

Your bug tracker and you

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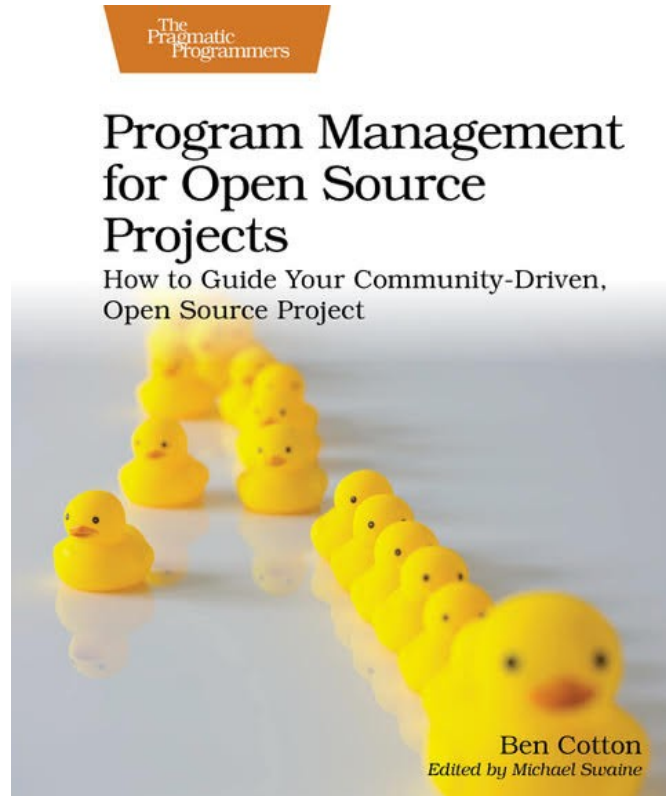
SCaLE 19x

Housekeeping

Housekeeping

- **Pronouns: he/him**
- **The usual disclaimers**
- **License: CC BY-SA 4.0**
- **Kind things: @FunnelFiasco**
- **Unkind things: /dev/null**
- **Questions at the end**

Shameless plug



Agenda

- Why have a bug tracker?
- What to track
- Picking a tracker
- Triaging bugs
- Closing bugs
- Analyzing bugs

Not-agenda

- Fixing bugs
- Specific bug trackers

Why have a bug tracker?

Why have a bug tracker?

To track bugs, silly!

Why have a bug tracker?

Bug trackers are the
cornerstone of building
an open source community

Why have a bug tracker?

- Communicate with users
- Coordinate with contributors
- Maintain a historical record
- Build a source of information about the project



What to track

What to track

- Type (e.g. “bug” or “RFE”)
- Status/state
- Closure type
- Impact
- Priority

What to track

- Version
- Component (if applicable)
- Platform (OS and architecture)

What to track

- Time (-stamps)
- Reporter
- Assignee
- more?

What to track

- Track these as separate fields, not bug content
- If you're lucky, the tracker provides this already

Picking a tracker

Picking a tracker

- Authentication & accounts
- API libraries
- FOSS status
- Hosting

Picking a tracker

- Comment/attachment hiding
- Moderate accounts
- Private bugs/comments

Picking a tracker

- Customizable fields
- Metadata ACLs
- Links to version control, other bugs
- Bulk updates
- Milestones/epics
- Reporting

Picking a tracker

- Default assignees
- Multiple assignees
- Mentioning
- Watching
- Subscribing

Picking a tracker

Whatever you pick,
you'll use it as more than a bug tracker.



Triaging bugs

Triage questions (first pass)

- Is this a bug?
- Is it a duplicate?
- Is it a security bug?
- Is it filed in the right place?
- Is it reproducible?
- Does it say what happened?

Triage questions (prioritizing)

- Can physical harm result?
- Does it cause data loss or corruption?
- Does it permit unauthorized access?
- Does it reduce accessibility?
- Is the default configuration affected?
- Is there a *reasonable* workaround?
- Does the bug affect all platforms?
- Does it embarrass you?

Closing bugs

Closing bugs

You totally should!

To close or not to close

- Sends a clear signal of intent
- Makes the tracker easier to scan
- Makes people angry
- “I was going to work on that someday”
- Represents a catalog of known* issues

When to close a bug

- When it's fixed
- If it's a duplicate, invalid, or spam
- If it's missing information
- If you can't reproduce it
- If the version reaches end of life
- If you know you can't or won't fix it

How to close a bug

- Set and communicate a policy *ahead of time*
- Explain why
- Give instructions to reopen
- Ignore the complaints

Bug closure process

- Varies by closure type
- Don't be too aggressive with "missing info" and "can't reproduce" closures



Analyze bugs

Learn about your user community

- Easier than a well-constructed survey
- Learn the approximate
 - Usage by platform
 - Use of components
 - Adoption rate of new versions

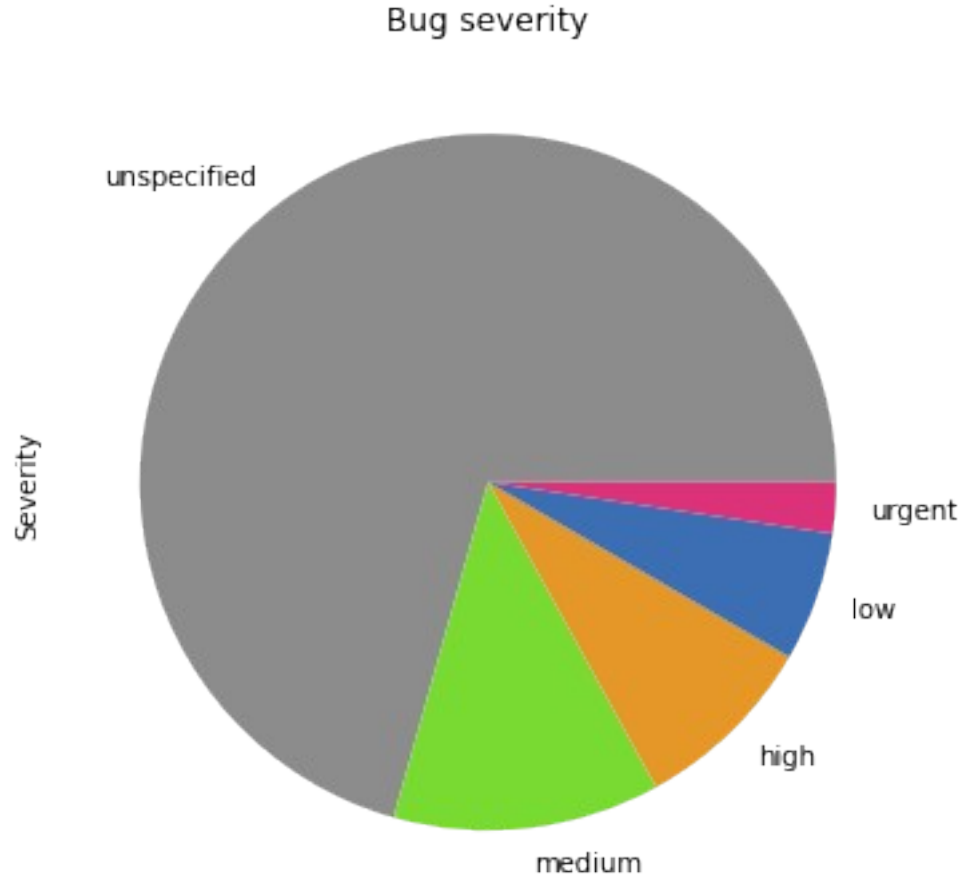
Learn project trends

- Bugs over time
- Time to resolution
- Bug severity

What you can't learn!

- Time-to-response
- Best (or worst) bug fixers
- Affiliations

Challenge your own assumptions



How to analyze

- Look for trends that will cause a change in behavior
- Ignore duplicates (usually) and spam (always)
- Percentages versus raw numbers

How to analyze

- Jupyter Notebook and pandas
- R
- A spreadsheet, I guess?

Fedora Linux bugs

- “Exploring our bugs” at Nest With Fedora 2021
 - https://youtu.be/k9NWWYTXj_I





Let's talk about it