

Introduction to Open Source Software

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What is the format of this session ?

- In this session, I will answer common questions about open source software and its contribution.
 - What is open source software (OSS) ?
 - OSS Vs Other software ?
 - Present scenario of OSS ?
 - Why does it matter for us to know OSS ?
 - How do orgs behind OSS make money ?
 - How can we get paid for contributing to OSS ?
 - How can we contribute to OSS ?
 - If you have any questions during the session, feel free to interrupt me to ask your questions.
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What is open source software ?

- Open source project are source code that is made available to the public to view, use, modify, and distribute under a permissive license.
 - Once OSS (Open Source Software) has been made public, and if you need to add a feature or make changes, the owner has to approve the added changes and publish them for others to see.
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What is the difference between open source software and other types of software ?

- Some software has source code that only the person, team, or organization who created it, and maintains exclusive control over it can legally copy, inspect, and alter it. People call this kind of software "proprietary" or "closed source" software. Eg: Microsoft Office and Adobe Photoshop.
 - In Open source software, Its authors make its source code available to others who would like to view that code, copy it, learn from it, alter it, or share it. Eg: LibreOffice and the GNU Image Manipulation.
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What is the present scenario of open source software ?

- Earlier private companies were highly threatened by concept of open source software because they thought it was damaging the software/intellectual property business.
 - Presently, Large companies such as IBM, Microsoft, Oracle, Google etc are very serious and have public stake in today's open source market. This shows that there have been significant shift in corporate philosophy concerning the development of FOSS (Free Open Source Software).
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Why does it matter for us to know open source software ?

- Allows us to know how the code works which facilitates knowledge exchange and community development of the software.
 - Allows us to reuse code, making it easier to collaborate and achieve goals, rather than trying to do everything on our own.
 - Allows us to stay up-to-date about the most innovative and latest software being used around the world.
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How do organizations behind open source software make money?

- Various ways organizations make money through OSS are:
 - **Paid Support**: Companies can save money by using paid support instead of hiring in-house specialist. Eg: MySQL, Red Hat Enterprise Linux
 - **Dual Licensing**: This allows OSS software to be under two license one for large enterprise who wants to make profit with the software and one for community who wants to learn, improve the software. Eg: MySQL Enterprise Edition (commercial license) and MySQL Community Edition (GPL License).
 - **Additional features**: Customers can choose which functionality they want to pay for saving time and money rather than getting it done by inhouse developers. Additional features includes premium support, advanced solution, cloud service etc.
 - **Certification**: Gives developers knowledge, skills, professional credibility.
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- People are willing to pay for open source software to ensure legal protection, technical support, and professional services. With paid open source technologies, companies can offer the best of both worlds: transparent technology with the support and features of commercial software.
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How can we get paid for contributing to open source projects ?

- If you are already an employee of a tech company, your company could itself have open source projects and you could be assigned to the team that maintains that project so basically you are contributing to the open source project while getting paid by the company.
 - If you are a student or professional, you could apply to various paid open source program that give you stipend for your successful completion of the program. Ex: Google Summer of Code (\$3000), Summer of Bitcoin (\$3000), Outreachy (\$7000), MLH Fellowship (\$1000), Google Season of Docs (\$3000), Reinforcement Learning Open Source Fest (\$10,000), Linux Kernel Mentorship Program (\$3000) etc.
 - You could also apply to unpaid open source program that will give you great exposure and experience, instead of stipend you will get swags and certificate. Ex: Season of KDE, Open Mainframe Project Mentorship Program, FOSSASIA Codeheat, Hacktoberfest etc.
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How can we contribute to open source projects ?

- Don't overthink about contributing, contribution happens at all levels, as simple fixing a broken link to adding new ground breaking feature.
 - Projects which you actively use or plan to use are the projects that you will keep coming back to so start thinking about how you can contribute to those projects.
 - Act on your instincts, if you feel something could be better or different, approach the maintainers and talk to them about it.
 - 28% of casual contribution to open source are documentation, such as typo fix, reformatting, translation etc.
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- Every open source project has a /contribute page that highlights beginner-friendly issues you can start out with. (for example <https://github.com/facebook/react/contribute>)
 - You can also use one of the following resources to help you discover and contribute to new projects:
 - [GitHub Explore](#)
 - [Open Source Friday](#)
 - [First Timers Only](#)
 - [CodeTriage](#)
 - [24 Pull Requests](#)
 - [Up For Grabs](#)
 - [Contributor-ninja](#)
 - [First Contributions](#)
 - [SourceSort](#)
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- You should always do some checks before you start contributing to a projects. These includes how actively is the project being maintained, which license does the project belong to, is the project friendly and welcoming. [for more details: <https://opensource.guide/how-to-contribute/>]
 - After deciding on which project you want to contribute to, you should follow proper communication standards so that your questions and arguments are followed up on quickly and properly by the maintainers. [for more details: <https://opensource.guide/how-to-contribute/>]
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Open Source Programs Links

Paid Open Source Programs

- [Google Summer of Code](#) (\$3000)
- [Summer of Bitcoin](#) (\$3000)
- [Outreachy](#) (\$7000)
- [MLH Fellowship](#) (\$1000)
- [Google Season of Docs](#) (\$3000)
- [Reinforcement Learning Open Source Fest](#) (\$10,000)
- [Linux Foundation Mentorship Program](#) (\$3000)
- [X.Org Endless Vacation of Code \(EVoC\) program](#) (\$5000)

Unpaid Open Source Programs

- [Season of KDE](#)
- [FOSSASIA Codeheat](#)
- [Hacktoberfest](#)
- [Girlsript Winter of Contributing](#)
- [Winter of Code](#)
- [Free Software Foundation Internship](#)

Any Questions?

Thank You
