

Project Title

Google Summer of Code Program 2026 Project Proposal

Name
Discord Handle
Discourse Username
Email
University

Instructions – delete before submission

Help us out:

- Review the GSoC Rules at <https://summerofcode.withgoogle.com/rules/> and make sure you understand and comply with them.
- Make a copy of this Google Documents file and rename it following the pattern: `GSoC2025_LASTNAME_ProposalName`
- Provide answers to all the sections listed below. Do not just provide this document.
- Ask on the Discourse if you do not understand something with this template.
- Share the proposal with potential mentors.
- You are expected to write this proposal independently. Therefore, you need to disclose ALL resources you use, including other proposals, other individuals, web pages, AI assistants, etc. For AI assistance in particular, you should retain the prompts you use and the versions of your work as it develops. It is in your best interest to write your ideas out first, before formatting them with an LLM or similar tool.
- Get reviews early and often. Discuss your project on the `rtems-devel` or `rtems-users` mailing list before you write your proposal!
- Fix any dates that are not consistent with the [GSoC Timeline](#).
- Identify if you plan to use a flexible coding period, and if you're proposing a Small, Medium, or Large scope project.

Remember: This is NOT the OFFICIAL application. You need to submit to Google! Convert this document to a PDF when you are satisfied, and submit it.

In the proposal the following MUST be included:

1. A paragraph explaining what the project is trying to accomplish
 - a. What is the core problem being solved?
 - b. Why is this better than what we have already done?
2. A sentence explaining how this project could be maintained (given developers have little time to maintain the code)
3. Make documenting how the next summer of code contributor will pick up with developing the project in later years a project deliverable
4. Break the project up into increments, so that if time runs out, each increment could be upstreamed, or at least written up on a wiki page so the next year's contributor could get farther faster.
 - a. Make writing a tutorial to include a deliverable
5. Share a draft for feedback, and make adjustments before submitting

- a. ****(THIS IS A CRITICAL REQUIREMENT!!!)****
 6. Expect the following questions from mentors:
 - a. We really need _something else specific_ done instead... could you do _something else specific_?
 - b. What's the maintenance plan?
 - c. How will we test it?
 - d. We did this already... How is this an improvement?
 - e. This is too much for you to complete in a summer... please remove these pieces from your proposal
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Project Abstract. This is good summary paragraph on the goal(s) of your project. (*not more than 50-60 words*)

Project Scope. Small (approx. 90 hours) or Medium (approx. 175 hours) or Large (approx. 350 hours)

Project Description. This is a description of what your project entails. It is important to include what your project brings to RTEMS.

Hints: Describe what's missing (for e.g. a feature, more coverage, whatever is your core project idea), why you think it must be there (its importance). Also try to include the benefits to RTEMS and finally, not in more than 2 sentences why you chose this project.

Project Deliverables

- GSoC Timeline: [GSoC Timeline](#).
- June 7 (coding begins) - What will you have to do to ensure that coding starts by this date? We expect you will have an RTEMS development environment working as part of the proposal effort. You will need to establish a code.google.com project and give access to your mentor, backup mentors, RTEMS organization administrator, and any other community members.
- July 12-16 (Midterm Evaluation) - What will you have done by this point? Your mentor will use this to judge your progress and whether you pass or fail.
- August 16-August 23 (Final Evaluation) - What will you have done at this point? What will you deliver? Your mentor will use this to judge your progress and whether you pass or fail.
- August 31 (Final Results Announced) - What will you have done at this point? You can use the period between Final Evaluation and here to do clean up, improve documentation, etc.
- Post GSOC - What will you do?

Proposed Schedule

During each phase, please make it clear whether code will be ready to be submitted for inclusion. Also ensure that your code will be available for review regularly. Do not work long periods without submitting code to the code.google.com repository.

Some projects are organized where they can be submitted in increments to the RTEMS repository. If your project is of this type, make this clear. But your patches should be tracked through code.google.com so they trip your final payment from Google.

Replace name with the name of this phase as appropriate for your project. Words like design, integration, test, etc.

March 14 - March 24 (Application Period)

What will you do during this period?

March 26 - April 22 (Acceptance Waiting Period)

What will you do during this period?

April 23 - May 23 (Community Bonding Period)

What will you do during this period?

May 24 - June 26 (First Half)

What will you do during this period?

Remember that your midterm evaluation is at the end of this period. You need to make deliverables for mid-term milestones.

June 27 - August 23 (Second Half)

What will you do during this period?

Remember that your final evaluation is at the end of this period. You need to make deliverables for final milestones and prepare for writing documentation and code submission after this period ends.

Future Improvements

Here, some future improvements on this project are proposed. This would be done after the GSoC program time line or as Bonus implementation during the program itself if things go better than expected.

Continued Involvement

How do you want to be involved with RTEMS in the future? What role do you see yourself growing into? Consider this like a career statement for your role in the RTEMS Project. Your mentors can help you achieve your goals.

Other Commitments

State whether you may have any other time commitments that may prevent you from working at full potential or may not allow you to contribute code you develop during GSoC. Possible reasons would include participating in a full-time summer internship, or holding a scholarship/fellowship at your school that restricts your ability to claim copyright on your work. **Although working or being funded by your school can be OK with GSoC, we need to know about your other commitments, and also need to be certain that the code you write can be contributed by you to RTEMS without a claim by your employer or University.** If you have other employment, please disclose the nature and time commitment involved, and how you will balance your commitments. Partial time commitments such as **final examinations** or **planned vacation time** should also be

disclosed here. **We do not penalize your performance during the summer due to any disclosed commitments!**

Eligibility

Please confirm your eligibility to participate in the program as defined by the rules in 7. Contributors. 7.1 Eligibility. <https://summerofcode.withgoogle.com/rules/>

Major Challenges foreseen

- Discuss any of the challenges that you see could make your project difficult or issues you need to resolve.

References

- Links, books, etc that are relevant to your project

Relevant Background Experience

- Tell us why you are qualified to carry out the proposed project.

Personal

Where do/did you go to school? What level are you, or where do you work now? What interests you about embedded systems?

How did you learn about RTEMS?

Anything else that makes you special

Experience

Free Software Experience/Contributions (optional):

- List any activity with other projects or references that you have worked with in the open source community.
- List any presentations, coding, evangelism, etc. you may have done for open source.

Please include any web links or urls for your previous work so that it helps the evaluators to get a first hand look at your work.

Language Skill Set

- Programming languages and skill level

Related Research and Work Experience (if any):

- Any publications, internships, or other programming-related jobs you may have held.

Reference Links and Web URLs (optional):

- Links to your blog, personal website, social media, etc.