What does it take to run a bug bounty program?

Typical problems and practical solutions

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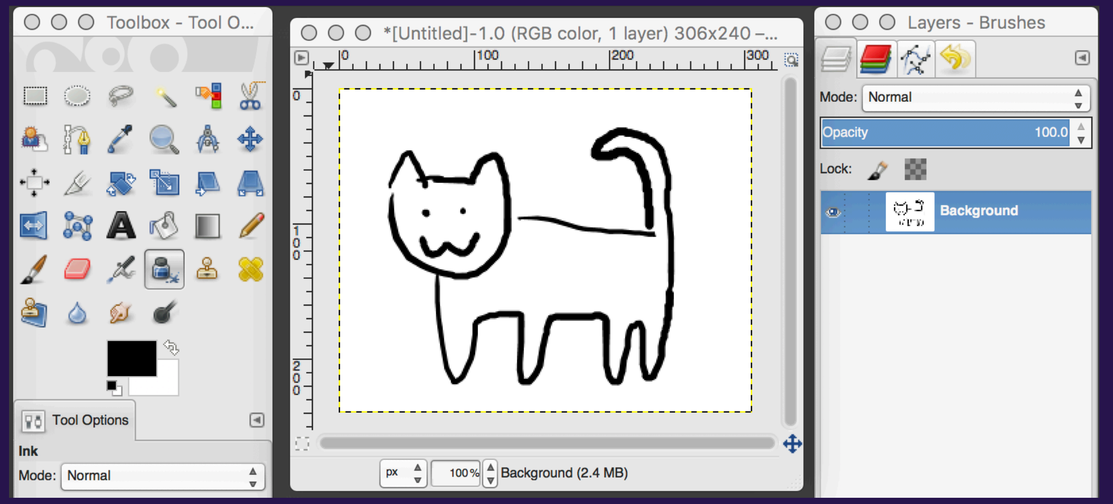
Wait, who are you¿

Was software engineer,
now at least 50% cyber

Arteest™



“

“You should run a bug bounty!”

– everyone, probably

Generally considered a Good Idea

Google	Reddit	Facebook	Microsoft
Apple	Valve	Fitbit	Mastercard
Netgear	Avast	DigitalOcean	Android

(and others)

Agenda

1) Bug bounty considered beneficial

2) Challenges and mitigations

3) Summary

A FORMAL PROGRAM WHERE:

1. Researchers tell you about security bugs in your software

2. You pay them for their efforts

People will attack your software anyway

A bounty lets it happen on your own terms

Tap into international talent

Bounty hunters can work anywhere in the world

Tap into specialist talent

Bounty hunters often specialize in some platform, tool, or framework

Meet security standards

Certifications ask for “vulnerability testing”, “penetration testing”

More secure products

Your products have measurably fewer bugs


WANTED
WHITE-HAT HACKERS
TO IMPROVE PRODUCT SECURITY
VISIT BUGCROWD.COM/ATLASSIAN
$$$ REWARD

BUT THERE ARE CHALLENGES

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Choosing a platform

- **Use an existing bug bounty platform** (STRONGLY RECOMMENDED)

- Or roll your own

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- Limit initial reports

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- Limit initial reports
- Make a shared chatroom/forum for bounty staff to ask each other for help

When should we increase the bounty?

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Pull data from your platform:

- # critical bugs found in the last 90 days
- Flow rate (is the dev team overwhelmed?)
- Remaining bounty budget (can you afford it?)

Our payout calculator

- Total Allowable FY19 Average Daily Spend: $XXX.XX
- Current Average Daily Spend: $XXX.XX
- Projected Daily Spend Remaining: $XXX.XX
- Days into the budget period: XXX

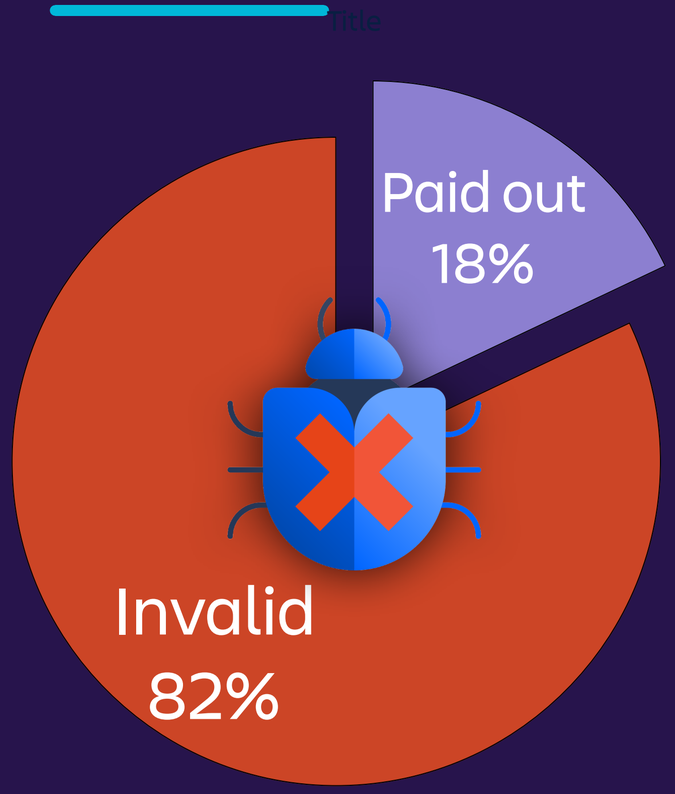
Product 1

- 0 critical issues in the last 90 days
- {0, 0, 0, 1, 0, 1} Issues per Month
  - Slope: 0.17, Intercept: -0.27
- 0.08 Average SLA Violations per week
- 2:1 (Created:Resolved this Quarter)
- 6: Current Issue Severity Metric

Product 2

- 0 critical issues in the last 90 days
- {4, 0, 4, 8, 4, 3} Issues per Month
  - Slope: 0.31, Intercept: 2.73
- 0.08 Average SLA Violations per week
- 15:14 (Created:Resolved this Quarter)
- 30: Current Issue Severity Metric

A huge proportion of all incoming bug reports are invalid.



FY18 bug reports

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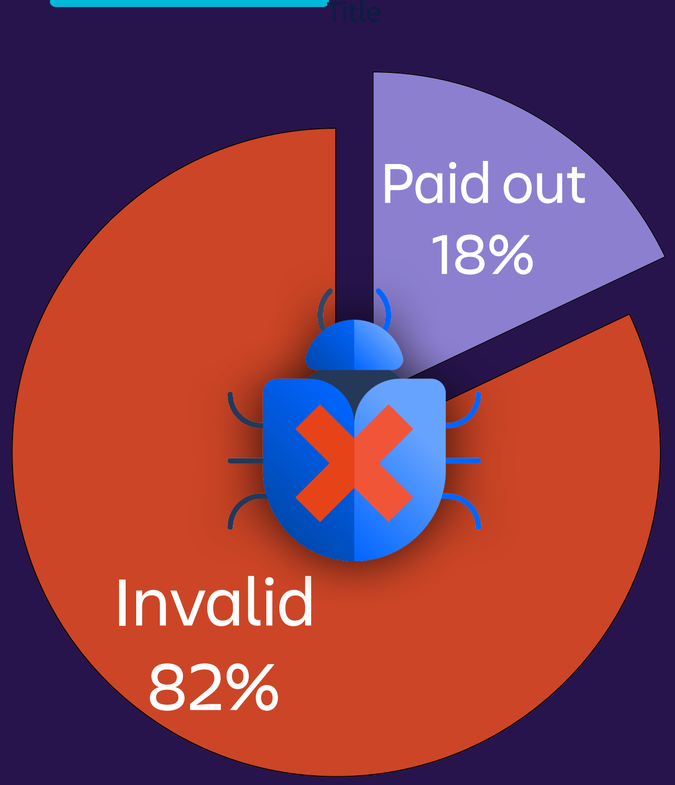

FY18 bug reports

- Choose a bounty platform which offers filtering services

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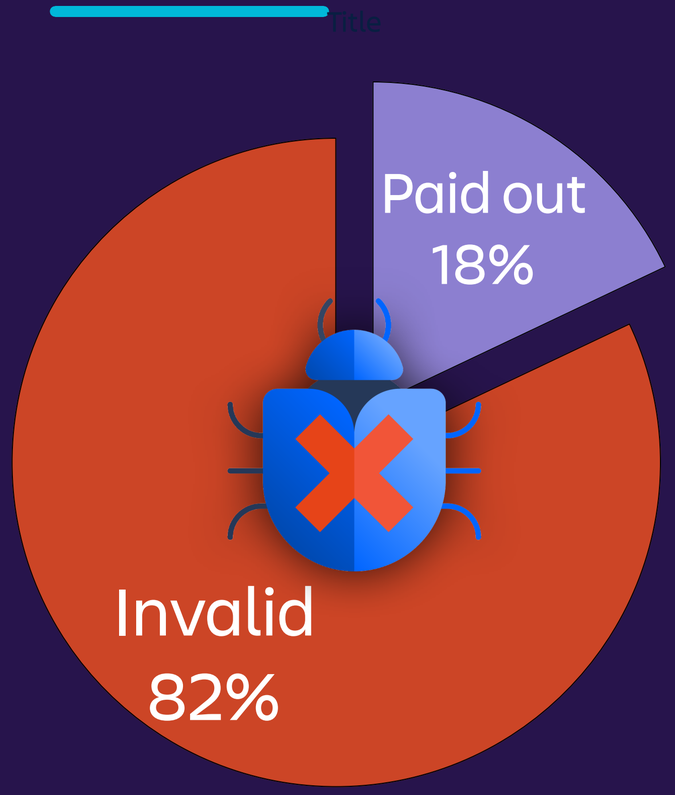

FY18 bug reports

- Choose a bounty platform which offers filtering services
- Bounty briefing page is your first line of defence

Communication fatigue

Communication fatigue

- Use standard responses
- Check bonus content for more ideas and situations

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e.g. Bug resolved

Hi <researcher>,
Thank you for your report to our bug bounty program.

The issue has been fixed by the development team and should reach production soon.

If you can still reproduce the issue in 2 weeks from today, please let us know and we can investigate further.

Thank you for your continued efforts toward our bug bounty program.


bugcrowd
BUGGY AWARDS
Wednesday, April 18
3 p.m. PT
Local Edition


Atlassian
Program of the Year
Bugcrowd Buggies 2018

Decision fatigue

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- Make a shared page for procedures and protocols
- Every time you have to make a judgement call, update the docs to cover it
- **FLOWCHARTS** 👌

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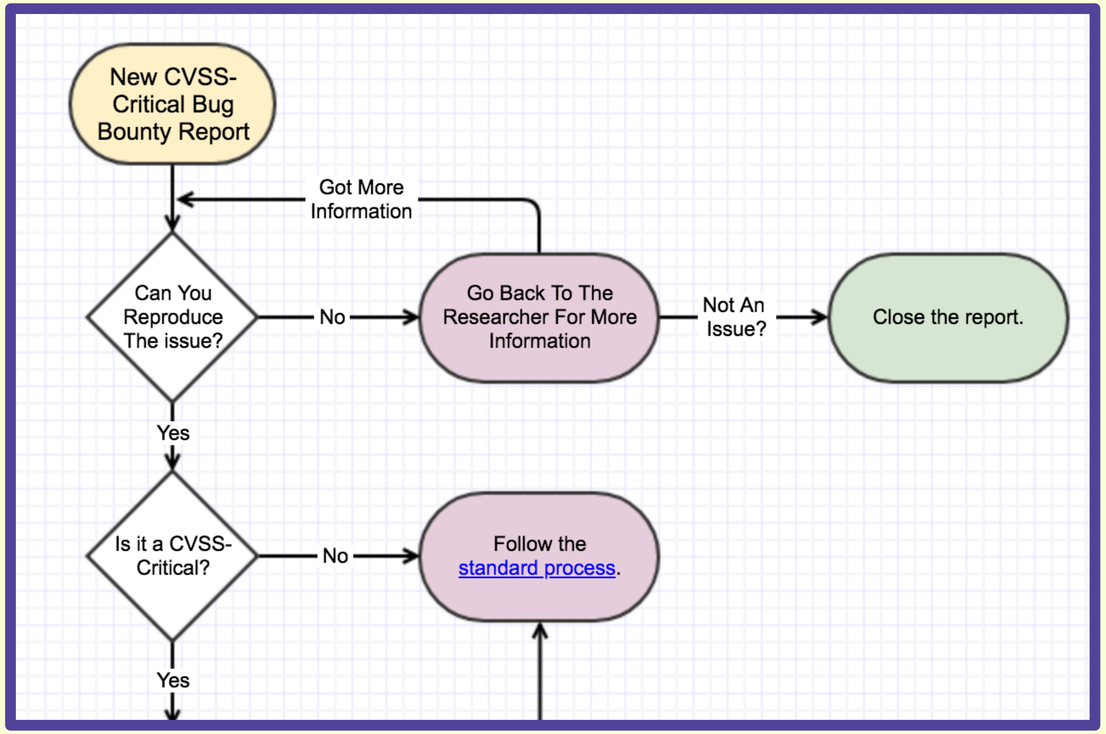
e.g. “How do you handle a Critical bug?”



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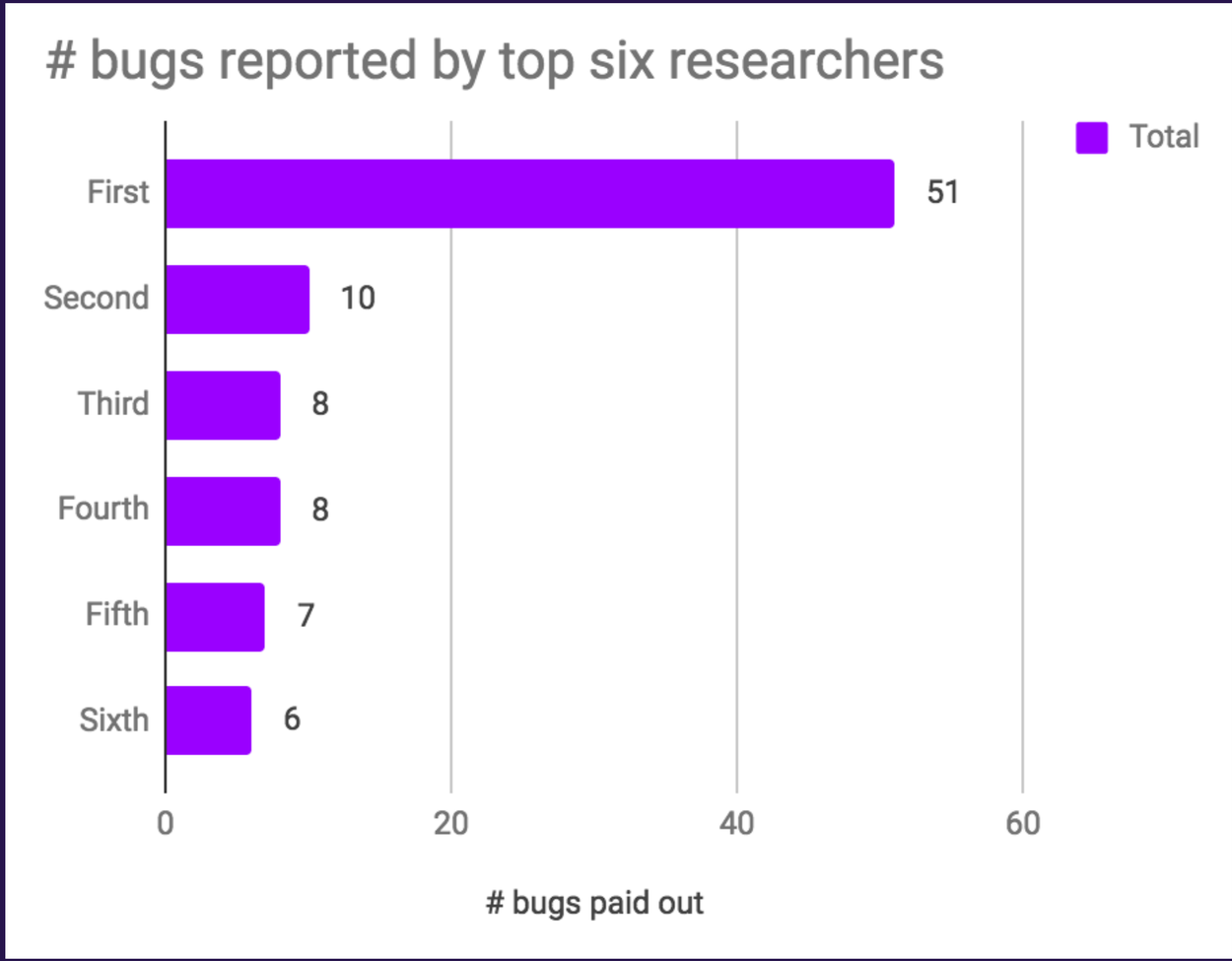

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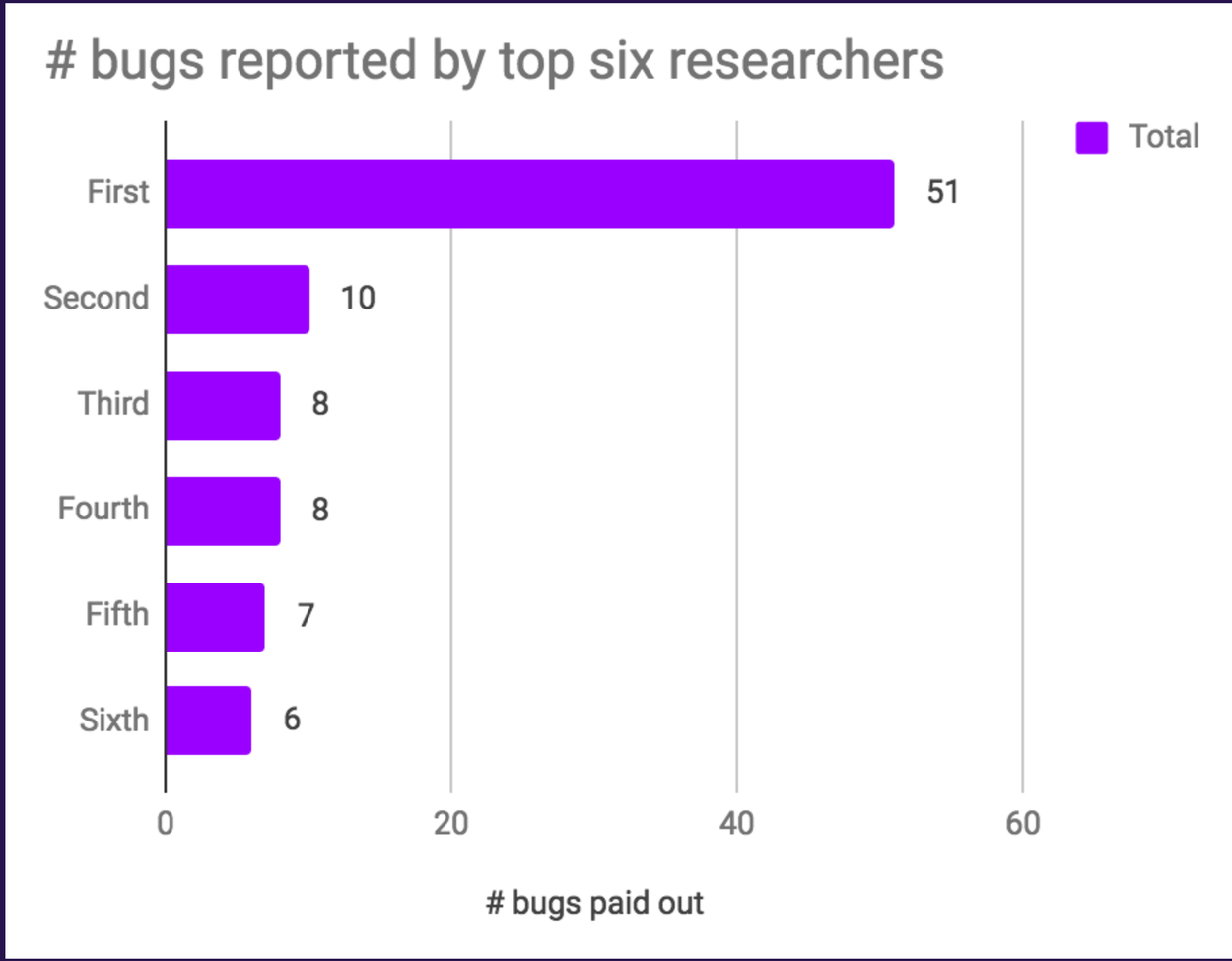

- Increasing the bounty ≠ more researchers
- Advertise and hold hacking events

Boring, repetitive admin tasks

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- Choose a platform with an API
- *Make the robots do it for you*

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Run a bug bounty!

Choosing your platform:

Filtering services

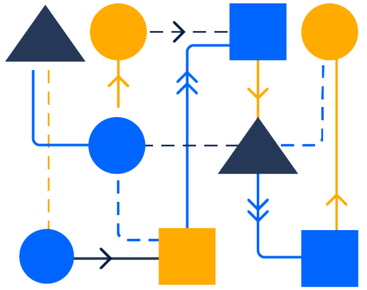
Reports + stats

Control via API

Preventing problems:

Start small

Use filtering services



Document procedures

Pull data to inform decisions

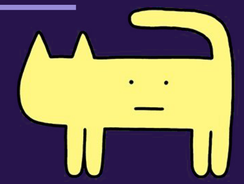
Advertise

Automate!

Atlassian's bounty program: bugcrowd.com/atlassian

For more, check out the bonus content

Or forward cat pictures to ablack@atlassian.com



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