsonjr** opened this issue 21 hours ago · 0 comments

jonjohnsonjr commented 21 hours ago Contributor

This is similar to #1637

Expected Behavior

The revision reconciler should ignore fields that are set by the defaulter and not reconcile on those fields.

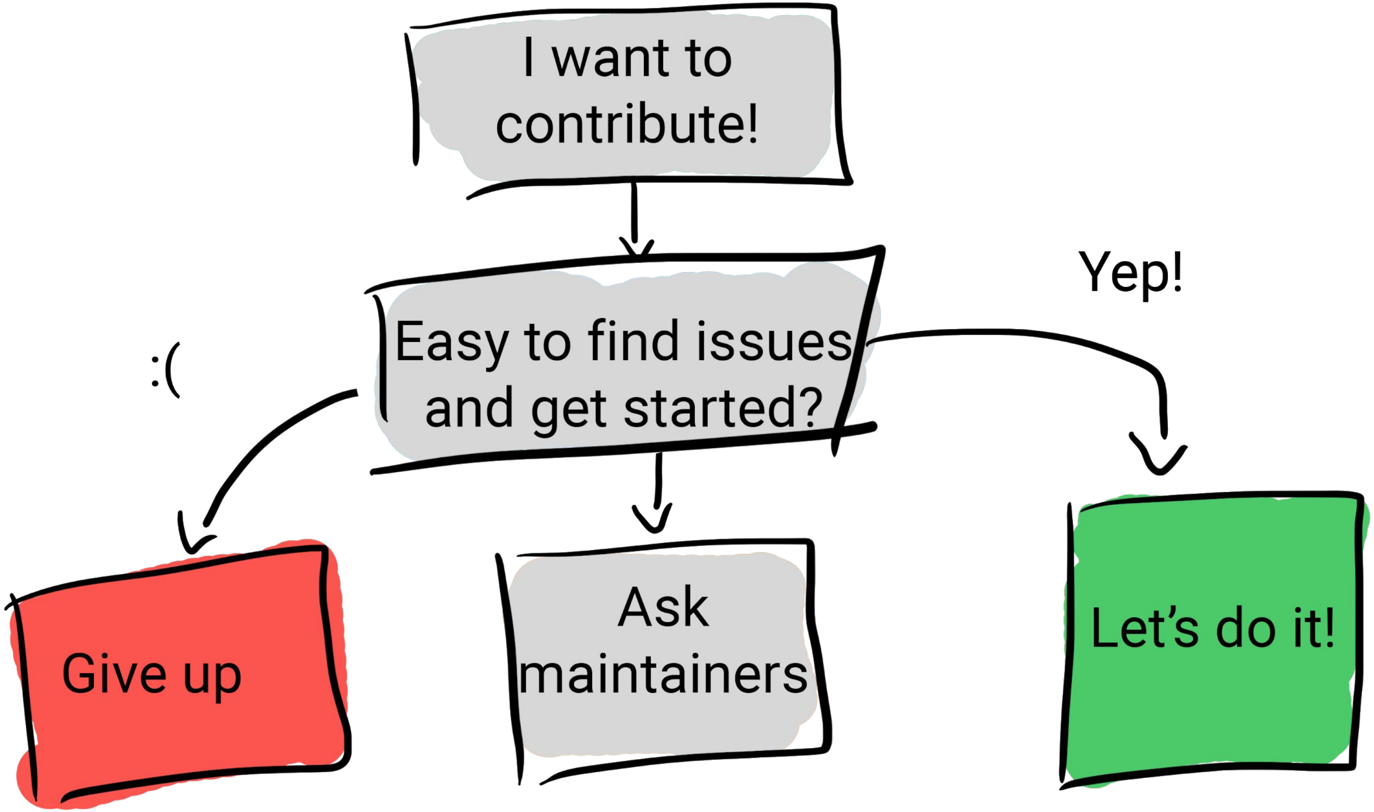
Actual Behavior

The revision reconciler fights the defaulter, per logs:

```
2018-08-14T22:01:29.434Z	revision/cruds.go:146	Reconciling service diff (-desired,
	-: v1.Protocol("")
	+: v1.Protocol("TCP")
{v1.ServiceSpec}.Ports[0].NodePort:
	-: 0
	+: 32020
{v1.ServiceSpec}.SessionAffinity:
	-: v1.ServiceAffinity("")
	+: v1.ServiceAffinity("None")
{v1.ServiceSpec}.ExternalTrafficPolicy:
	-: v1.ServiceExternalTrafficPolicyType("")
	+: v1.ServiceExternalTrafficPolicyType("Cluster")
```

Steps to Reproduce the Problem

1. Run one of the examples.
2. Look at controller logs.



I want to contribute!

Easy to find issues and get started?

:(

Yep!

Give up

Ask maintainers

Let's do it!

@bobcatwilson

Talking with maintainers

@bobcatwilson

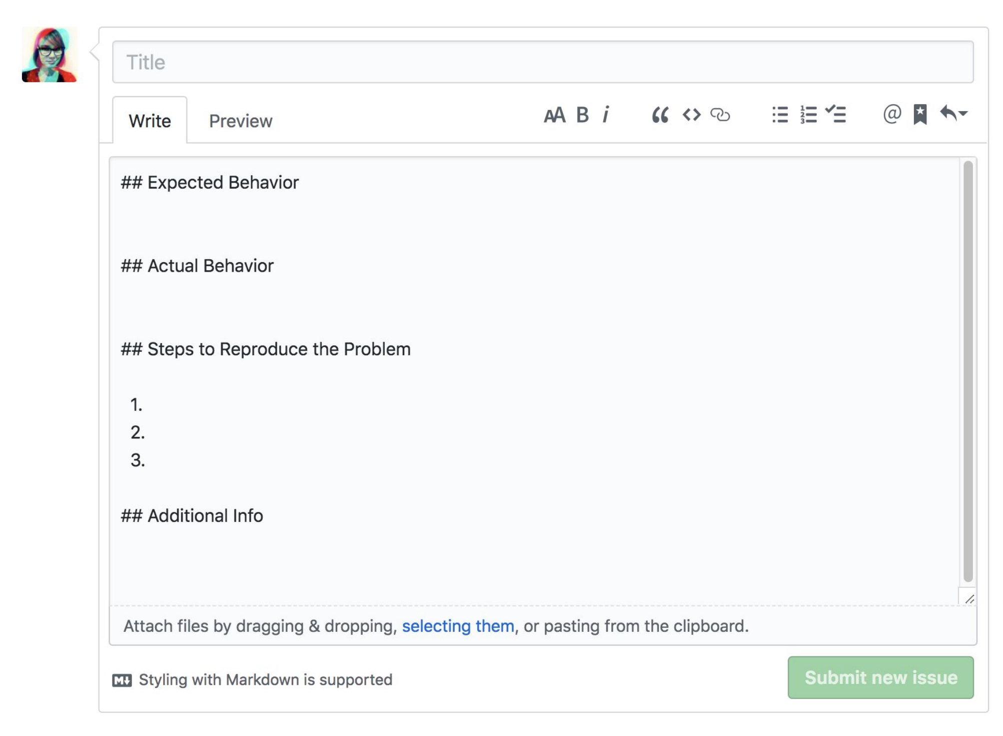
The 3 keys to great issues!

- **Observed behaviour**
  - Links to the relevant code
  - Snippets
- **Expected behaviour**
- **Steps to repro**
  - Environment
  - Commands

Screenshots, images, links

Github features

- Use an issue template



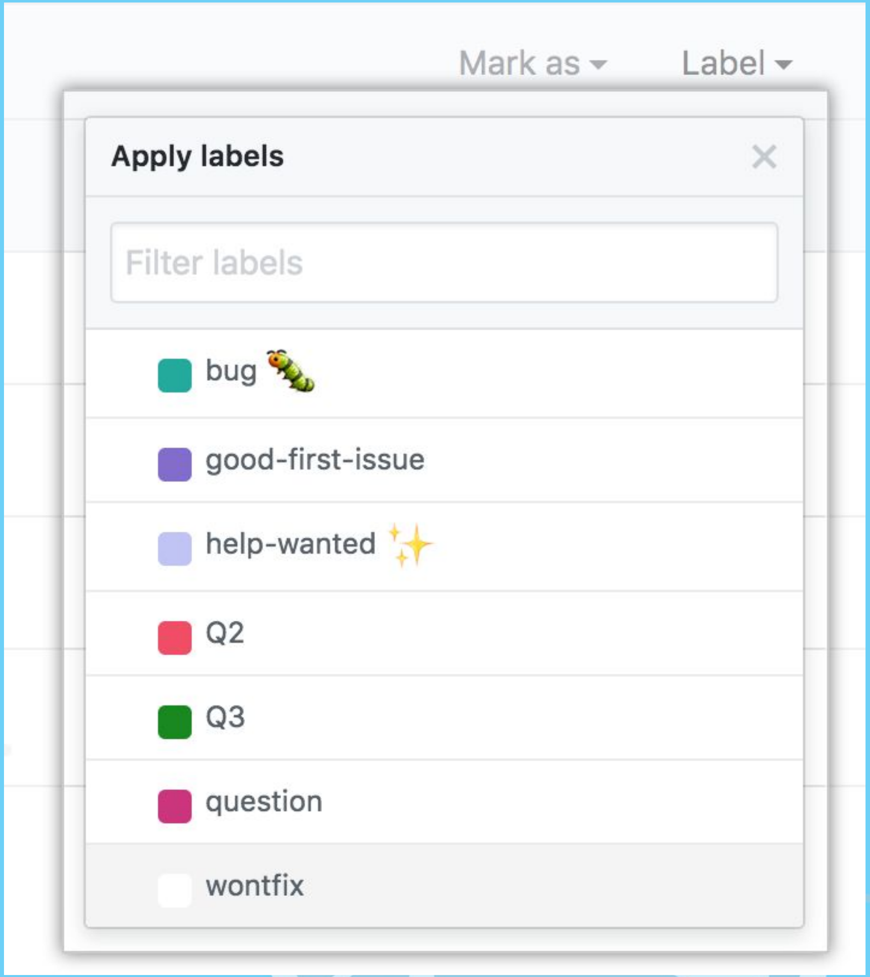
```
## Expected Behavior


## Actual Behavior


## Steps to Reproduce the Problem

  1.
  2.
  3.

## Additional Info
```

Attach files by dragging & dropping, selecting them, or pasting from the clipboard.

Styling with Markdown is supported

Github features

- Use labels!
  - good-first-issue
  - help-wanted

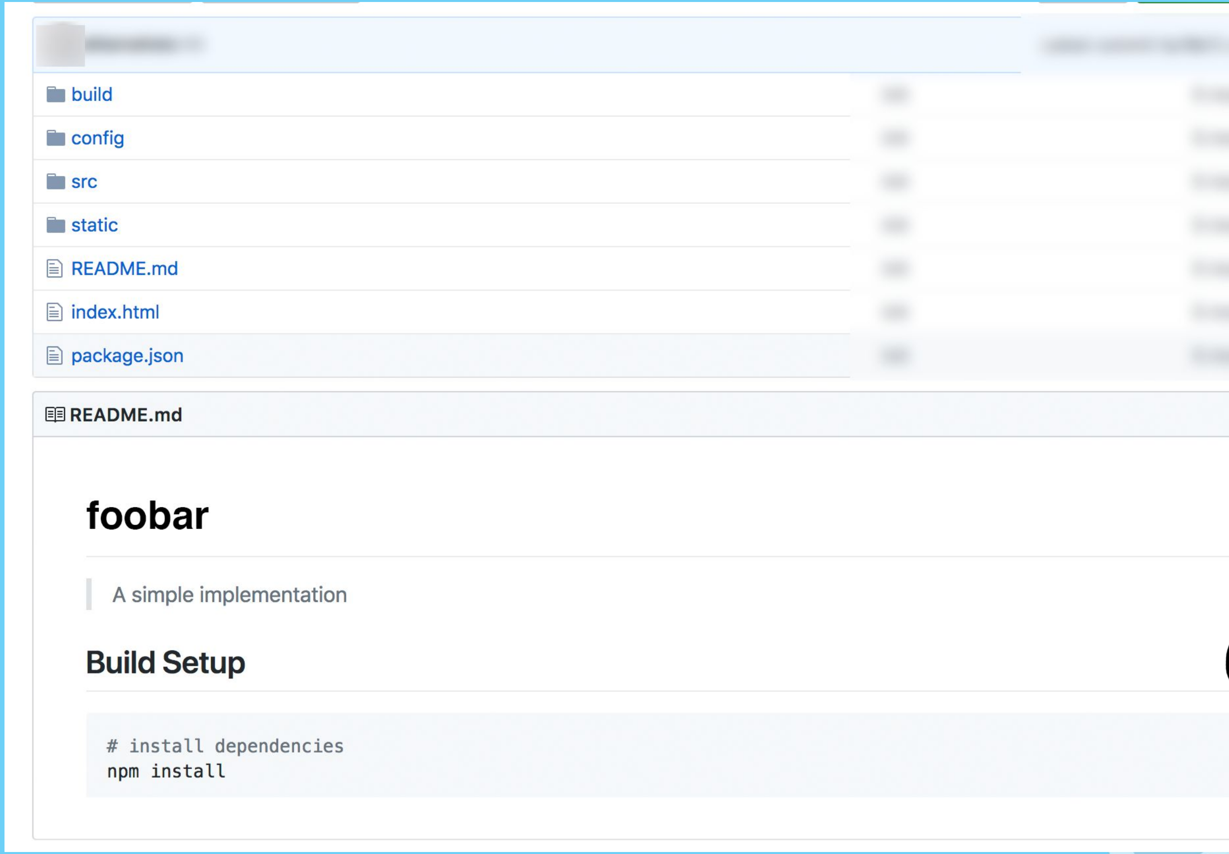


@bobcatwilson

How does Jaz get started on the issue?

- Needs to know how to run tests
- Your lib also runs as a service, needs to be able to run it
- Needs to know how the pull request workflow works

@bobcatwilson



build

config

src

static

README.md

index.html

package.json

README.md

foobar

> A simple implementation

Build Setup

```
# install dependencies
npm install
```

@bobcatwilson

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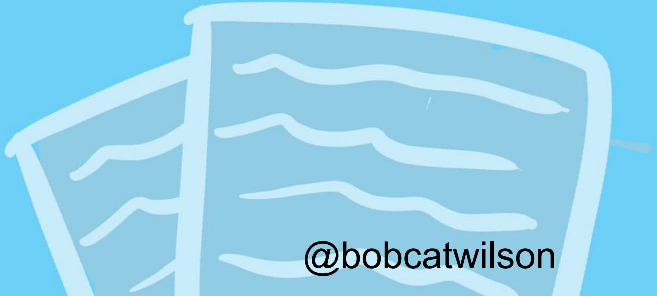
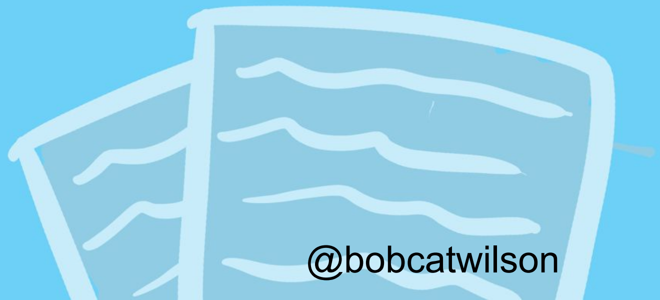
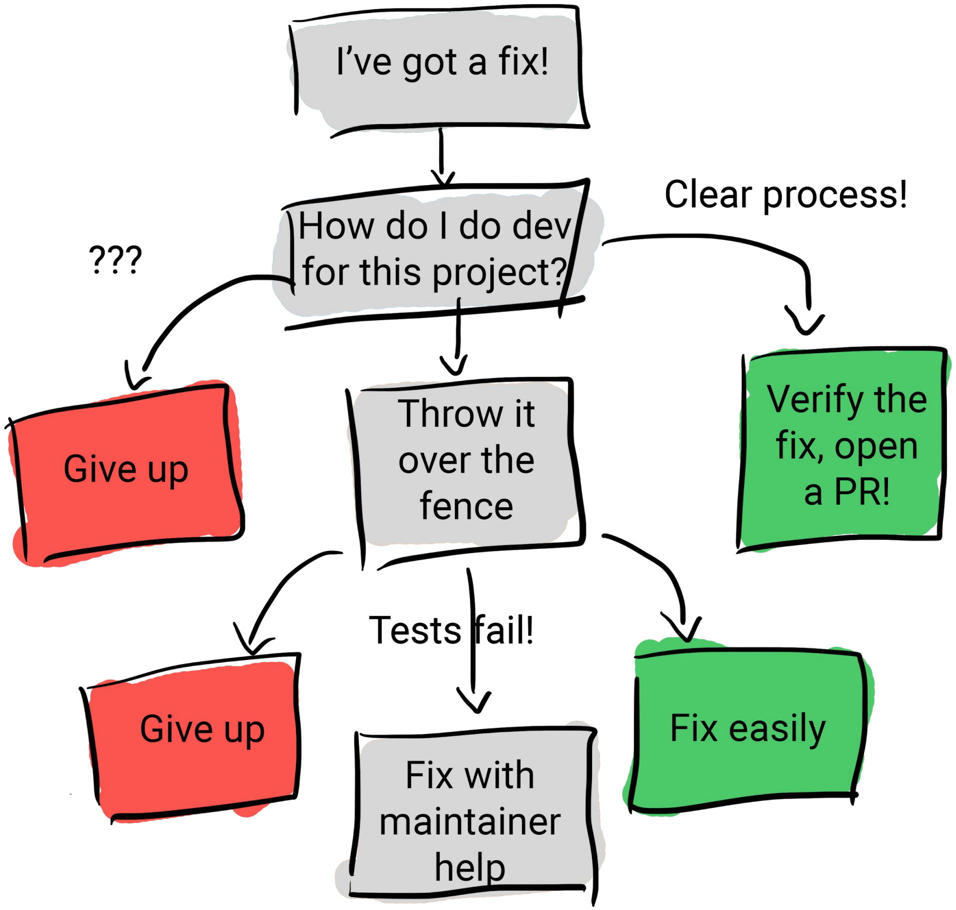


CONTRIBUTING.md
and
DEVELOPMENT.md

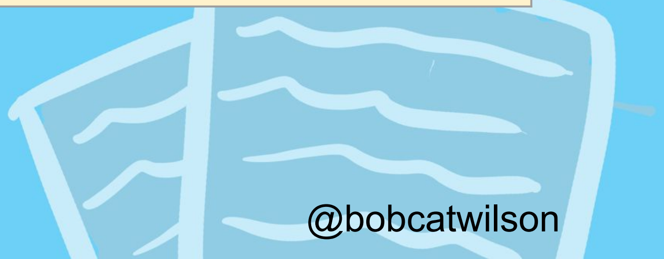


@bobcatwilson

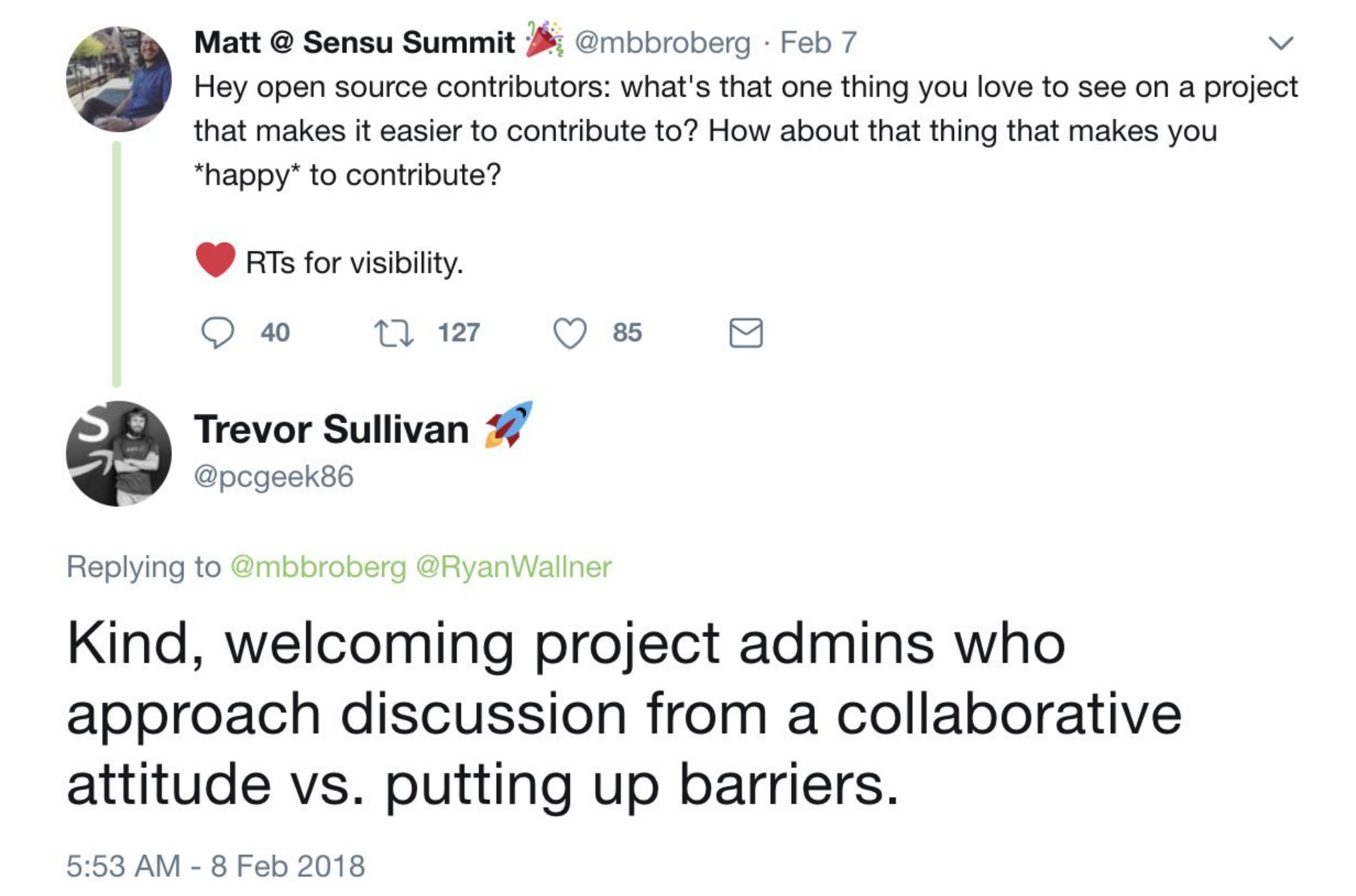


@bobcatwilson

CONTRIBUTING.md	**DEVELOPMENT.md**
Standard recognized by GitHub (e.g., integrated into PRs)	Extends CONTRIBUTING.md (less standard)



CONTRIBUTING.md	DEVELOPMENT.md
HOW to contribute to your repo. <u>Examples:</u> - PR process - Issue requirements - Commit message style	**WHAT** a maintainer/contributor does. <u>Examples:</u> - Build steps - Running tests - Debugging tips



Matt @ Sensu Summit 🎉 @mbbroberg · Feb 7

Hey open source contributors: what's that one thing you love to see on a project that makes it easier to contribute to? How about that thing that makes you *happy* to contribute?

❤ RTs for visibility.

💬 40 🔁 127 ♡ 85 ✉

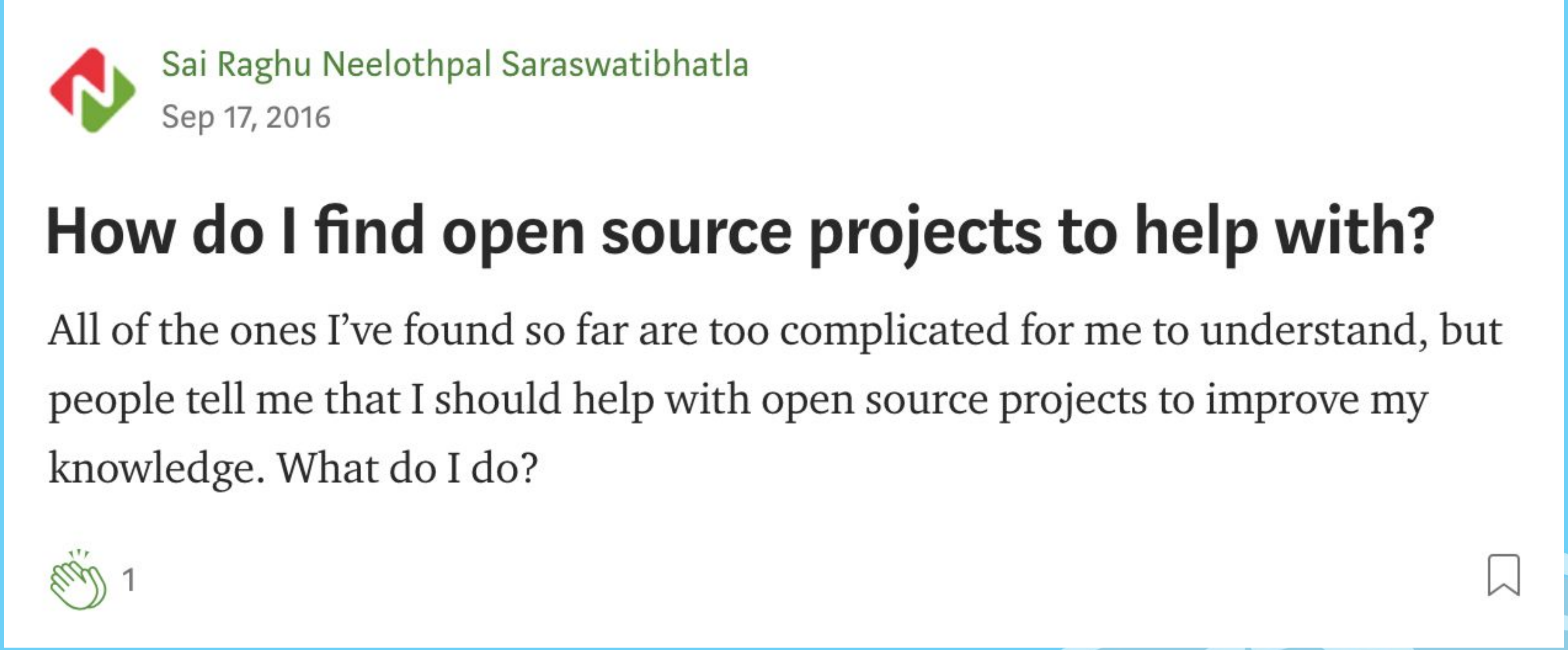
Trevor Sullivan 🚀
@pcgeek86

Replying to @mbbroberg @RyanWallner

Kind, welcoming project admins who approach discussion from a collaborative attitude vs. putting up barriers.

5:53 AM - 8 Feb 2018

@bobcatwilson



Sai Raghu Neelothpal Saraswatibhatla

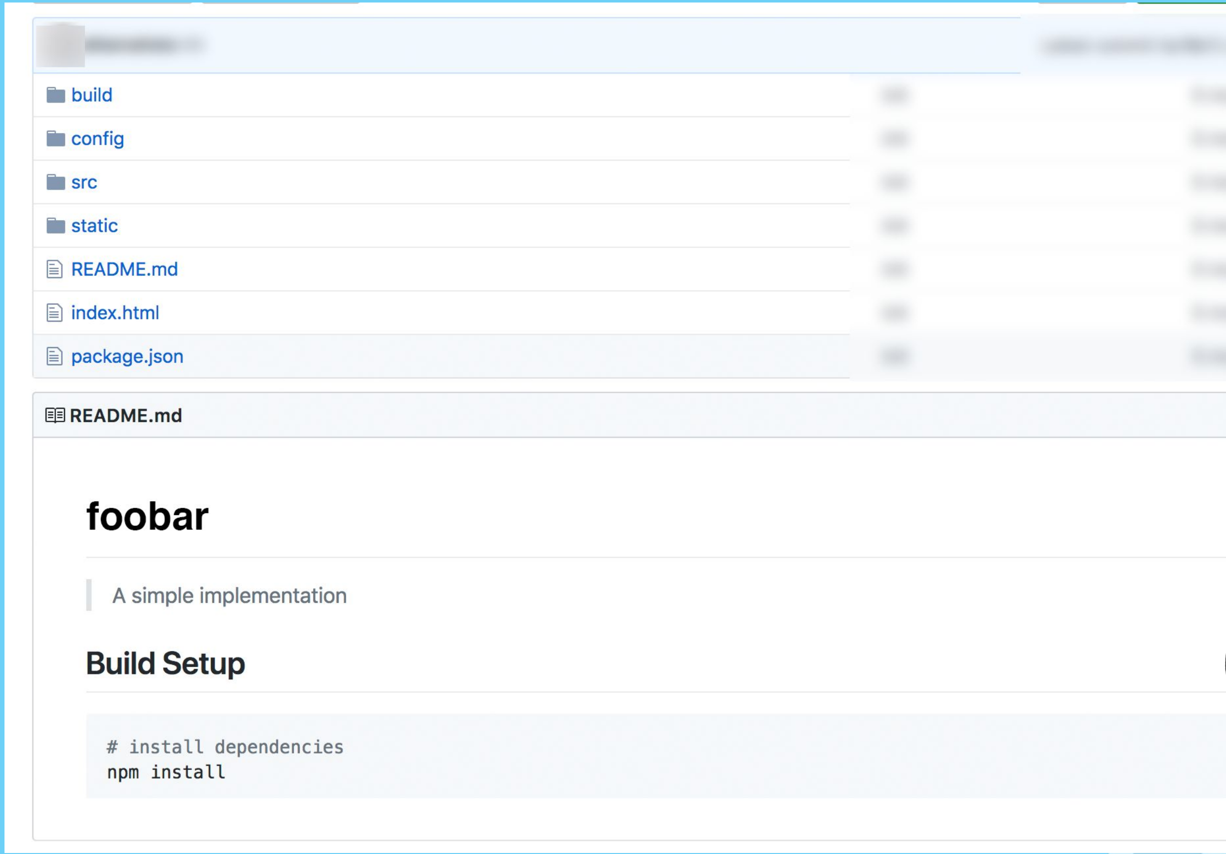
Sep 17, 2016

How do I find open source projects to help with?

All of the ones I’ve found so far are too complicated for me to understand, but people tell me that I should help with open source projects to improve my knowledge. What do I do?

1

@bobcatwilson



- build
- config
- src
- static
- README.md
- index.html
- package.json

README.md

foobar

> A simple implementation

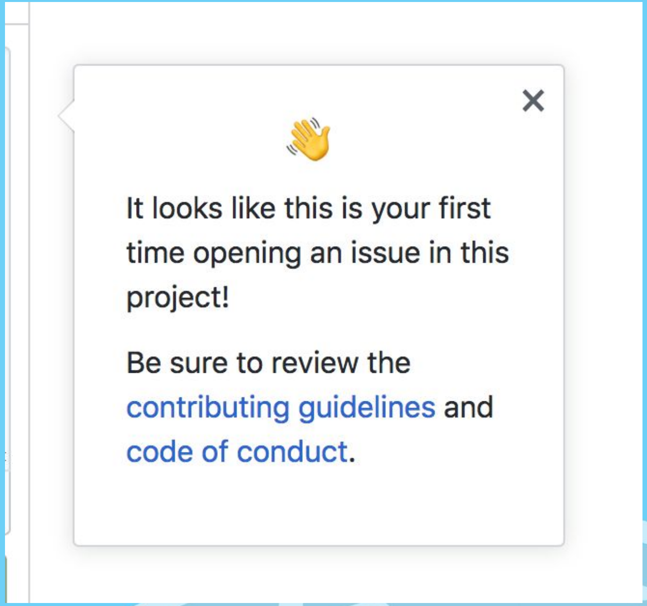
Build Setup

```
# install dependencies
npm install
```

@bobcatwilson

How to write a great CONTRIBUTING.md

- Be friendly :D
- This is the welcome mat to your repo!
- A greeting to potential new contributors!
- The beginning of a new relationship

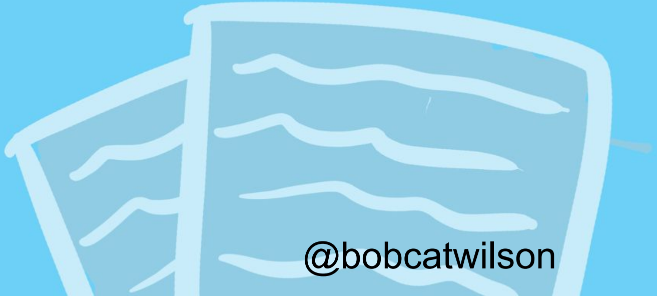


It looks like this is your first time opening an issue in this project!

Be sure to review the contributing guidelines and code of conduct.

How to write a great CONTRIBUTING.md

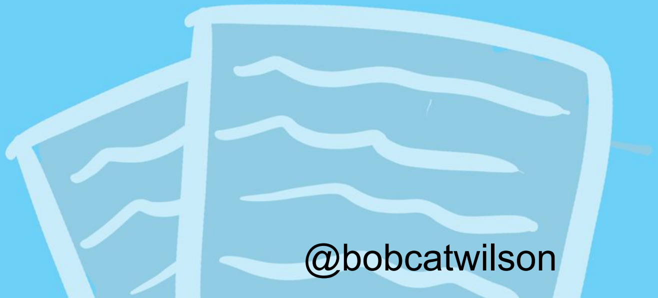
- How to open an issue
- How to suggest features
- What contributions you’re looking for
- Project philosophy
- Project roadmaps
- Slack/group chat/mailing lists



@bobcatwilson

If all projects were the same….

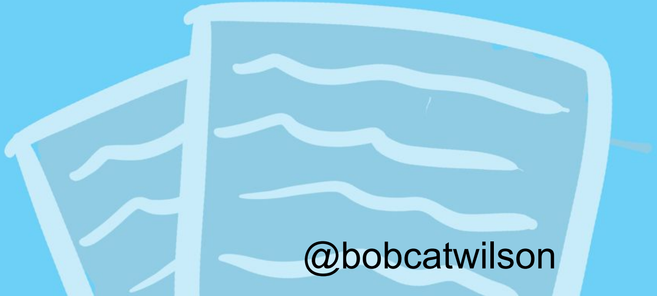
- Who here uses Go?



@bobcatwilson

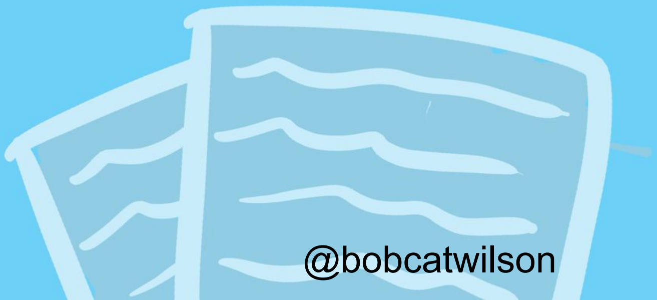
If all projects were the same….

- Who here uses Go?
- Who builds and tests **ONLY** with:
  - `go test`
  - `go build`



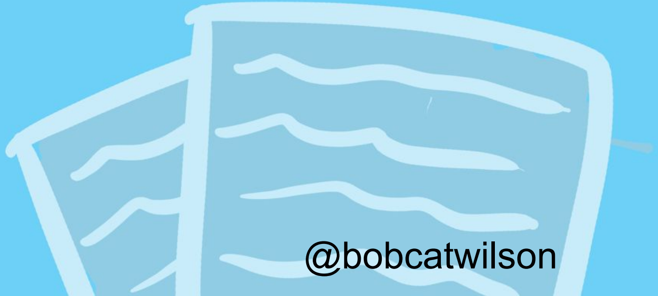
If all projects were the same....

- Who here uses Go?
- Who builds and tests **ONLY** with:
  - `go test`
  - `go build`
- i.e. you never have to use Makefiles, or scripts, etc.



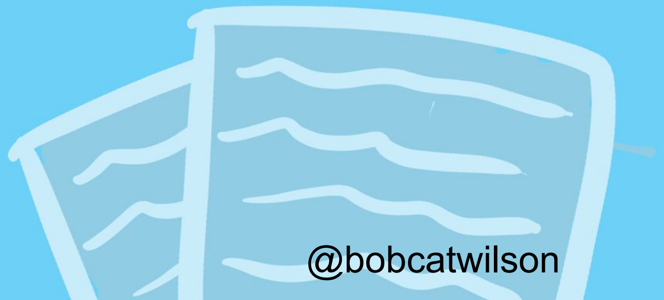
@bobcatwilson

~~Unless all projects are identical,~~
If you want contributors,
you need to explain how your project works!



@bobcatwilson

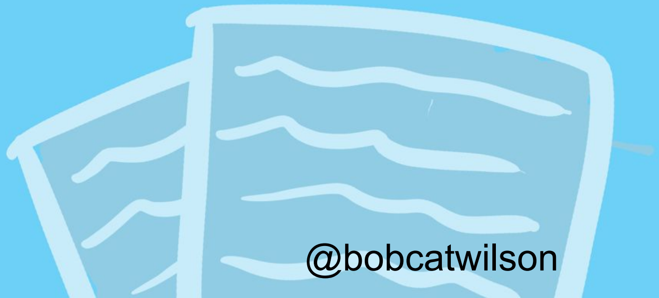
Get the process out of your brain and into markdown!



@bobcatwilson

How to write a great DEVELOPMENT.md

- The less you assume, the more people can contribute!
- Even super experienced folks:
  - Are new to your project
  - May use different tools
  - Have had different experiences



@bobcatwilson

Even experienced devs use different tools

Jaz uses:

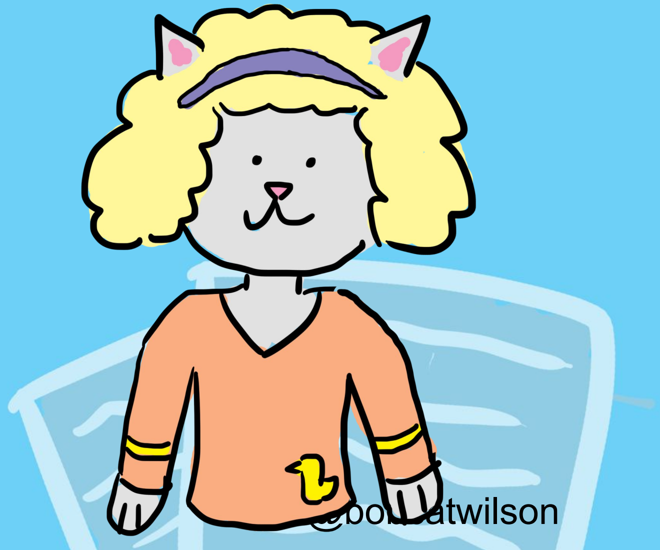
- Github
- Go
- Kubernetes

Andy uses:

- Java
- SVN
- In-house bare metal

Wendy uses:

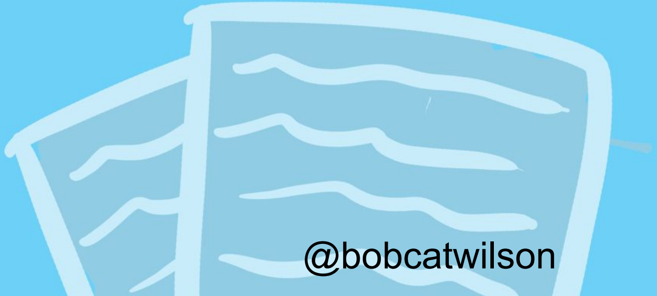
- C#
- Visual Studio
- Azure



@bombatwilson

How to write a great DEVELOPMENT.md

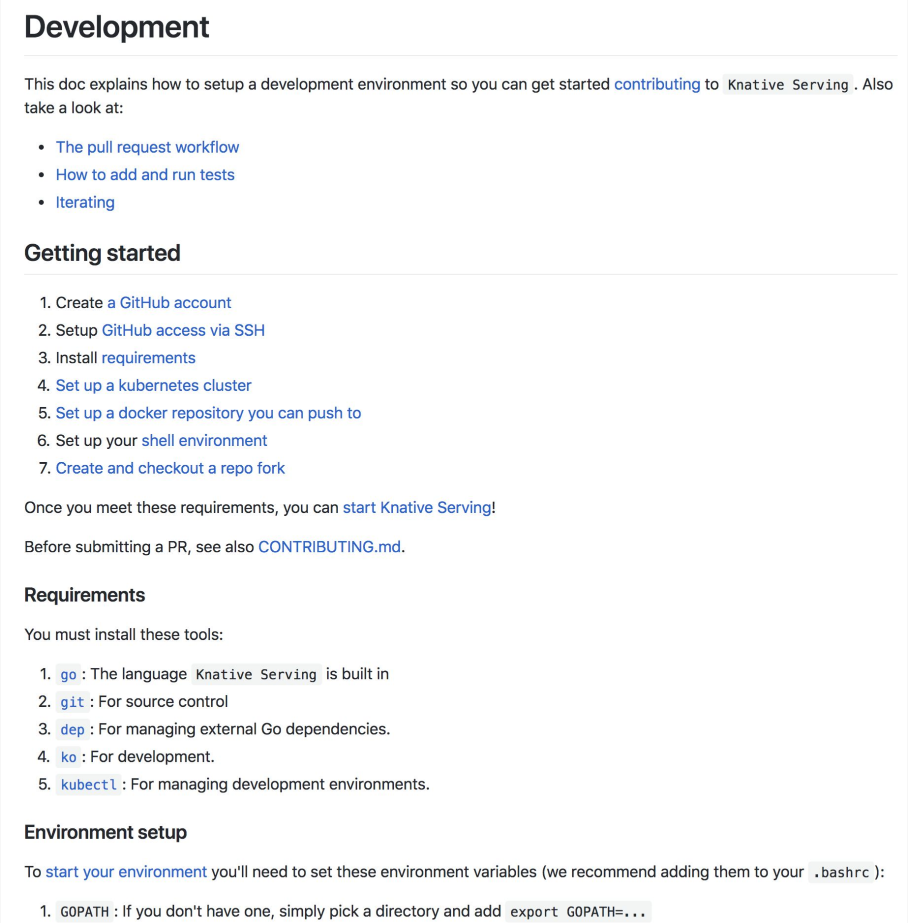
- How to fork
- How to setup an environment for development
  - Tool and resource requirements
  - Interacting with the system
- How to iterate
  - How do you check something works? e.g. tests, poking manually
  - e.g. keeping vendor/ up to date, redeploying, cleaning up



@bobcatwilson

Example DEVELOPMENT.md

knative/serving DEVELOPMENT.md



Development

This doc explains how to setup a development environment so you can get started contributing to `Knative Serving`. Also take a look at:

- The pull request workflow
- How to add and run tests
- Iterating

Getting started

1. Create a GitHub account
2. Setup GitHub access via SSH
3. Install requirements
4. Set up a kubernetes cluster
5. Set up a docker repository you can push to
6. Set up your shell environment
7. Create and checkout a repo fork

Once you meet these requirements, you can start Knative Serving!

Before submitting a PR, see also CONTRIBUTING.md.

Requirements

You must install these tools:

1. `go` : The language `Knative Serving` is built in
2. `git` : For source control
3. `dep` : For managing external Go dependencies.
4. `ko` : For development.
5. `kubectl` : For managing development environments.

Environment setup

To start your environment you'll need to set these environment variables (we recommend adding them to your `.bashrc`):

1. `GOPATH` : If you don't have one, simply pick a directory and add `export GOPATH=...`

1. Issues
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   +
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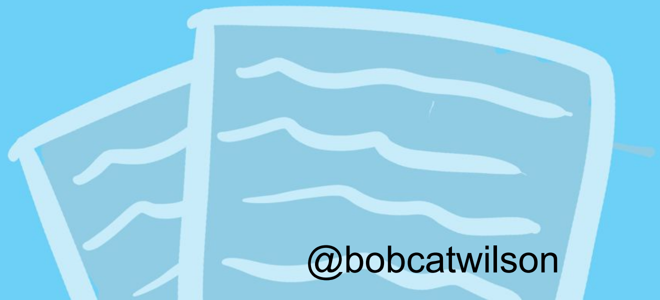
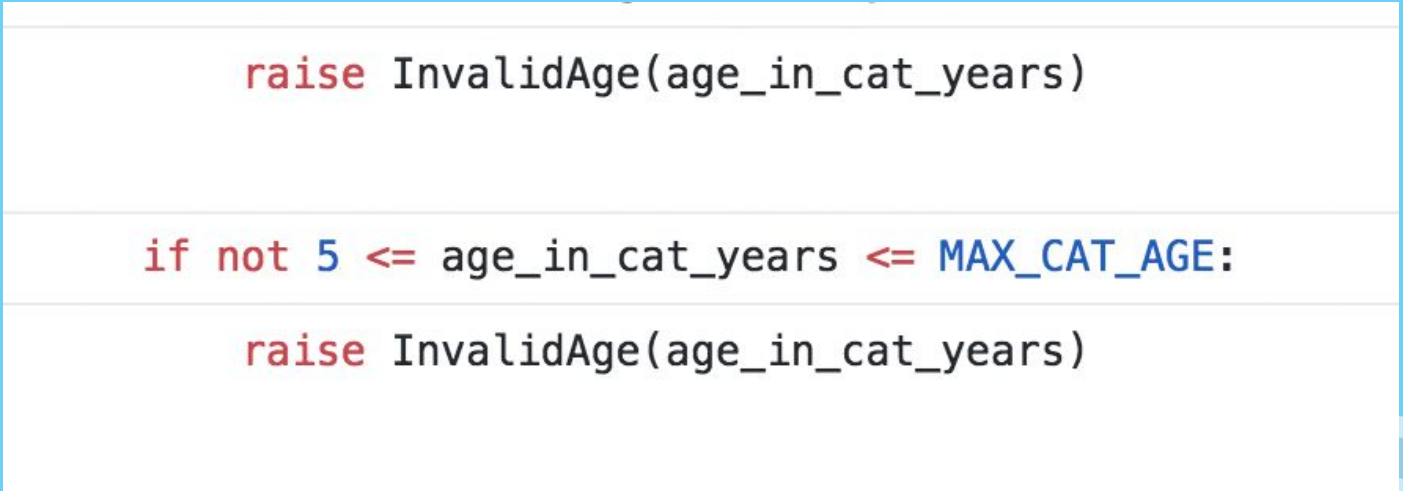
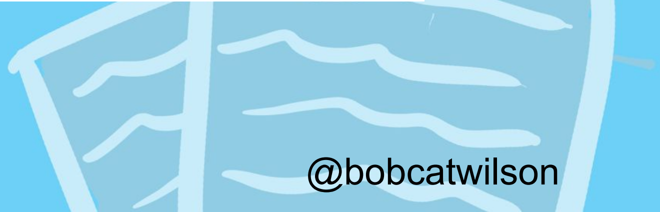


Jaz found a bug in your lib!



```
        raise InvalidAge(age_in_cat_years)

    if not 5 <= age_in_cat_years <= MAX_CAT_AGE:
        raise InvalidAge(age_in_cat_years)
```



@bobcatwilson

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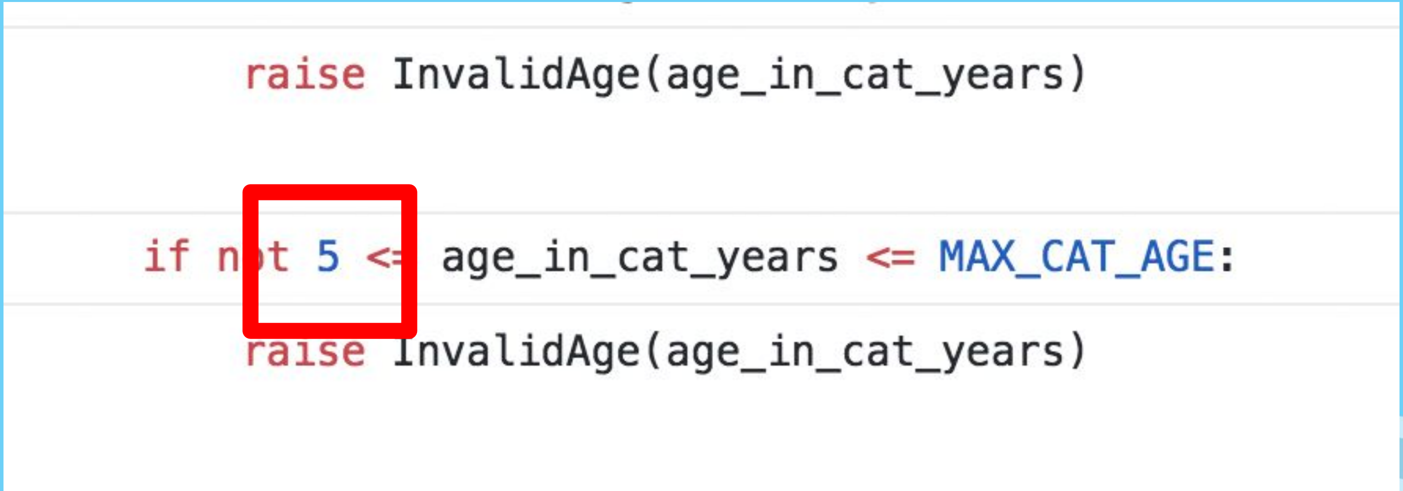

```
        raise InvalidAge(age_in_cat_years)

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```
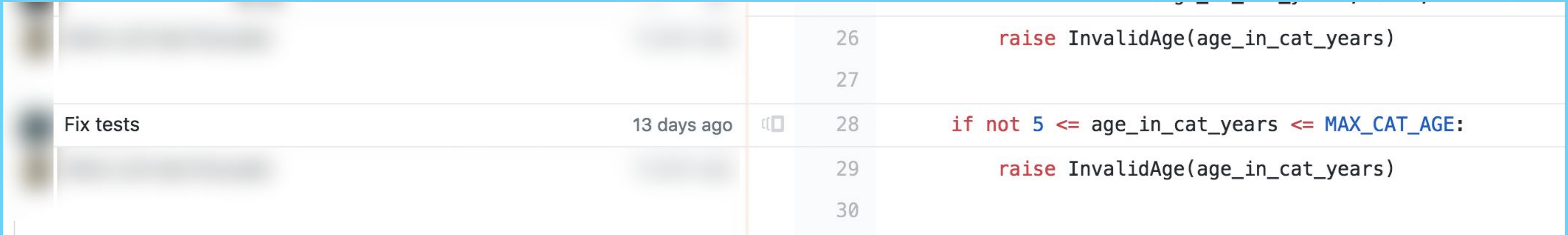

Why 5?



Fix tests 13 days ago

```
        raise InvalidAge(age_in_cat_years)

    if not 5 <= age_in_cat_years <= MAX_CAT_AGE:
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```
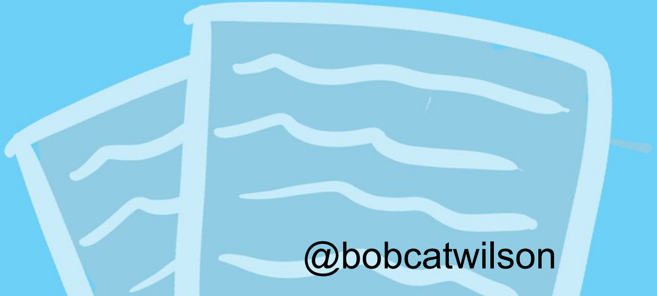
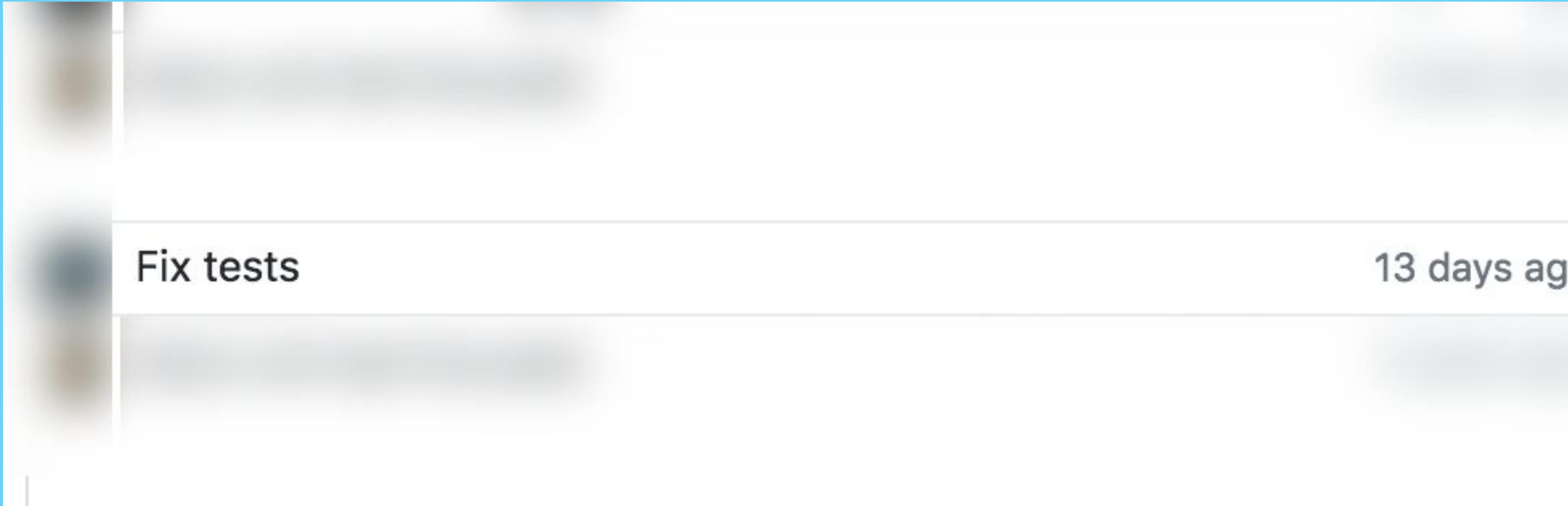



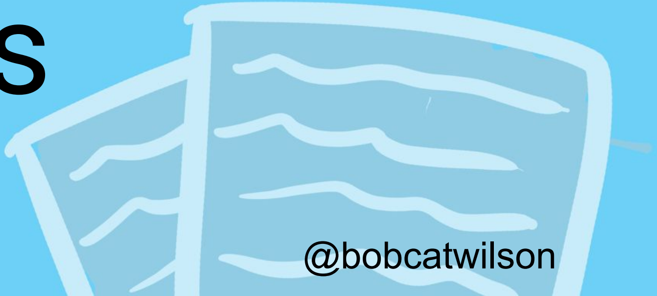
Why 5?



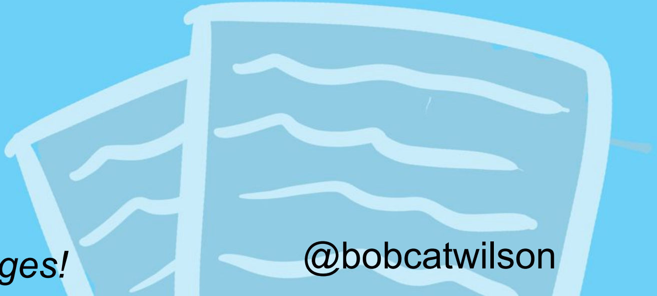
Fix tests 13 days ag

@bobcatwilson

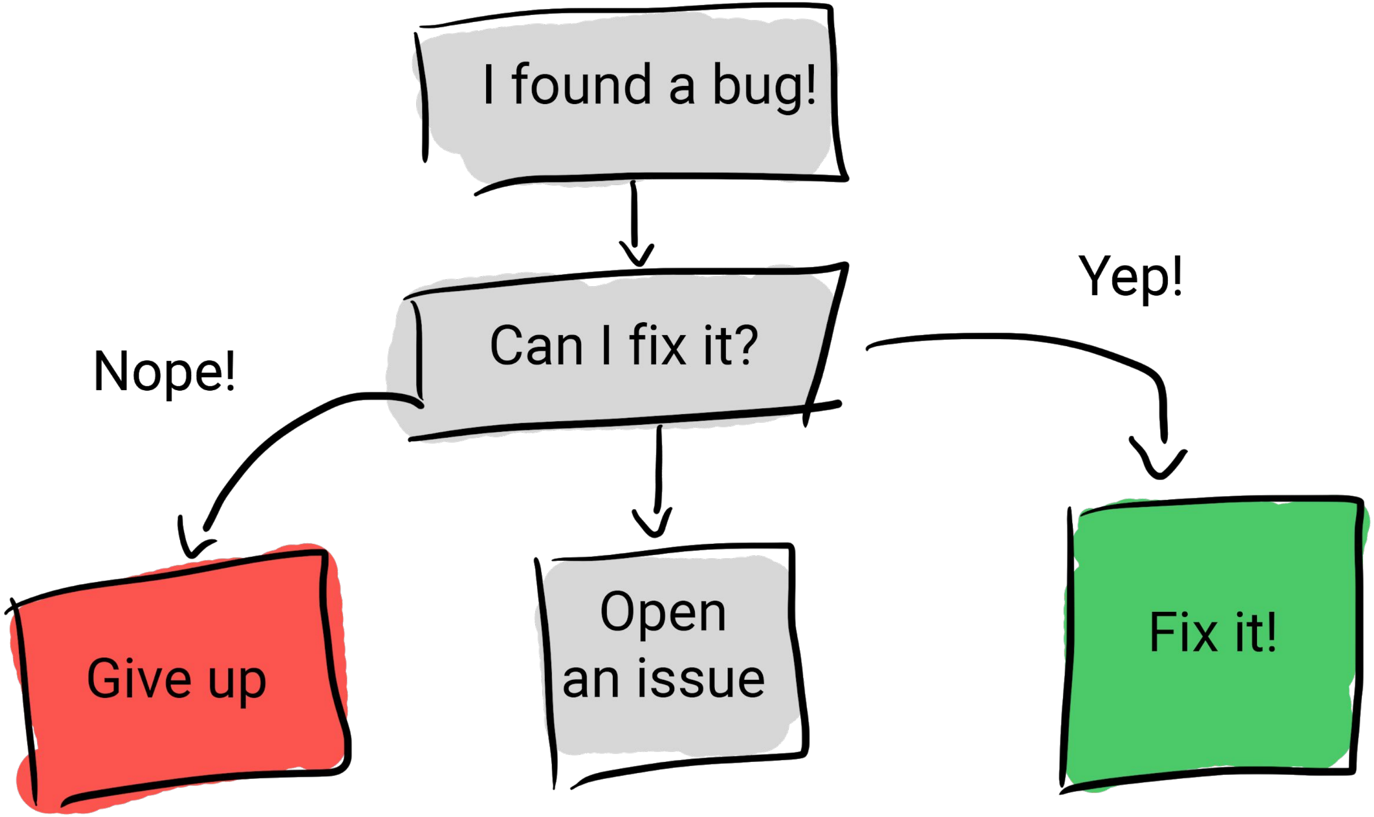
1. Issues
2. CONTRIBUTING.md
   +
   DEVELOPMENT.md
3. Commit messages



Commit Messages



Thanks Steven Erenst for teaching me about the value of commit messages!



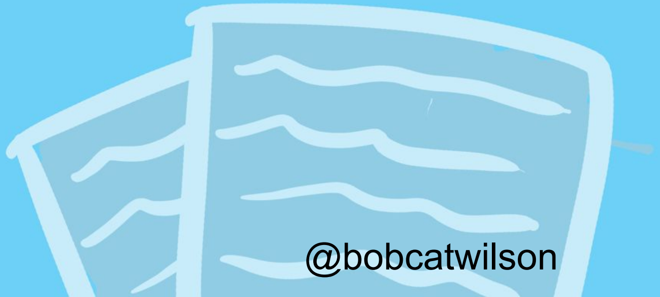
@bobcatwilson

Commits often look like this:

“Fix missing logs”

“Fixes #22 and #5”

“Bump the timeout to 20 min”



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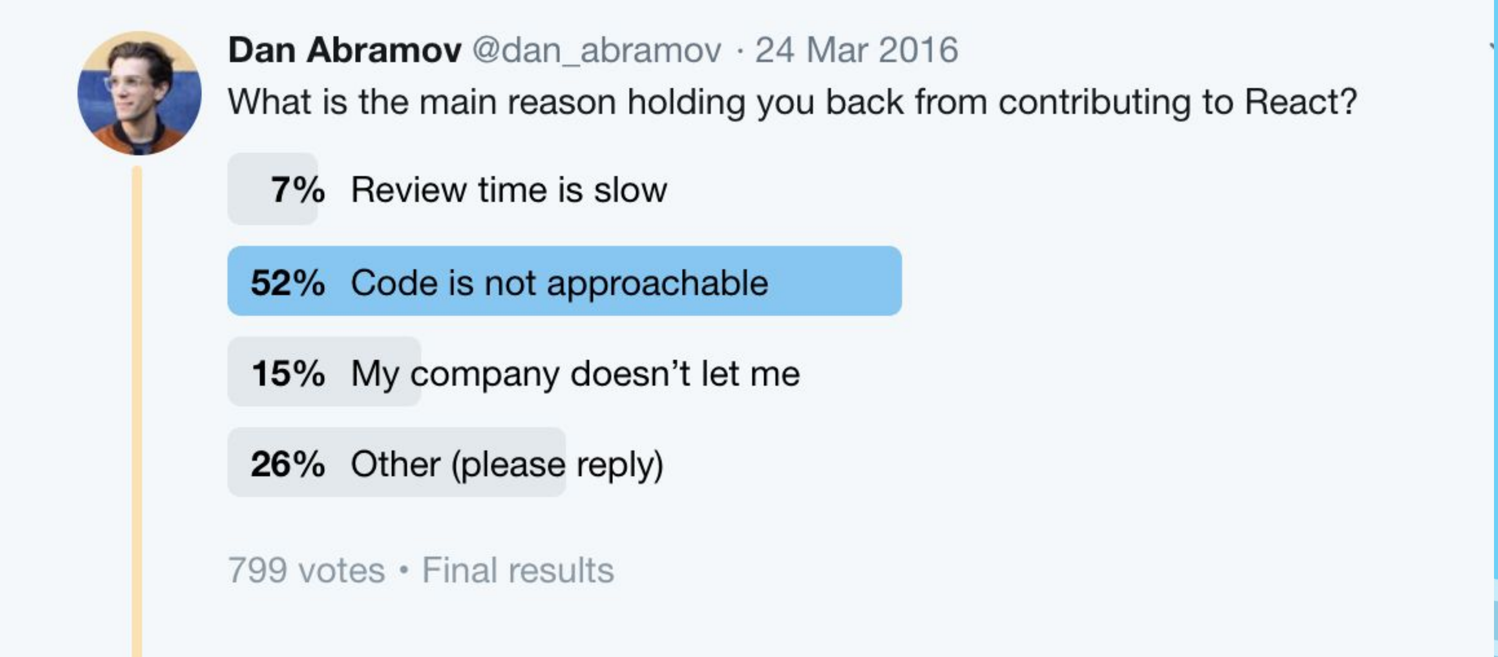


Dan Abramov @dan_abramov · 24 Mar 2016

What is the main reason holding you back from contributing to React?

7% Review time is slow

52% Code is not approachable

15% My company doesn't let me

26% Other (please reply)

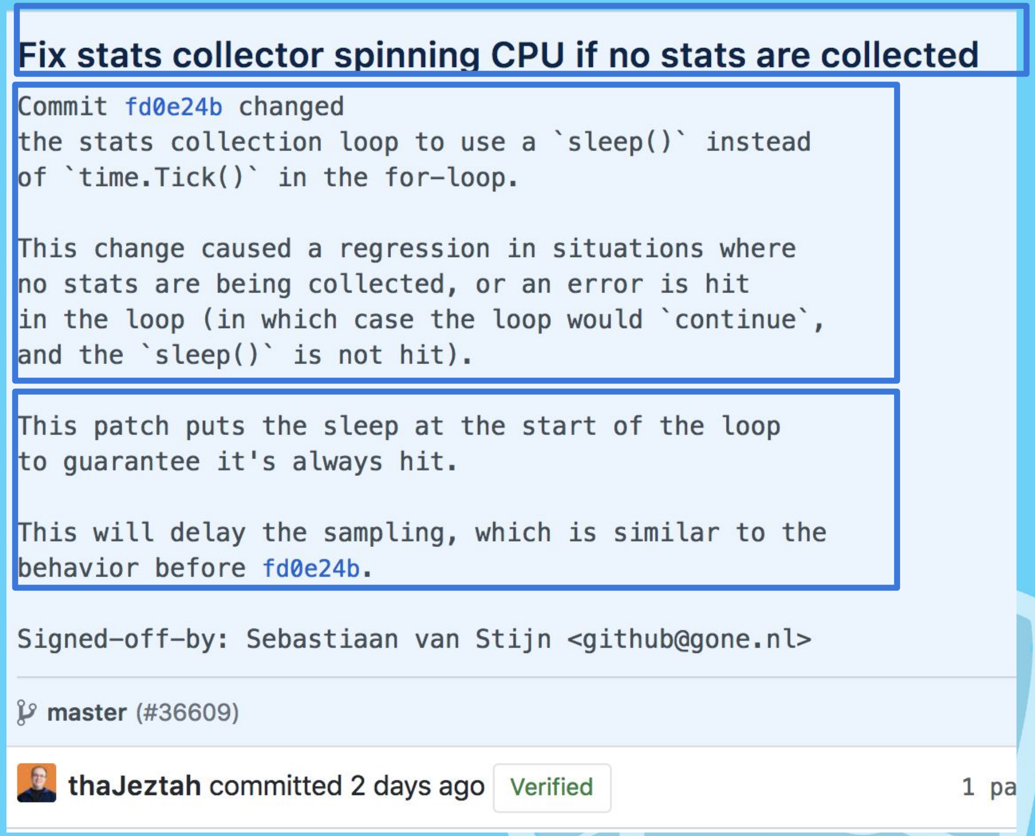
799 votes • Final results

Example good commit message

Subject Line

Background

Description



Fix stats collector spinning CPU if no stats are collected

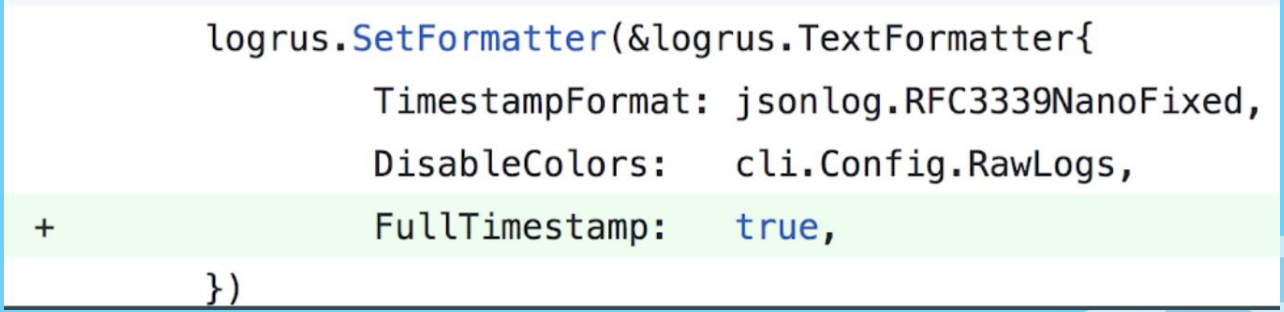
```
Commit fd0e24b changed
the stats collection loop to use a `sleep()` instead
of `time.Tick()` in the for-loop.

This change caused a regression in situations where
no stats are being collected, or an error is hit
in the loop (in which case the loop would `continue`,
and the `sleep()` is not hit).

This patch puts the sleep at the start of the loop
to guarantee it's always hit.

This will delay the sampling, which is similar to the
behavior before fd0e24b.

Signed-off-by: Sebastiaan van Stijn <github@gone.nl>
```

master (#36609)

thaJeztah committed 2 days ago Verified 1 pa

y tho

“logrus use full timestamp”

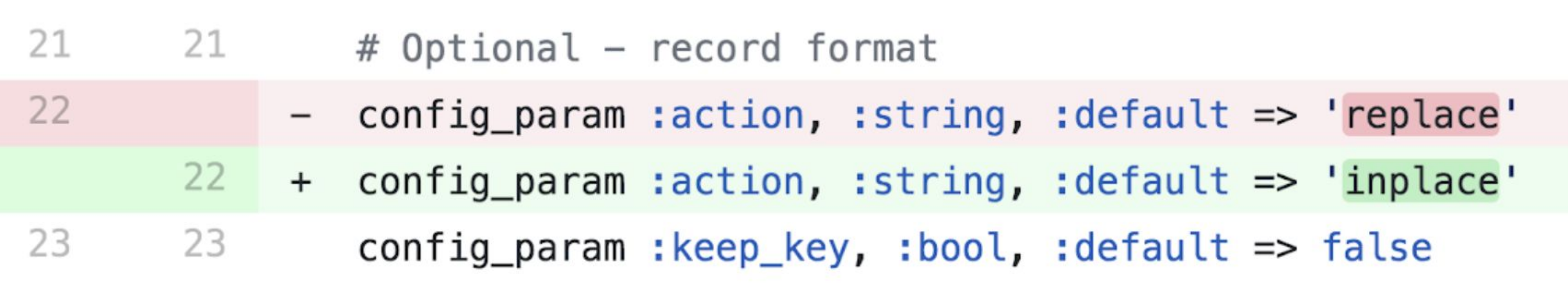


```
        logrus.SetFormatter(&logrus.TextFormatter{
                TimestampFormat: jsonlog.RFC3339NanoFixed,
                DisableColors:   cli.Config.RawLogs,
+               FullTimestamp:   true,
        })
```

@bobcatwilson

y tho

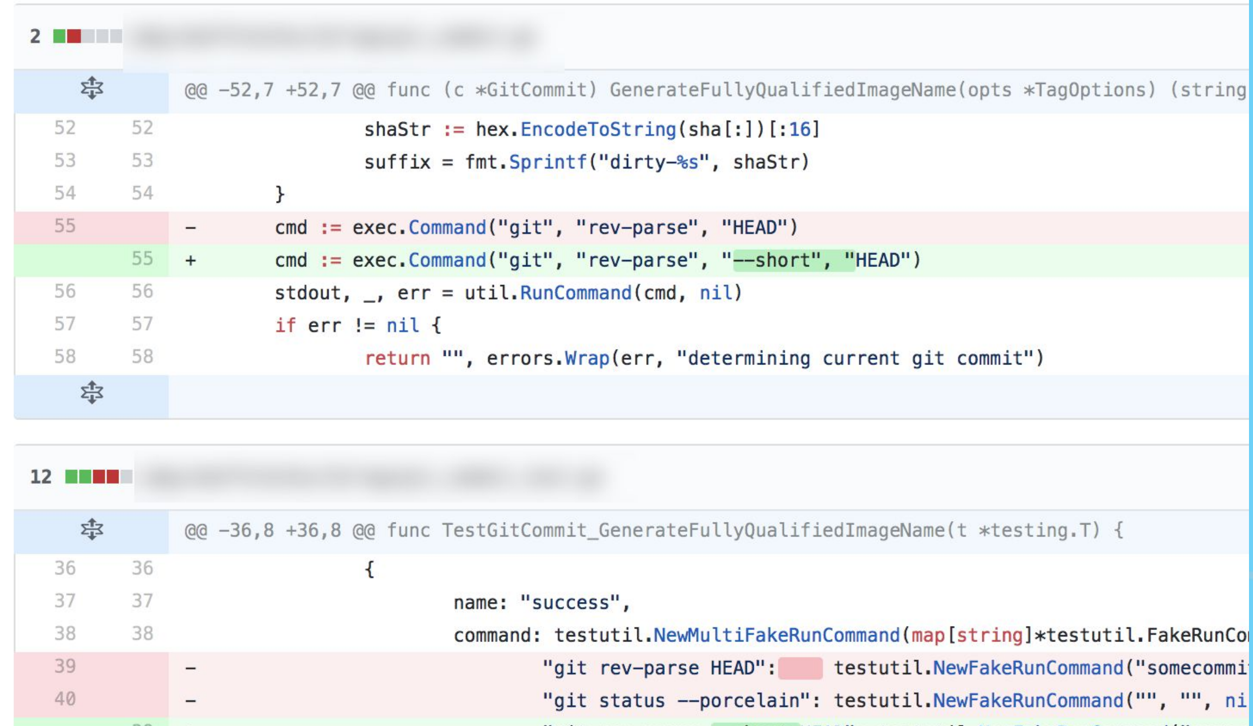
“Change default action to ‘inplace’”



```diff
    # Optional - record format
-   config_param :action, :string, :default => 'replace'
+   config_param :action, :string, :default => 'inplace'
    config_param :keep_key, :bool, :default => false
```

y tho

“Change git commit to use short ID instead”



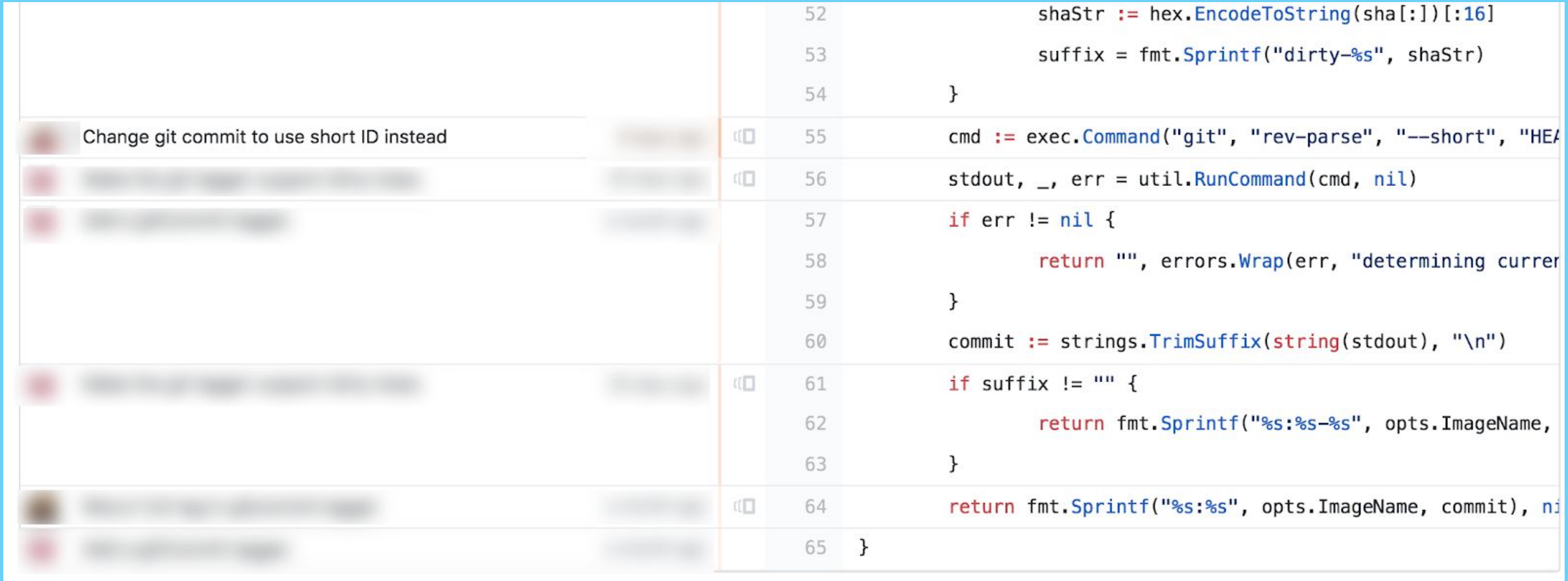
2 🟩🟥 [redacted]

```
@@ -52,7 +52,7 @@ func (c *GitCommit) GenerateFullyQualifiedImageName(opts *TagOptions) (string
                shaStr := hex.EncodeToString(sha[:])[:16]
                suffix = fmt.Sprintf("dirty-%s", shaStr)
        }
-       cmd := exec.Command("git", "rev-parse", "HEAD")
+       cmd := exec.Command("git", "rev-parse", "--short", "HEAD")
        stdout, _, err = util.RunCommand(cmd, nil)
        if err != nil {
                return "", errors.Wrap(err, "determining current git commit")
```

12 🟩🟩🟥🟥 [redacted]

```
@@ -36,8 +36,8 @@ func TestGitCommit_GenerateFullyQualifiedImageName(t *testing.T) {
                {
                        name: "success",
                        command: testutil.NewMultiFakeRunCommand(map[string]*testutil.FakeRunCo
-                               "git rev-parse HEAD":    testutil.NewFakeRunCommand("somecommi
-                               "git status --porcelain": testutil.NewFakeRunCommand("", "", ni
```

Context switching

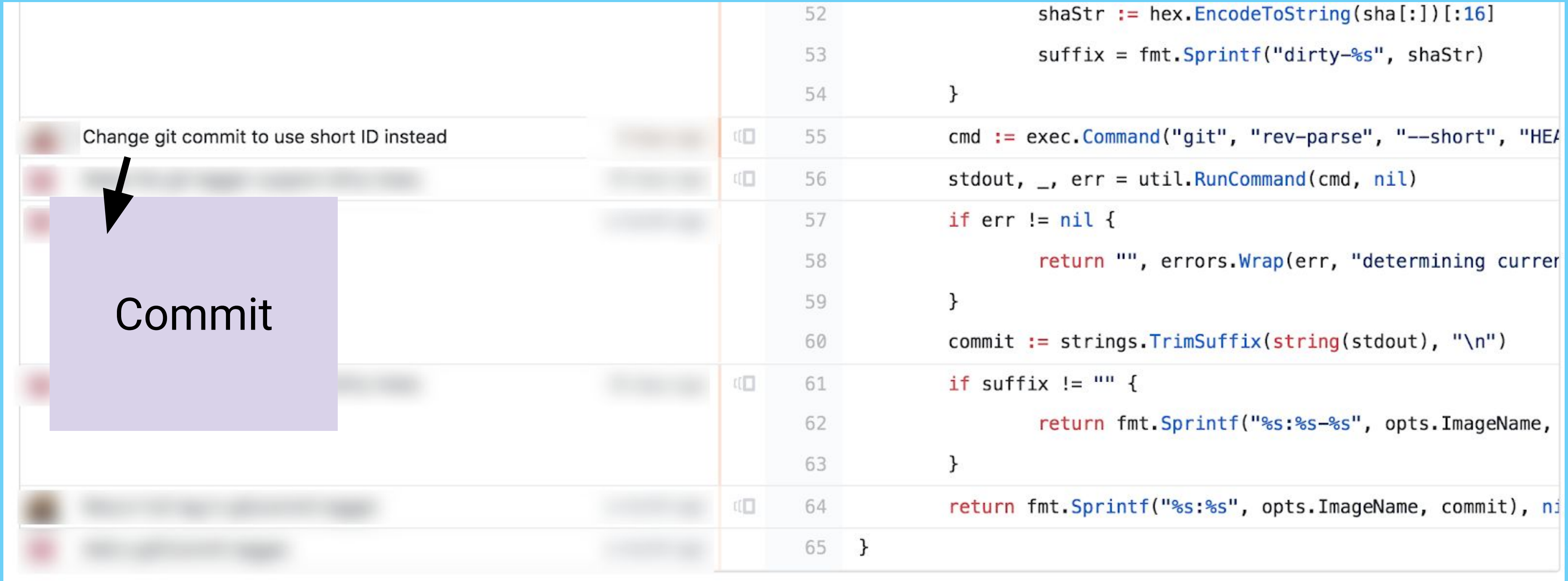


Change git commit to use short ID instead

[redacted]

```
		shaStr := hex.EncodeToString(sha[:])[:16]
		suffix = fmt.Sprintf("dirty-%s", shaStr)
	}
	cmd := exec.Command("git", "rev-parse", "--short", "HEA
	stdout, _, err = util.RunCommand(cmd, nil)
	if err != nil {
		return "", errors.Wrap(err, "determining curren
	}
	commit := strings.TrimSuffix(string(stdout), "\n")
	if suffix != "" {
		return fmt.Sprintf("%s:%s-%s", opts.ImageName,
	}
	return fmt.Sprintf("%s:%s", opts.ImageName, commit), ni
}
```

Context switching



Change git commit to use short ID instead

Commit

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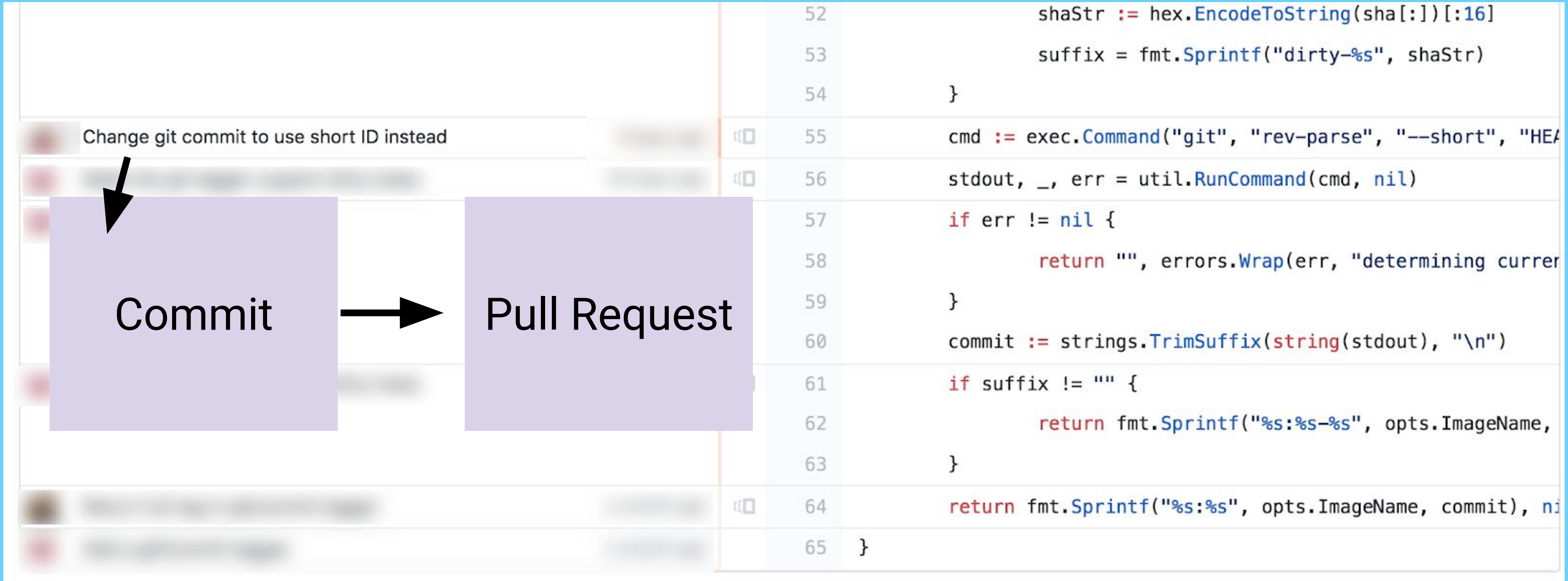
```

@bobcatwilson

Context switching



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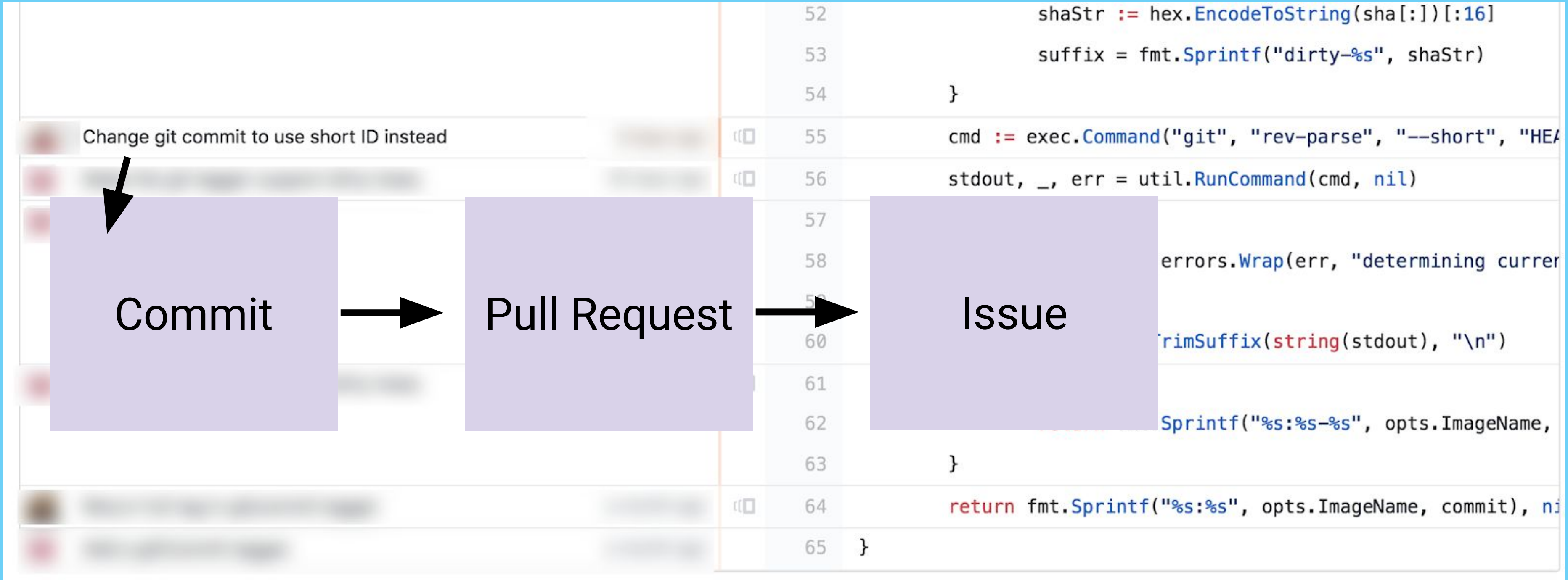
```

@bobcatwilson

Context switching



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        shaStr := hex.EncodeToString(sha[:])[:16]
        suffix = fmt.Sprintf("dirty-%s", shaStr)
    }
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    stdout, _, err = util.RunCommand(cmd, nil)

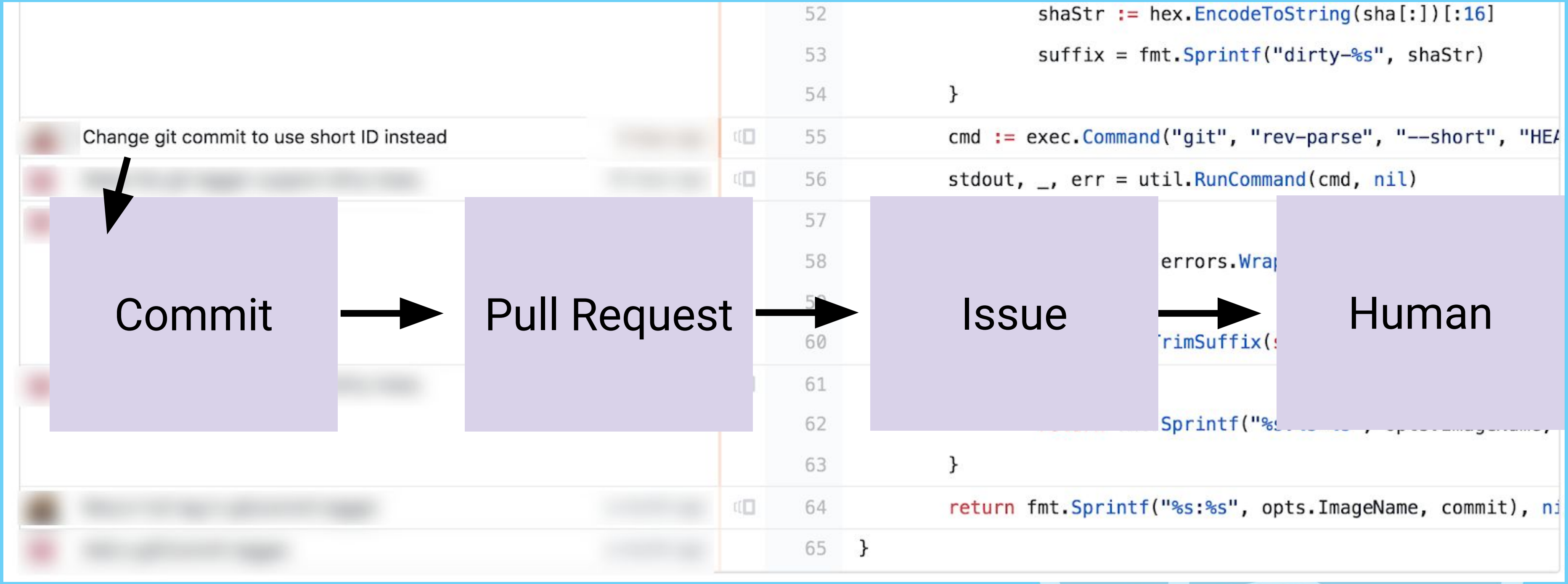
                 errors.Wrap(err, "determining curre

                rimSuffix(string(stdout), "\n")

                 Sprintf("%s:%s-%s", opts.ImageName,
    }
    return fmt.Sprintf("%s:%s", opts.ImageName, commit), ni
}
```

Commit → Pull Request → Issue

Context switching



Change git commit to use short ID instead

```
            shaStr := hex.EncodeToString(sha[:])[:16]
            suffix = fmt.Sprintf("dirty-%s", shaStr)
        }
        cmd := exec.Command("git", "rev-parse", "--short", "HEA
        stdout, _, err = util.RunCommand(cmd, nil)

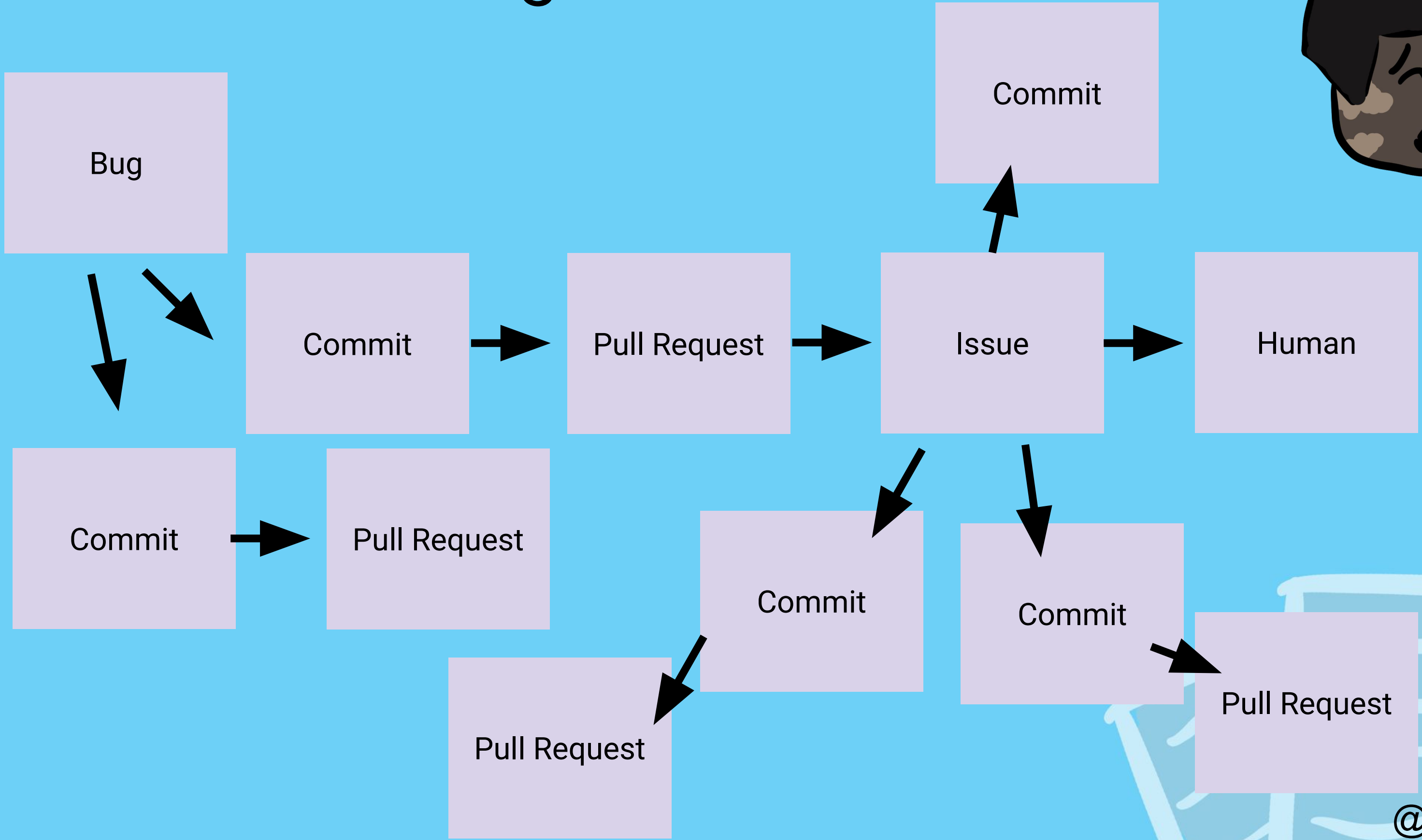
                    errors.Wra

                    rimSuffix(

                    Sprintf("%
        }
        return fmt.Sprintf("%s:%s", opts.ImageName, commit), ni
}
```

Commit → Pull Request → Issue → Human

Context switching



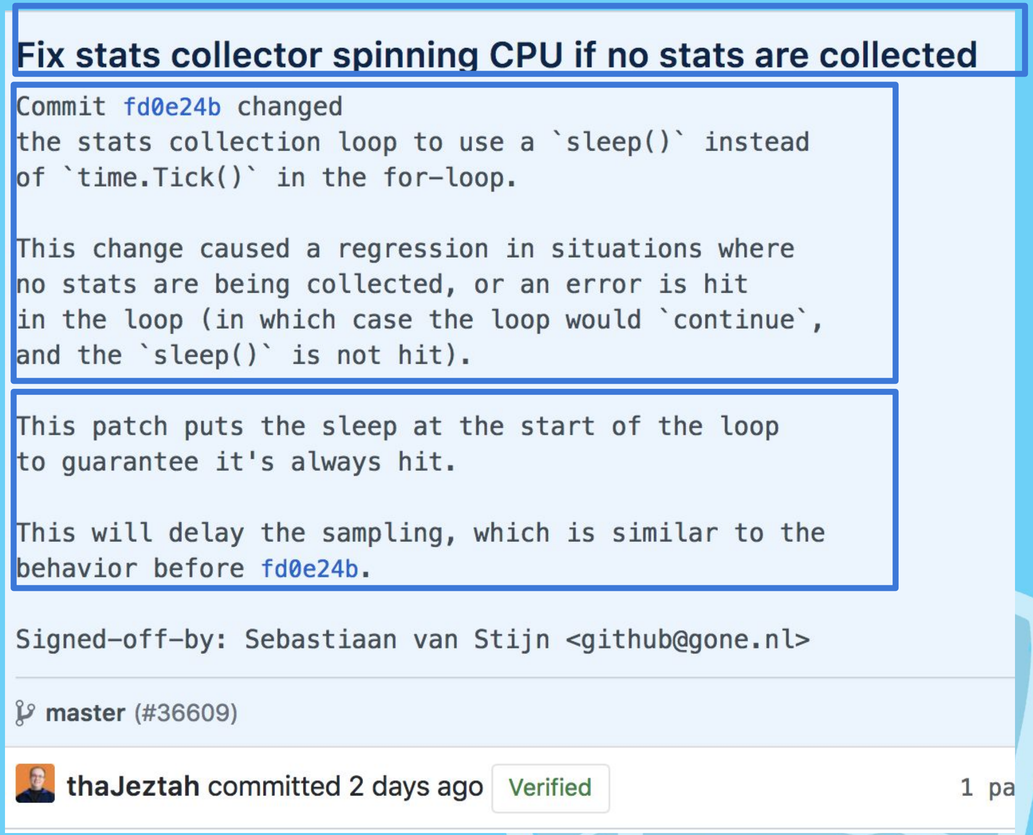
@bobcatwilson

Example good commit message

Subject Line

Background

Description



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to guarantee it's always hit.

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Signed-off-by: Sebastiaan van Stijn <github@gone.nl>
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master (#36609)

thaJeztah committed 2 days ago Verified

How to write great commit messages

- Subject line (what does this commit do?)
- Body that explains what and why vs. how
- Two paragraphs

@bobcatwilson

What + Why v.s. How

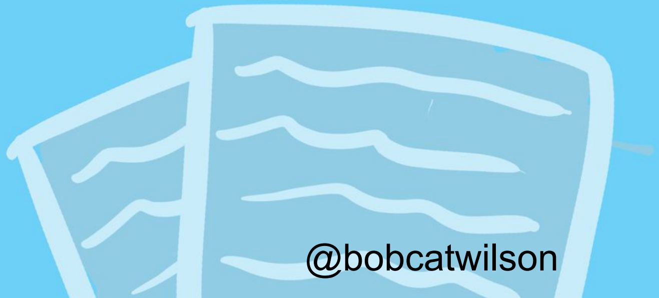
How do you fill 2 paragraphs?

- **What** is the problem being solved?
- **Why** is this the best approach?
- **What** other approaches were considered?
- **What** side effects will this approach have?
- **What** future work remains to be done?

Thanks Thomas Stromberg!

@bobcatwilson

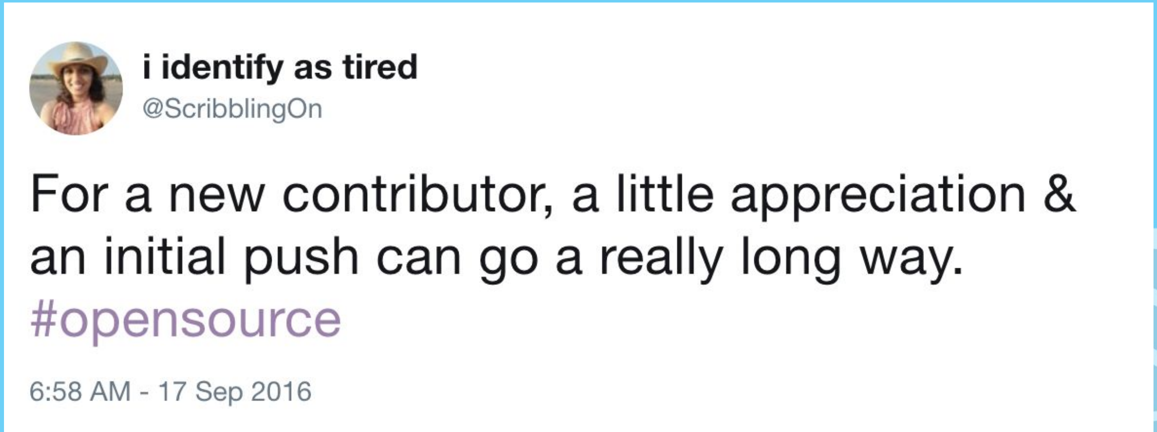
Great docs are a prereq
for a strong contributor base!



@bobcatwilson

Great docs for a better world!

- Remote first!
- Different lifestyles!
- People all over the globe!
- Welcome different kinds of contributors!



i identify as tired
@ScribblingOn

For a new contributor, a little appreciation & an initial push can go a really long way. #opensource

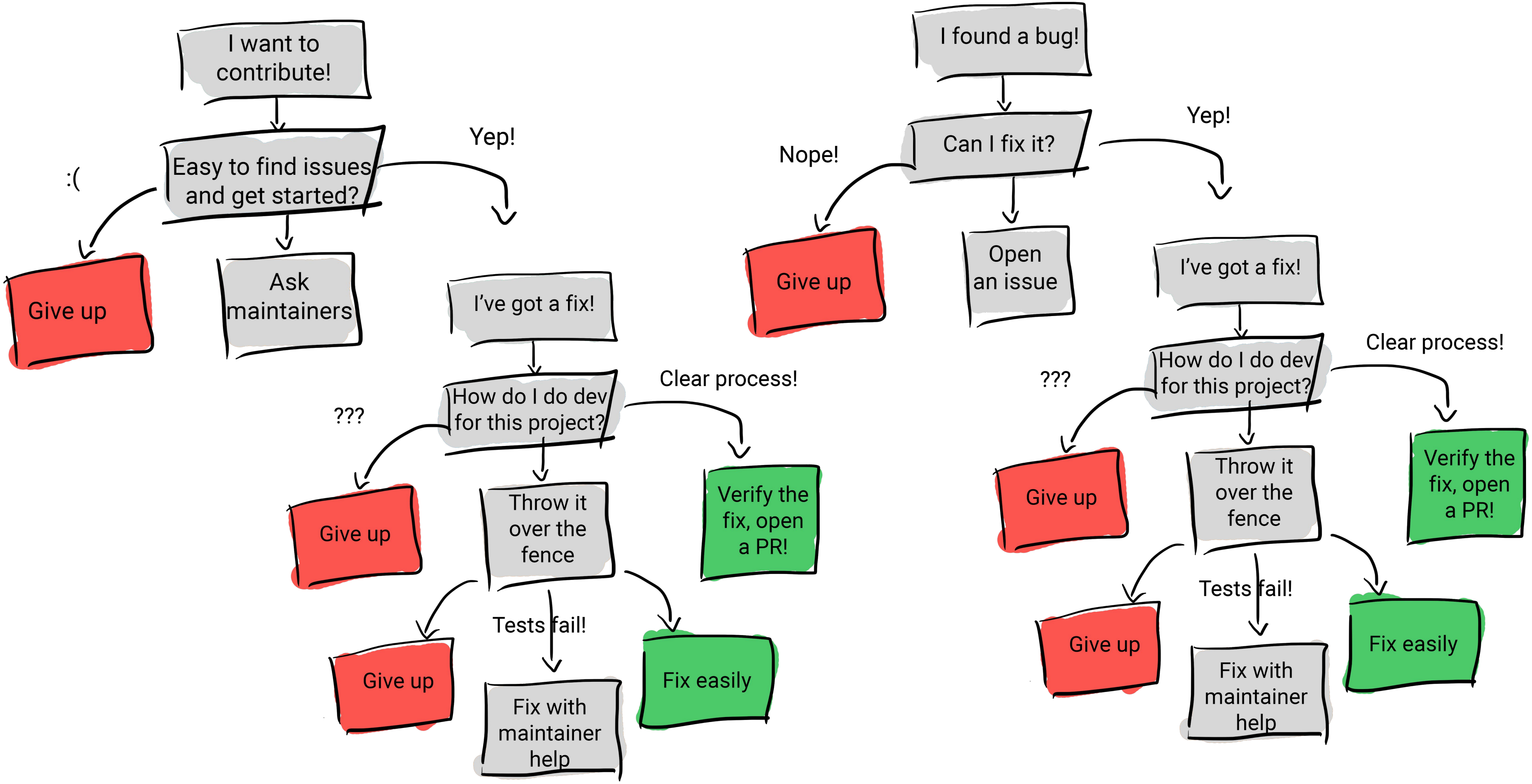
6:58 AM - 17 Sep 2016

@bobcatwilson

How?

Make docs part of your process!

1. Dogfood your own internal docs
2. Complete PR = Code + Tests + Docs



I want to contribute!

Easy to find issues and get started?

:(

Give up

Ask maintainers

Yep!

I've got a fix!

How do I do dev for this project?

???

Give up

Throw it over the fence

Give up

Tests fail!

Fix with maintainer help

Fix easily

Clear process!

Verify the fix, open a PR!

I found a bug!

Can I fix it?

Nope!

Give up

Open an issue

Yep!

I've got a fix!

How do I do dev for this project?

???

Give up

Throw it over the fence

Give up

Tests fail!

Fix with maintainer help

Fix easily

Clear process!

Verify the fix, open a PR!

@bobcatwilson

Thanks!

Links!

CONTRIBUTING.md:
https://help.github.com/articles/setting-guidelines-for-repository-contributors/
https://opensource.guide/starting-a-project/#writing-your-contributing-guidelines
https://github.com/nayafia/contributing-template/blob/master/CONTRIBUTING-template.md

Community building:
https://help.github.com/categories/building-a-strong-community/
https://opensource.guide/starting-a-project/
https://medium.freecodecamp.org/how-to-attract-new-contributors-to-your-open-source-project-46f8b791d787

GitHub and issues:
https://help.github.com/articles/using-templates-to-encourage-high-quality-issues-and-pull-requests-in-your-repository/
https://github.com/codeforamerica/howto/blob/master/Good-GitHub-Issues.md#writing-good-github-issues
https://help.github.com/articles/helping-new-contributors-find-your-project-with-labels/

Commit messages:
Implementing a Strong Code Review Culture
https://chris.beams.io/posts/git-commit/