Hi, I'm Sam!

- Germany > England > NYC
- PhD in computer science
- I've been working for several data-centric startups...
- ... and most recently, I was part of the company behind the open source project Great Expectations (greatexpectations.io)

Question time!

Have you contributed to an open source project before?
What is/was your motivation?
What was your experience, if you have?
If not yet, what would you like to know to get started?

→ Post in the chat!

Today's goal

At the end of this session, you will be able to
- find a project and task to get started with
- follow step-by-step instructions to make your first contribution

Getting started in open source

1: Background
What is "open source"?

3: Getting started
An end-to-end walkthrough

2: Motivation
Why should I get involved?

4: Wrap up
Time for Q&A

1: What is "open source"?

- Open source software = source code is openly available

- Open source projects (often)
  - welcome contributions
  - have an active developer community
  - hold events to welcome new contributors
  - … may be just a 1-person project

2: Why should I get involved?

- Fix bugs or add features to software **you use!**
- **Level up** your skills: git, coding, testing, documentation, training, branding...
- Add work to your **portfolio**/resume
- Be part of a **community**
- (Send things to Mars)

A 10 followers · 0 following · ☆ 27

Mars 2020 Helicopter Contributor

@InessaPawson contributed code to 1 repository used in the **Mars 2020 Helicopter Mission:**

numpy/numpy

It doesn't have to be code...

I've been renowned for my work on CocoaPods, but most people don't know that I actually don't do any real work on the CocoaPods tool itself. My time on the project is mostly spent doing things like documentation and working on branding.

— **@orta**, "Moving to OSS by default"

3: Getting started

- Finding a project and task
  - "Checklist" for projects
- Technical setup
  - Pre-requisites
  - Environment setup
  - Orientation
- Doing the thing!
  - Dev loop
  - Live demo!

Question time!

What's an open source tool or library you use a lot?
Have you come across any small bugs or "oh this would
be nice to have" ideas when using the software or the
documentation?

→ Post in the chat!

Finding a project and task

- Project you use a lot(!!)
- Open source sprints, hackathons, Hacktoberfest...
- "Good first issues" lists, e.g.
  - goodfirstissues.com/.dev
  - github.com/firstcontributions /first-contributions

- Browse "Issues" page in project's GitHub repo
- Filter labels for "good first issues", "beginners", etc.
- Or create an issue yourself, e.g. small improvement, bug fix, etc.

Filters ▾   🔍 is:issue is:open   🏷 Labels 16   🚩 Milestones 0   New issue

ⓘ 46 Open   ✓ 289 Closed

Author ▾   Label ▾   Projects ▾   Milestones ▾   Assignee ▾   Sort ▾

Filter by label   ✕

Filter labels

ⓘ Typos (Ext   🔴 bug   ⑂ 1
Contributo
                                      🟢 discussion
#38651 opene
                                      🟣 documentation   ection   💬 3
ⓘ Intellij IDE
                                      ⚪ duplicate
#38619 opene
                                      🔵 feature
ⓘ Slack Team
                                      🟢 good first issue   "Tutoriais   💬 1
#38552 opene
                                      🟢 hacktoberfest-accepted
ⓘ Broken Lin
usando ou

"Checklist" for projects

First impressions

- ✓ Is it *interesting*?
- ✓ Is it *alive*?
- ✓ Is it *nice*?

Will this work?

- ✓ Can I *run* it?
- ✓ Is the task *clear*?
- ✓ Is the task *small*?

Technical setup

Pre-reqs

- GitHub account
- Git basics: Branches, add-commit-push loop, rebase
- Enough coding knowledge

Setup

- Read contribution instructions (!!)
- Fork & clone repo
- Set remote
- Environment setup
- Run everything!

Orientation

- "Claim" issue
- Find code location and relevant tests
- Ready to start coding...
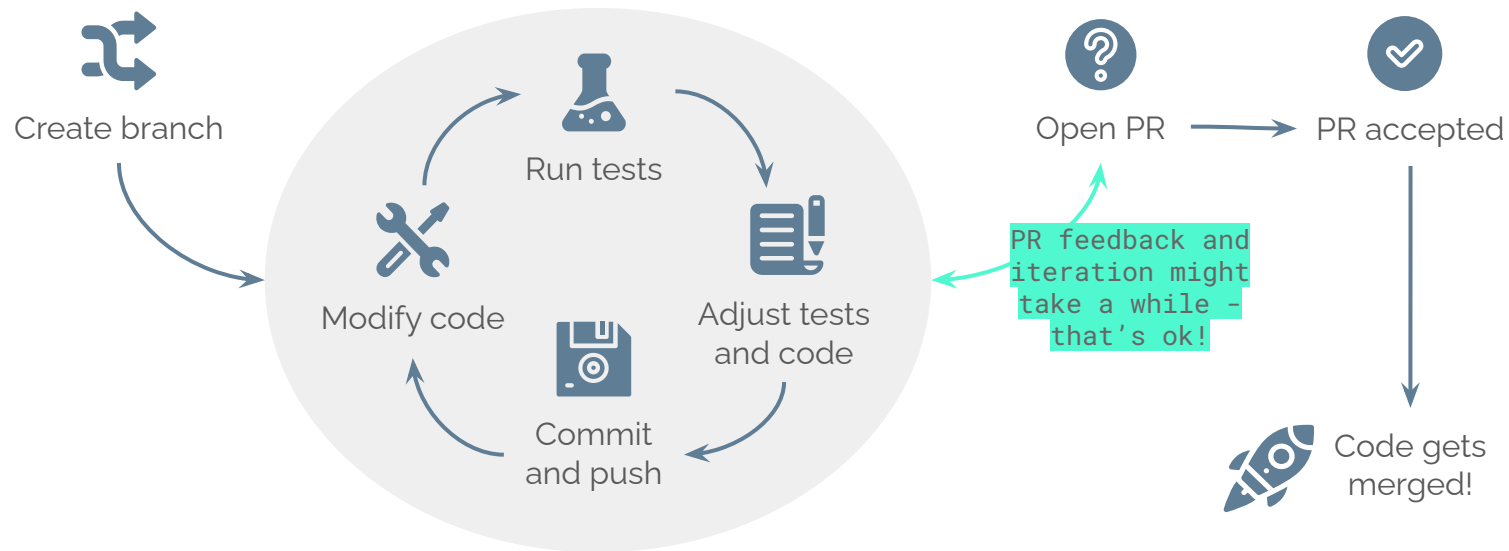
Should I create an issue?

sam bail 🔒
@spbail

Quick survey for folks involved in maintaining an open source project. For small fixes/changes (e.g. typos in docs, bug fixes, improvements like formatting changes), would you want contributors to create an issue before submitting a PR?

Just the PR is fine	93.3%
Issues for everything!	0%
Other (comment)	6.7%

15 votes · 22 hours left

A (simplified) "dev loop"

Create branch

Run tests

Modify code

Adjust tests and code

Commit and push

Open PR

PR accepted

PR feedback and iteration might take a while – that's ok!

Code gets merged!

Time for a live demo!

I'm going to make my first contribution to
github.com/spbail-dev/demo-project

Live demo steps

- Go to project GitHub page, look at README and issues
- Read contribution instructions
- Fork repo and clone locally
- Open project in IDE
- Install requirements
- Run tests in terminal

- Find code to modify, make changes
- Re-run tests
- Modify test
- Commit change, push to branch
- Open PR on GitHub
- Make additional change, commit and push
- Show updated PR
- Accept my own PR

A few things to keep in mind...

- Make sure you read and understand contribution guidelines
- Clean your code, run the tests, add meaningful descriptions, keep your PRs manageable
- Don't take code review feedback personally!

- Most maintainers are volunteers and might take a while to respond - be patient
- Please don't abandon your PR!

THANK YOU
THANK YOU
THANK YOU
THANK YOU
THANK YOU

4: Wrap-up

- Lots of learning opportunities on open source projects
- Start *really* small
- Check out opensource.guide/how-to-contribute
  - Covers what I talked about in a lot more detail!
- Want to get started with a sample project?
  - My hacky brewery project: github.com/spbail-dev/demo-project
  - This awesome demo project and tutorial: github.com/firstcontributions/first-contributions

Question time!

What's your next move? :)

→ Post in the chat or unmute yourself and let's chat!

Resources for this talk

- Getting started with open source:
  - **opensource.guide/how-to-contribute**
  - hackerearth.com/getstarted-opensource
  - firsttimersonly.com
  - rubygarage.org/blog/how-contribute-to-open-source-projects
  - opensource.com/resources/getting-started-open-source
- My version of Reshama Shaikh's "git intro" workshop
  - github.com/spbail/git-intro-workshop
- Slide template
  - CREDITS: This presentation template was created by Slidesgo, including icons by Flaticon, infographics & images by Freepik

Resources mentioned in the chat

- How to Get Involved with Open Source resource list: https://www.one-tab.com/page/UV8DOGQgTayFre-TSXZYWA
- GitHub PR review example: https://github.com/rubyforgood/rubyforgood.org/issues/2
- Python mentored sprints: https://www.mentored-sprints.dev/events/