Ballerina

The Open Source Way
Contributing, Collaborating, and Building Together

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Hello!

Thisaru Guruge

Technical Lead | **@ballerinalang** | **WSO2**

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Introduction to Open Source

What is Open Source?

- Software whose source code is available to everyone
- Can be used, modified, and shared freely
- Not just "free" - it's about freedom

Core Principles

- Transparency: Anyone can inspect the code
- Collaboration: Built by communities, not just companies
- Meritocracy: Good ideas win
- Community over corporation

A Bit of History

- 1983: GNU project and Free Software Movement
- 1991: Linux kernel released
- 1998: "Open Source" term introduced
- Today: Powers the internet, cloud, and AI

Stallman vs. Linus

- Richard Stallman: Founder of the Free Software Movement (1983)
  - Advocated for software freedom and ethics
  - Created GNU and the GPL license
  - Believes nonfree software is a social problem
- Linus Torvalds: Creator of the Linux kernel (1991)
  - Focused on practical engineering and results
  - Uses open source for better software, not ideology
- The tension: Freedom vs. Pragmatism
  - FSF vs. OSI
  - Both shaped today's open source landscape

Free Software Foundation vs. Open Source Initiative

FSF - "Free" as in Freedom

- Founded by Richard Stallman
- Focuses on user freedoms and software ethics
- Software must always remain free
- Opposes DRM, SaaS lock-in, and proprietary licenses

OSI - Open as in Collaboration

- Founded in 1998 to make OSS more business-friendly
- Focuses on development model and collaboration
- More pragmatic than ideological
- Embraced by companies like IBM, Microsoft, Google

Open Source is Everywhere

- Android – built on Linux
- VS Code – open source editor
- Git – backbone of modern development
- Kubernetes, TensorFlow, Hugging Face – all OSS
- Linux - Runs about 90% of the network infrastructure on the internet!
- Supercomputers - World's fastest 500 supercomputers runs on Linux

Not Just Code

- Documentation and tutorials
- UI/UX design and translations
- Bug reports, testing, and issue triaging
- Community help and support

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Contributions in 2024 – Octoverse 2024 report

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Why and How to Contribute?

Why Should You Contribute?

- Learn real-world dev practices
- Build a strong public portfolio
- Get peer feedback and mentorship
- Networking and job opportunities
- OSS experience helps with WSO2 internships

Getting Started

- Find a project you use
- Look for good first issues
- Read README and CONTRIBUTING.md
- Join discussions
- Start small, stay consistent

GitHub 101

- Star, Watch, Fork to track and contribute
- Issues = report bugs / feature requests
- Pull Requests = contribute code or docs
- CI checks, reviews, and collaboration

Real-World Impact

- 2024: XZ Utils backdoor incident
- Small OSS project, massive potential damage
- Highlights the importance of trusted OSS maintenance

Open Source ≠ No Rules

- Open source uses licenses; it's not lawless
- Licenses define usage, sharing, modification rights
  - Copyright | Permissive | Copyleft licenses
- MIT, Apache 2.0 = permissive
- GPL = must share modifications
- Always read the license before using code

Open Source Licenses

- Licenses define how software can be used, shared, and modified
- Permissive: MIT, Apache 2.0 - few restrictions
- Copyleft: GPL - must share changes under same license
- Apache adds patent protection, MIT is simplest
- Always read the license before contributing or using code

Contributing to Ballerina

Introduction to Ballerina

- A cloud-native programming language
- Designed for integration and services
- Built by WSO2, fully open source

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Ballerina Project Structure

- GitHub org: [ballerina-platform](#)
- Repos: ballerina-lang, libraries, tools, website, docs
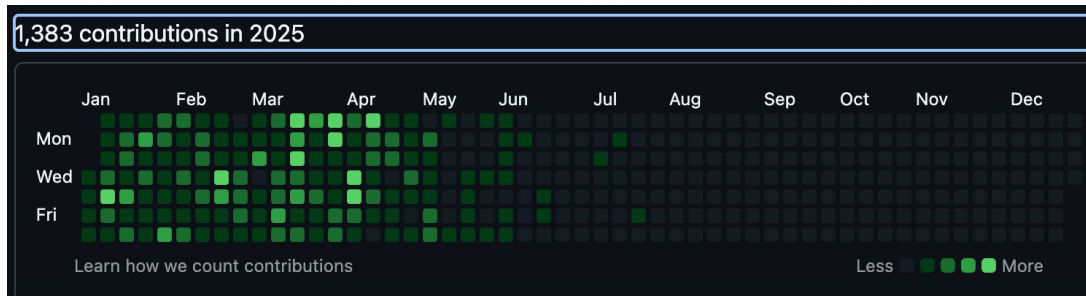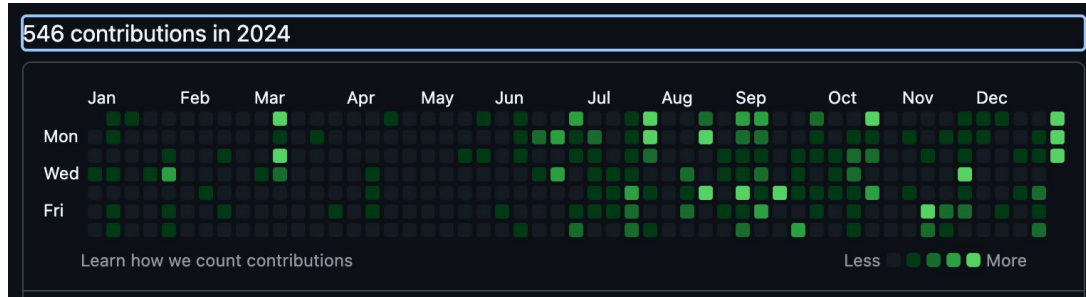- Modular, multi-repo architecture – Easy to contribute

How to Contribute to Ballerina

- Look for good first issue, area/* labels
- Improve docs, fix bugs, write tests
- Follow the contribution guide
- Join the Ballerina Discord community

What you get from contributing

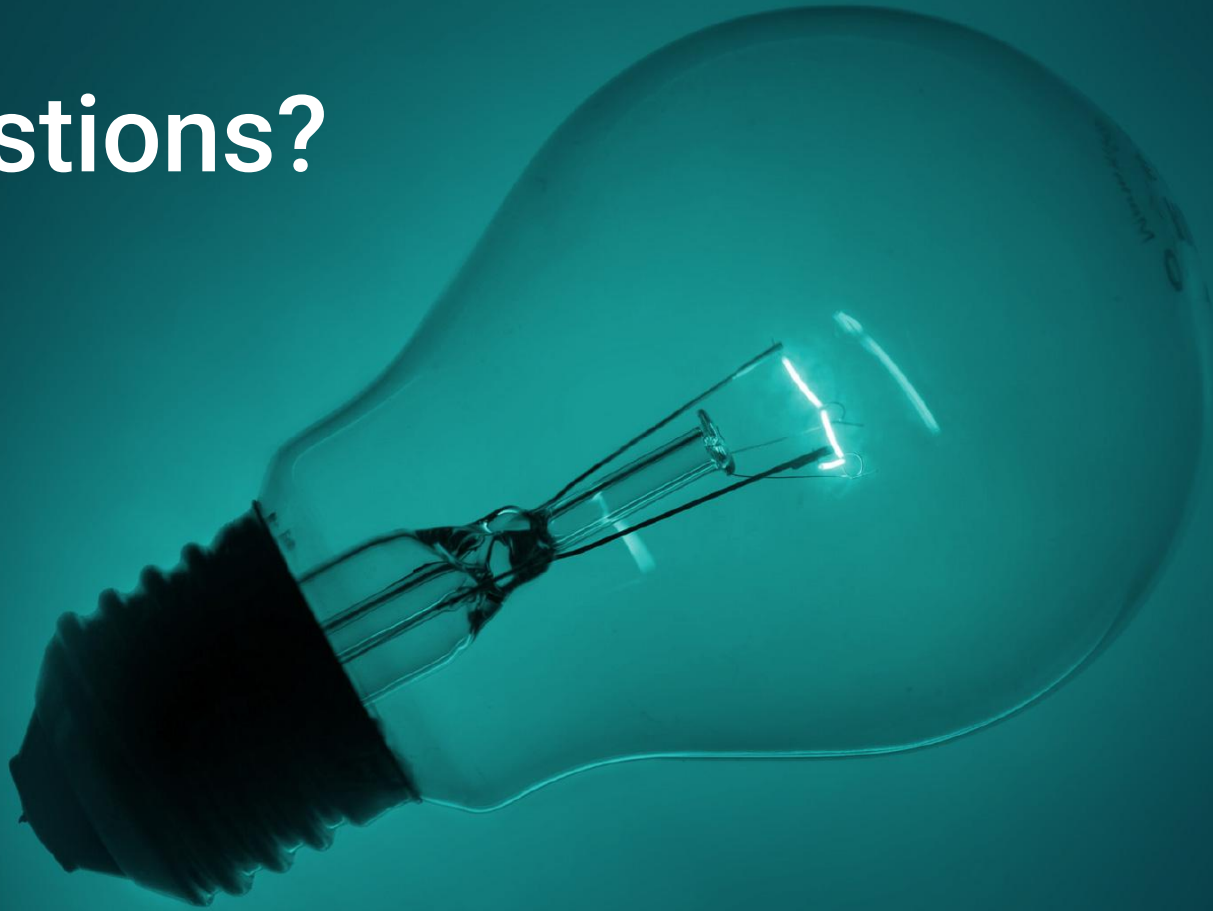- [Ballerina rewards](#)
- [WSO2 Internships](#)

A Real Journey

- Contributor who started with the Ballerina Hackathon
- Got an internship - joined as a software engineer

Final Thoughts

- OSS is about community and learning
- You don't need to be an expert to start
- Contribute, collaborate, grow
- Your OSS journey can start today

Questions?

Resources

- ○ Ballerina Platform
  - ○ https://github.com/ballerina-platform

- ○ Ballerina contributor rewards program
  - ○ https://ballerina.io/community/#contribute-and-get-rewarded

- ○ GitHub Octoverse Report - 2024
  - ○ https://github.blog/news-insights/octoverse/octoverse-2024/

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Community Channels

https://github.com/ballerina-platform/

https://stackoverflow.com/questions/tagged/ballerina

https://discord.com/invite/ballerinalang

https://twitter.com/ballerinalang

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Ballerina student program

- Ballerina student engagement program
  https://ballerina.io/community/student-program/

- Ballerina ambassador program
  https://ballerina.io/community/ambassadors/

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Thank you!

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