



Google Summer of Code

FAQs

Disclaimer: The views and opinions are my own and I've tried to answer the questions based on my personal experiences and knowledge.

1. **What is GSoC?**

It is a three-month-long program Sponsored by Google where people work on open source projects under open-source organizations.

So what basically happens is, Google wants to promote open source culture and student developers to engage in it.

Google calls various open-source organizations.

These organizations come with their ideas/project lists that they want to be developed.

After that students look for these organizations and shortlist them on the basis of their experience with tech stack or the interests with the project idea. They submit a detailed and timed 3-month long proposal to the organization they want to work with.

Organizations then select the students out of it and the selected students work on their proposal with the organization continuously for three months.

Three evaluation happens every 4 weeks and after Passing the evaluation Google Sends you the stipend after each successful evaluation.

First, you have to know about what open source is, how to use it and what are the organizations using open source projects.

For more info about GSoC, you can refer to <https://summerofcode.withgoogle.com/>

2. **May I know how hard is it, to get into the program?**

Actually, it's not that tough. It's all about strategy and well planning. I spent only one month and got myself into GSoC. I've also seen students struggling years and years.

3. **Can you tell me more about how you planned and about your strategy?**

This was my first attempt and I haven't worked as much as other students did. So I Shortlisted smaller organizations where there is less number of students applying.

I got myself familiar with the mentors. So that at least they know my name.

I solved a few good first issues to get myself familiar with their codebase and then drafted my proposal.

4. **I have heard about GSoC but don't know anything about open source, where should I start from?**

It's good that you have a piece of prior knowledge about GSoC and You can always learn more about it by simply Googling it.

For a Starter, I will recommend you to start learning about Git and Github tutorials. Because the GSoC is all about Open Source development.

5. **I am familiar with Git but the problem is I haven't done even a single contribution till now in open source projects. Where should I start?**

First, do some projects of your own and use GitHub for that. It will be really beneficial if you will do that with some of your friends. Like 3-4 people working on the same repository. Then you'll get to know the Git and GitHub workflow.

There are many organizations and repositories available on GitHub that only focuses on Beginners, so you can contribute to that. If you think you've gained a little bit of experience working on these things, start searching for a GSoC organization with your relevant tech stack. All the organizations have beginner-friendly issues so start by solving that. This will help you learn their codebase. Then you can try their advance level issues. Be active on the organization's community, soon they'll gonna recognize you, this will help you get in the eyes of mentors and you'll have a lot of contribution in that organization. Then you can apply for GSoC from that organization, this will increase your chance by a large margin.

6. **How important are data structures and algorithms for GSoC?**

It is not required and a basic understanding is enough for that. GSoC is a project-based program. You will have to work on a project mostly doing software development. Competitive programming is a different thing where one is required to solve some problems efficiently. While that may require you to know various data structures and algorithms but GSoC is not the same. Project-based coding and competitive coding are two different things.

While most of the projects won't require you to have a deeper knowledge of DSA, but it won't hurt you to know a little bit of it.

7. **I've been looking at organizations and see that there are loads of technologies used in different organizations, there is no way I could learn all of them and contribute. So how to cope up with that?**

one thing we have to understand that if you'll look at any larger scale projects there's a lot more tech stack than a single language because it needs so much more than a single thing. Not all but you'll have to learn some major tech stack of any project to contribute to it. I myself being a Python developer didn't have a clue about PHP and C++, but I had to learn it and I'm still learning it because of the requirements of the project.

Mentors totally understand these things and will help you to learn fast. GSoC is not a job but a learning opportunity for the students. It is made that way in which you get into it with some skills and come out with much more. Learning is a lifetime thing, never be afraid to do so. Always look for opportunities and make yourself more equipped than before.

8. What to do after being familiar with Git and GitHub?

look for the Organizations in the GSoC Organization Page.

The tech stack you are familiar with or want to work on that.

Go to the organization's project and Start contributing to whichever you find interesting.

9. I use GitHub, But I am confused about where should I contribute. I don't know the proper resource.

If you know git and GitHub workflow than you are good to go.

Goto GSoC organizations page, look for Organizations that use the tech stack you are familiar with or the project that interests you.

Goto that organization's page, understand what the project is, look for issues that are labeled as beginner's or first-timer.

There will be some kind of community page where developers chat with each other. Join that community, tell them you want to contribute, where you should start. They will guide you further.

10. I know programming but not able to implement it on the project on how to tackle this? When I open the organization Github page. My mind blows how to code.

I will suggest you start with a smaller project of your own first. Like is someone's tech stack in about web development than he should start making some websites from scratch.

For any organization you choose, first read the README file to understand what the project is about. They try installing it. Join its community, there you will find other developers, don't ever hesitate to ask for help (any kind of help, Noob level or advance, Never afraid to ask anything).

Get to the issue page and look for beginner level issue, it will have a label as beginners or good first use.

Comment there and ask if you can try to solve it and try solving it.

11. Can I apply for 'n' number of organization of I have to be specific?

No, you can submit at most 3 proposals.

The organizations will announce their ideas list for proposal. You can draft a proposal on any issue or you can propose something new that might help that organization.

12. While choosing an organization what things should I keep in mind?

Choose an organization according to your tech stack and your prior contribution to that organization. It is not mandatory but if you will have some contribution in that organization it will help mentors to choose you from the others thinking that you are already familiar with their workflow.

13. I found my organization, now how to start contributing to it?

Goto Organization's GitHub page, read its documentation, what is it all about, how it functions.

Then look for issues that you think you can solve. Then try solving it.

You can join their community and interact with other developers. Ask them you are new and you want to contribute. They will help you further.

14. What to do after I am comfortable with git and GitHub?

So after you being comfortable using git and Github. Goto GSoC Organization's page, look for the organization with the tech stack you uses or any organization or projects you find interesting. Like I am a Python developer so I searched Python there and found few organizations using Python as their tech stack. You can search for Web development, app development, machine learning, any programming language, etc. You can also manually check each and every organization and what tech stack they use. After you chose your organization, go to their project section or GitHub page, see what are their project about. Try to understand their work, read the whole documentation.

You can join their official channel or community, where you can ask any developer there that you want to contribute to their project, where should you start.

Or go to their issue page, see for any beginner issue or the issue that you can solve. Try solving that.

With continuous contributions, you will get to know about the whole codebase and its workflow. Also, fellow developers will start knowing about you. So when the time will come you can actually submit a proposal in GSoC.

15. I tried solving some major issues too but turned out I lack the knowledge.

Yes, solving issues without any guidance are tough sometimes, the codebase is so diverse you get lost so easily.

That's why organizations have mentors to guide us to understand the codebase and workflow.

16. I have checked past projects and tech stack, it turns out I have a lot to learn.

You don't need to worry about that. You can learn most of the things on the go.

GSoC is a type of learning program, not an actual internship, so they focus on learning.

Nobody knows everything and most of the GSoCers learn different tech stack during the period according to their organization's requirements.

17. How do I contact mentors and ask them that I need to understand the project?

Every organization has their community page, where they talk and discuss things. In the README there will be a section. So join their channel and ask them. Most of them are pretty friendly and will surely guide you.

18. I have a dream for GSoC, but I am from a tier 4 college, Does that matter

Not at all, College, Year, nothing matters. Anyone can be a GSoCer until unless he is a student. Cause it is for students only. In today's world, everything is available online. And no college teaches these things, everyone is self-taught. Just have the passion and follow the right path

19. It is necessary to use Linux OS, Can't we go with windows?

It is not necessary but it is always advised to use Linux. That's because development is relatively easy on Linux with respect to Windows.

Windows are made taking care of End users and we are not using OS for that purpose. We are developers.

Of course, you can use Windows and no one is forcing you to change but according to me, You should switch to Linux, preferably Ubuntu(beginner-friendly).

You don't need to learn that much, just remember a few Commands.

And you can always search for everything on the internet like "how to do this, how to do that", "how to install something"

20. I hadn't contributed to any GitHub open source projects yet and no prior experience, Then why any organization will select me?

You have plenty of time. So start contributing. Solve 1-2 issues and create PRs. If you will have 2-3 PRs in their repo and a detailed proposal with each and every detail that what will you do in GSoC, then you are good to go. Some of the people don't even have a single PR merged in the organization's repo and if both of you will be compared then you are way ahead as you have already solved some of their issues and is familiar with their codebase. This is all they want. Most of the skills you will learn during your GSoC period through mentors so you don't need to worry about that beforehand.

Also, if not selected this year then you still have few contributions and the number of contributions will increase till next year. Also, the mentors will remember you as you have been their active contributor a year-long.

So it is a win-win situation.

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