

Google Summer of Code: introduction, quick report of 2026 projects and more™!

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Introduction

Google Summer of Code



Google Summer of Code

*Google Summer of Code is a global, online program focused on bringing new contributors into open source software development. GSoC Contributors work with an open source organization on a 12+ week programming project under the guidance of mentors.*¹

¹From <https://summerofcode.withgoogle.com/>

Google Summer of Code: Glossary I

Contributor works on a **project** with the assistance of their **mentor(s)**

Organization Open-source organization, e.g. The NetBSD Foundation

Mentor developer part of the organization mentors one or more **contributor(s)**

Admin mentors in the "wheel" group

Google Summer of Code: Glossary II

Project 12+ weeks project done by the **contributor** with the guidance of **mentor(s)**

Project proposal Proposal written by **contributor** and evaluated by **mentors** to choose **project** ²

Project size There are **small** (90 hours), **medium** (175 hours) and **large** (350 hours) projects

Community bonding 4 weeks where contributor get in touch with community and their mentor(s) and more confident with the code base they will work on

Coding period 8 weeks (small) - 12+ weeks (medium/large) ³

²Every organization get a limited slot of projects to select, mentors should rank projects.

³Can be extended up to 22 weeks.

Google Summer of Code: Program Timeline for 2026 ⁴



December 03, 2025	Program Announce Date
January 19, 2026	Org Applications Open
February 3, 2026	Org Applications Deadline
February 18, 2026	Org Notification Date
February 19, 2026	Accepted Orgs Announced
March 16, 2026	Contributor Proposals Open
March 31, 2026	Proposal Deadline
April 21, 2026	Proposal Ranking Deadline
April 29, 2026	Slot Allocation Deadline
April 30, 2026	Accepted Projects Announced
May 1-24, 2026	Community Bonding Period
May 25, 2026	Coding period starts
July 10, 2026	Midterm Evaluation Deadline
August 31, 2026	Final Evaluation Deadline
November 11, 2026	Program End Date

⁴Evaluation deadlines are for standard 12 weeks projects.

Google Summer of Code

- ▶ Started in 2005
- ▶ ... we are participating since then! ⁵
- ▶ Opportunity to attract fresh blood ⁶
- ▶ Contributors get two stipends (midterm, final) ⁷
- ▶ Organization gets \$500 per project ⁸

⁵We have not participated only in 2014 and 2015.

⁶Average and median age of developers is getting bigger in the years. For FreeBSD the median age is 45 years old, see [Kirk McKusick(2024)].

⁷GSoC should be considered a full time job for 12 weeks!

⁸Plus travel stipend(s) if an org admin/mentor attend GSoC mentor summit.

Quick report of 2026 projects

2026 projects

- ▶ Improving and Stabilizing the racoon2 IKE Daemon in NetBSD - Artem Belan
- ▶ Port the Enlightenment desktop environment to NetBSD - Dimitris Gounaridis
- ▶ Improving RAIDframe - Emmanuel Nyarko
- ▶ Testing Compat Linux: Syscall testing - Henrique Brito
- ▶ Convert a Wi-Fi driver to the new Wi-Fi stack - Vishal@88

Improving and Stabilizing the racoon2 IKE Daemon in NetBSD

Contributor: Artem Belan

Mentor: Christos Zoulas (<christos>)

This project aims to improve and stabilize the racoon2 IKE daemon in NetBSD, which currently suffers from issues related to Security Association handling, connection management, NAT traversal, and lack of IPv6 support.

Port the Enlightenment desktop environment to NetBSD

Contributor: Dimitris Gounaridis

Mentor: Leonardo Taccari (<leot>) ⁹

- ▶ Dimitris has done bug fixing, NetBSD porting and upstreamed all of his work
- ▶ We should be able to get rid of most pkgsrc patches!
- ▶ Work available in [pkgsrc-wip](#)
- ▶ Me or someone™ plan to import them in pkgsrc in the next weeks
- ▶ More info at: [Google Summer of Code 2026 Reports: Port the Enlightenment desktop environment to NetBSD](#)

⁹With a lot of help from Nia Alarie <n1a>, thanks!

Improving RAIDframe

Contributor: Emmanuel Nyarko (<joe>)

Mentor: Greg Oster (<oster>)

- ▶ Implementation of N-way RAID 1 extension, to support multiple disks in RAIDframe mirror
- ▶ Implementation of RAID scrubbing
- ▶ Emmanuel also spotted and fixed several bugs!
- ▶ More info at: [Google Summer of Code 2026 Reports: Improving RAIDframe](#)

Testing Compat Linux: Syscall testing

Contributor: Henrique Brito

Mentor: Stephen Borrill (<sborrill>)

- ▶ Henrique exercised `compat_linux(8)` by using [LTP \(Linux Test Project\)](#)
- ▶ He packaged LTP in `pkgsrc`
- ▶ Documented tests and analyzed differences between Linux and `compat_linux(8)`
- ▶ He was also able to spot bugs and fix them
- ▶ ...and also Linux behaviors not conform to POSIX!
- ▶ More info at: [Google Summer of Code 2026 Reports: Testing Compat Linux: Syscall testing](#) and [Google Summer of Code 2026 Reports: Testing Compat Linux: Syscall testing, part 2](#)

Convert a Wi-Fi driver to the new Wi-Fi stack

Contributor: Vishal

Mentor: Martin Husemann (<martin>)

The Wi-Fi drivers has been changed to support newer protocols. [...] I am going to convert and test (otus – Atheros USB IEEE 802.11a/g/n wireless network device (<https://man.NetBSD.org/otus.4>) on TP-Link TL-WN821N which is a compatible device for this driver.

More™

More™ for contributors

- ▶ Suggestions and project ideas at <https://wiki.NetBSD.org/projects/gsoc/>
- ▶ Use NetBSD and/or pkgsrc and feel free to propose your ideas!
- ▶ It is essential that you find a possible project you are passionate to work on
- ▶ Get in touch with us early! ¹⁰
- ▶ Lurk mailing lists and IRC
- ▶ Be candid with your mentor(s) ¹¹
- ▶ Read [NetBSD Commit Guidelines](#) and in particular bear in mind that “Code generated by a large language model or similar technology [...] is presumed to be tainted code, and must not be committed”

¹⁰Yes, that means before GSoC is announced!, also right now.

¹¹E.g. If you can work on it only part-time, let them know early about that and request an extension ASAP.

More™ for mentors/admins

- ▶ Add and update project ideas that you are willing to mentor at <https://wiki.NetBSD.org/projects/gsoc/>
- ▶ Project proposal counts very little due possible GenAI/LLM use
- ▶ Video calls with potential contributor are much better!
- ▶ During community bonding and coding periods get in touch with them and request a status updates at least twice a week
- ▶ Persuade your contributors to share about their work, submit talks to conferences and make to feel them responsible for their work
- ▶ Google Summer of Code is about the journey for the contributor to get involved in open source, the coding is only the means to an end

More™ for contributors/mentors/admins

- ▶ Every 2 weeks we have a “NetBSD GSoC contributors meetup” video call
- ▶ Contributors share a status update about their work with other contributors and mentors
- ▶ Other contributors and mentors can ask questions and help each others
- ▶ That works pretty well to get contributors more involved!

Conclusions

- ▶ We have introduced what Google Summer of Code (GSoC)
- ▶ We have seen GSoC 2026 projects
- ▶ Several suggestions/tips/experiences for both contributors and mentors/admins were shared
- ▶ Google Summer of Code is about the journey for the contributor to get involved in open source, the coding is only the means to an end

References I

Kirk McKusick.

FreeBSD at 30 Years: Its Secrets to Success.

<https://events.eurobsdcon.org/2024/talk/HFYARS/>, 2024.

Presented at EuroBSDCon 2024 in Dublin, Ireland.

Google Summer of Code.

<https://summerofcode.withgoogle.com/>.

Dimitris Gounaridis.

Google Summer of Code 2026 Reports: Port the Enlightenment desktop environment to NetBSD.

[https:](https://blog.NetBSD.org/tnf/entry/gsoc2026_enlightenment)

[//blog.NetBSD.org/tnf/entry/gsoc2026_enlightenment.](https://blog.NetBSD.org/tnf/entry/gsoc2026_enlightenment)

References II

Henrique Brito.

Google Summer of Code 2026 Reports: Testing Compat Linux: Syscall testing.

https://blog.NetBSD.org/tnf/entry/gsoc2026_testing_compat_linux, a.

Henrique Brito.

Google Summer of Code 2026 Reports: Testing Compat Linux: Syscall testing, part 2.

https://blog.NetBSD.org/tnf/entry/gsoc2026_testing_compat_linux_2, b.

Emmanuel Nyarko.

Google Summer of Code 2026 Reports: Improving RAIDframe.

<https://blog.NetBSD.org/tnf/entry/gsoc2026 RAIDframe>.

References III

The Google Summer of Code Guides Authors.
GSoC Contributor Guide.

<http://google.github.io/gsocguides/student/>, a.

The Google Summer of Code Guides Authors.
GSoC Mentor Guide.

<https://google.github.io/gsocguides/mentor/>, b.

Thanks!

Questions/Discussion?