

QEMU Community Growth Through Open Source Internships

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Why?

QEMU participates in 2 open source internship programs

- 6 years of participation
- Many community members involved as mentors

But we rarely talk about it...until now

- To introduce more mentors to the program
- To encourage applicants to apply
- To share experience and reduce bus factor



What are Open Source Internship Programs?

Paid, full-time, remote work internships with open source projects





Google Summer of Code 2016

https://g.co/gsoc

https://www.gnome.org/outreachy/



Our Goals

Get new contributors

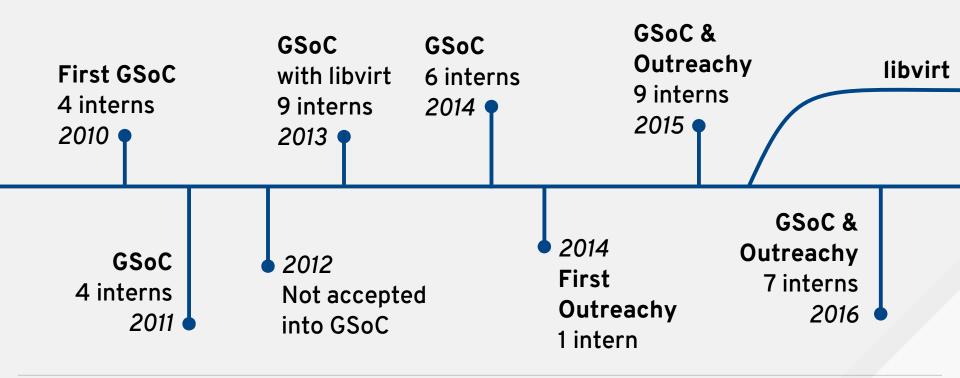
Raise profile of our community

Give back to open source

Fun & stimulating work



Participation Timeline





Interns 2010-2016 (37 people)

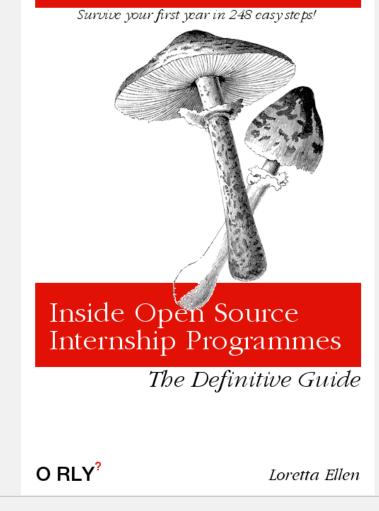
Reza Jelveh Maria Kustova Cormac O'Brien Roland Elek

Ultety Ákos Kovács David Kiarie

Reda Sallahi
Pallav Agrawal Sanidhya Kashyap Eduard - Gabriel Munteanu Tomas Meszaros Miguel Di Ciurcio Filho Yuto KAWAMURA Arthur Chunqi Li Tan Md Haris Iqbal Devin Nakamura

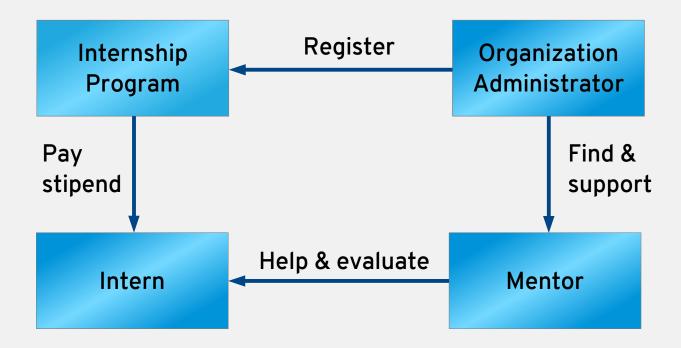
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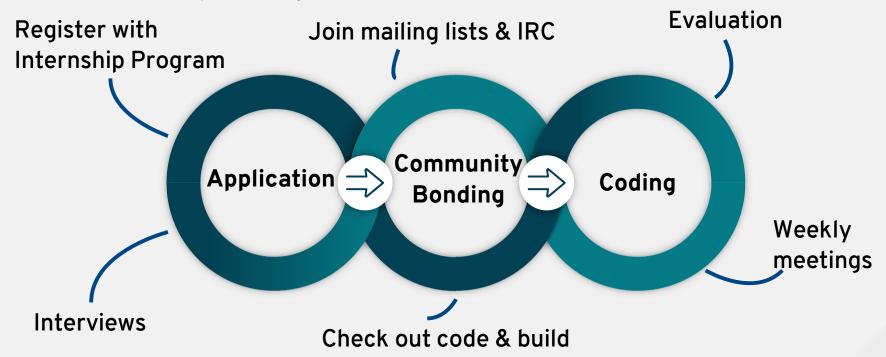


Stakeholders Overview





Internship Program Phases





Mentor Tasks during Application Phase

- 1) Propose project ideas
- 2) Discuss custom ideas (if any)
- 3) Answer questions about project ideas
- 4)Interview top candidates
- 5) Select intern (if any)



What makes a good Project Idea?

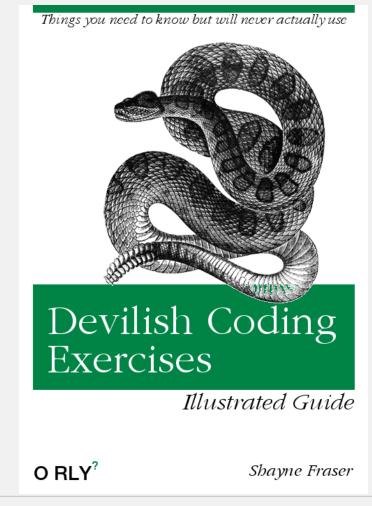
Better project ideas, higher chance of success

(Too?) easy Challenging Risky Impossible

Attributes to look for:

- Well-defined scope is clear
- Self-contained has few dependencies
- Uncontroversial acceptable to the community
- Incremental produces deliverables along the way







How we Interview

Coding exercise (30 min)

- Is this person fluent?
- Real-world coding ability:
 - Memory management
 - Pointers
 - Error handling
- NOT a trick question
- NOT writing well-known data structure

Discussion (30 min)

- Technical topics from coding exercise
 - How do they react to review?
 - Can they reason about performance?
- Their technical background and projects
- Their open source experience
- Answer questions about internship

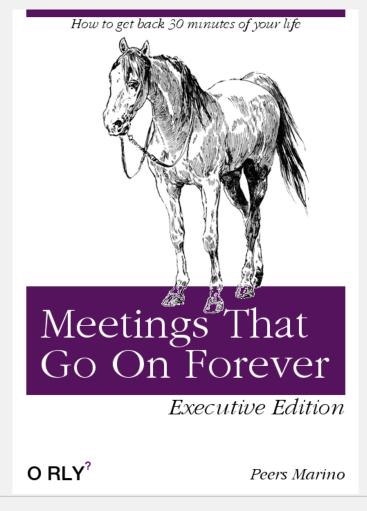


Mentor Tasks during Coding Phase

- 1) Weekly meetings
- 2) Review patches
- 3) Answer questions or help debug

~5 hrs/week





The Importance of Communication

- Projects that fail usually involve lack of communication
- Weekly meeting
 - Discuss & debug tricky issues
 - Progress update
 - Administrativia
- IRC, mailing list, VoIP chat



Co-mentoring makes life easier

- Two mentors instead of just one
- Faster response to intern questions
- Coverage during downtime or vacation
- Less pressure on mentor to always be available



How to become a Mentor

- Requirements:
 - Regular contributor
 - Can spend ~5 hrs/week
- Think of project ideas
- Contact me:
 - Google Summer of Code February
 - Outreachy February and September



Thank you

- QEMU Google Summer of Code pages: http://qemu-project.org/Category:GSoC
- Google manuals for Summer of Code: https://developers.google.com/open-source/gsoc/resources/manual
- My advice for applying as an intern: http://goo.gl/gPj0yR
- My nick is 'stefanha' on #qemu irc.oftc.net
- More on QEMU: http://blog.vmsplice.net/

