Becoming OpenStack Developer via Outreachy

Presented by:
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In this talk
- What is Outreachy internship?
- How it worked out for us & lessons learned
- Should you try it, too?

Why do we do this?
- Help develop software engineers
- Sustain the open source culture
- Promote diversity in the profession

What is OpenStack?
- Cloud management software stack and infrastructure software
- Decade-old open source community project
- Has involved 1025 developers from 126 companies
- Made out of 728 repos

Reference: https://docs.openstack.org/project-team-guide/introduction.html
Reference: https://www.stackalytics.com, Stein cycle

About Outreachy
What is Outreachy?
- Non-profit project under Software Freedom Conservancy
- Brings together interns, mentors, community and free software projects
- Promotes the participation of under represented persons in technology fields

How does it work?
- Interns gets into an open source project
- Each intern gets a mentor (or two)
- 3 month paid internship

Why become an intern?
• Find your aspirations
• Learn the software engineering, documentation, design, or other craft
• Start contributing to free and open source software
• Get a job (hopefully, the dream one)

Why mentor with @Outreachy?

• Contribute back to the culture we are part of
• Grow professionally and personally
• Get more hands on our stuff

Aija's internship @OpenStack

• How it all began
  • Finding a project
    • something new, but in familiar programming language
    • mentors in the same or nearby time zone
  • The initial application:
    • Challenges
      • initial ticket
      • transparency in seeing others applying
    • Successes
      • dedicated tickets for application

OpenStack: Everybody struggles

• Technology
  • Code complexity and its sheer size is overwhelming
  • Developer's workbench takes time to learn
  • Not always possible to run OpenStack at home
• Social
  • Code reviews tend to be slow
  • Sometimes feedback can seem harsh
  • Newcomers are prone to taking the feedback personally
  • It takes time to become egoless and a good community citizen

Outreachy application period

In the eyes of a mentor:

• Come up with isolated, yet non-trivial and useful tasks
• On-board a handful of candidates to let them proceed
• Ponder code reviews, aiming to merge their work
• Ensure the community is on board with your effort

Aija’s survival hints

• Code reviews
  • Don’t take it personally (really don’t)
  • But take responsibility for the code you write
  • Essential part of programming
  • Opportunity to learn
• Asking questions
• Working from home/remotely
  • Self-starter
  • Motivation
  • Dedicated place to work
  • Video calls

Case study: Becoming better together

• Industry is influential in OpenStack and standards bodies
• Silos existed between OpenStack, a standards body, and industry
• How we came together to everyone's benefit

How to be a better mentor

Work-wise:
• Keep your intern busy, challenged, and growing
• Help keep them focused to get things done
• Build on small successes, plan and promote small steps

Community:
• Help network interns with the upstream community
• Involve interns in code reviews

Psychologically:
• Understand the psychological setting, be aware of the biases
• Consider being a co-researcher with your intern, rather than a master-apprentice
• Promote friendliness, awesomeness, and curiosity

Signs of a successful intern

• Has a track record of playing with computers
Researched the project they applied to
Reasonable expectations, e.g., open source quirks

Come join us!

• If you are a prospective intern...
• If you are an open source practitioner...
• If you work in the industry...

Reference: https://www.outreachy.org/communities/cfp/
https://www.outreachy.org/communities/cfp/openstack/

Q&A
Thank you!