

A decorative graphic on the left side of the slide. It consists of a blue parallelogram and a light green parallelogram, both tilted at an angle. The blue shape is in the foreground, and the green shape is partially behind it. They are set against a dark blue background with subtle diagonal lines.

Open Source Programs

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What is Open Source?

Open source is a term that originally referred to open source software (OSS).

Open source software is code that is designed to be publicly accessible—anyone can see, modify, and distribute the code as they see fit.

- Decentralized & collaborative design
- Reliant on peer review and community production
- Often cheaper and more flexible
- More longevity



Prerequisites

Get familiar with Version Control Systems

For big projects it is extremely important to store all the changes that are being made. VCS help keep track of all the modifications that happen over time in the source code as versions.

There exist many version control systems such as Git, Mercurial, CVS, and SVN.

Git is the most popular and most widely used version control system in the industry.

The logo graphic consists of two overlapping parallelograms. The front one is blue and the back one is light green, both slanted to the right.

Hacktoberfest

Open source is changing the world - one pull request at a time.

Hacktoberfest is a celebration open to everyone in our global community. It is a month-long celebration of open source software run by DigitalOcean. Hacktoberfest is a month-long celebration of open source software sponsored by Digital Ocean, Intel, and DEV.

Happens during the entire month of October 2020.



Hacktoberfest is available to everyone in our worldwide network.

You need to registers yourself for this festival of the open-source i.e. Hacktoberfest 2020. By the way, you can sign up ever in between 1 to 31 October.

You need to make 4 pull request in GitHub repositories to qualify. Pull requests can be made in any GitHub-hosted repositories/projects.



Google Summer of Code

Google Summer of Code is a global program focused on bringing more student developers into open source software development.

We work with an open source organization on a 10 week programming project during their break from school.

This year, Google has funded 1276 student projects (listed below) for 202 open source organizations who benefit from active involvement from new developers.



Students

Students contact the mentor organizations they want to work with and write up a project proposal for the summer. If accepted, students spend a few weeks integrating with their organizations prior to the start of coding. Students then have 10 weeks to code, meeting the deadlines agreed upon with their mentors.



Organizations

Open source projects apply to be mentor organizations. Once accepted, organizations discuss possible ideas with students and then decide on the proposals they wish to mentor for the summer. They provide mentors to help guide each student through the program.



Mentors

Existing contributors with the organizations can choose to mentor a student project. Mentors and students work together to determine appropriate milestones and requirements for the summer. Mentor interaction is a vital part of the program.



Girlsript Summer of Code

Girlsript Summer of Code is the 3 month long Open Source program during summers conducted by Girlsript Foundation, started in 2018, with an aim to help beginners get started with Open Source Development while encouraging diversity.

Last year, it witnessed overwhelming participation and 2021 edition will carry the legacy forward while promising to be even more impactful and grand.



Timeline

4th March - 5th March, Project Assignment to Mentors.

8th March, First Phase of Contribution Starts.

10th March, The leaderboard will be open.

10th March - 12th March, The Community Bonding sessions.

1st April, Personalized allotment of projects to the participants.

31st May, Coding period ends.

2nd week of June, Results will be declared.



Codeheat

Codeheat is a coding contest for FOSSASIA projects on GitHub.

The contest runs until June 1, 2021. The contest is separated into two months period after which winners of each period are announced.



NWoC/KWoC

NWoC :- It stands for NJACK Winter of Code and is organised by IIT Patna.

KWoC :- It stands for Kharagpur Winter of Code and is organised by IIT Kharagpur.

You can either submit your own project for other participants to work on or can participate as a contributor by working on other submitted projects. It can be considered as a very small GSoC. First of all , projects are selected, mentors are assigned and after that students start contributing to the projects and in the end they prepare a proposal. After that, winners are announced.

Websites :- [NWoC](#) , [KWoC](#)



Outreachy

[Outreachy](#) is a diversity initiative that provides paid, remote internships to people subject to systemic bias and impacted by underrepresentation in the technical industry where they are living. A stipend of 6000\$ is provided to Outreachy Interns.

It has a reservation criteria :-

♀ 92% women

🏳️‍🌈 4% transgender, genderqueer, or non-binary people

👩 64% people of color

👤 12% people from a historically disadvantaged caste or tribe



Application Process

- An application is to be filled out, and then you need to pick 1-2 projects.
- Each project will have a set of task, you need to make at least one contribution to be eligible as an Outreachy Intern.
- You will need to record your contributions on Outreachy Project Listing website by listing out the essential links of contributions.
- After contributions, you will need to submit an application for each project you contributed to. On the basis of application candidates will get shortlisted.

Please note that GSoC selected students can not apply for it.



Two cohorts:

1. May to August
2. December to March

Remote internship — both interns and mentors work remotely

Applications for the May 2022 internship cohort will open during February.
Applications for the December 2022 internship cohort will open during August.

There are three parts to the Outreachy application process:

1. Initial application period
2. Contribution period
3. Intern selection period




Summer of Bitcoin

In [Summer of Bitcoin](#) you will contribute to open source organizations working on Bitcoin. It is released this year. It provides a monetary benefit of about 2500\$ worth of Bitcoin.

Application Process

- An application needs to be filled by navigating to main website.
- After few days you will receive a problem that you will need to solve .
- After solving the problem, you will need to contribute on the project by solving some issues.
- After contributions, a technical interview will be scheduled and it will decide the result of your selection.



Students are matched with open source, free software and technology-related organizations working on bitcoin to write code, earn BTC and put their summer break to good use.

The organizations provide mentors who help the students onboard to the project and contribute code.

The program requires **10-12 weeks of time commitment** with a minimum expectation of **30 hours a week** and is open to students, age 18 and older enrolled in a post secondary academic program in most countries.



MLH Fellowship

MLH Fellowship is a remote internship alternative. It has a very vast community in which people from all over the world are involved. It has 3 tracks. You can apply for any batch you want to. There's no limit on number of total applications by a candidate. You can opt for a stipend too.

- Pre Fellowship
- Open Source Track
- Software Engineering
- Production Engineering



Application Process

- You need to apply on [MLH Fellowship Website](#) , there you need to select the track for which you are applying.
- After that you will need to answer some questions in about 200 words. These questions will make a difference so make sure to write them in an essay format and it should be easy to understand.
- After essay questions, you will need to submit a code sample that displays your best coding abilities. You need to write about your project there about what was the motive behind creating it, problems faced while creating it and tech stack used.
- When your application gets shortlisted , a 10 min video interview will be scheduled to check your network connection, speaking skills, basically to confirm the eligibility criteria.
- When this gets done you will be required to schedule a technical interview, there a detail discussion will take place about the code sample that you have submitted.



Prep Program

Bite-sized version of the Fellowship track. An intensive 3-week experience, for portfolio building, experimenting with new technologies, and collaborating in small groups during a short, impactful hackathon sprint. It is designed to quickly build technical skill and experience for candidates who wish to pursue the full MLH Fellowship in the future.

Upcoming Batches:

Oct 21 — Prep Batch (Applications Open)

Nov 21 — Prep Batch (Applications Open)

Fellows who successfully complete the Prep Program track will be priority candidates for future Fellowship classes.



Getting started with Open Source

1. Open Source your projects
2. Solve beginner friendly issues
 - Up For Grabs, 24 Pull Requests, Hacktoberfest, First Timers Only, Your First PR, CodeTriage, Open Source Friday
 - Go to GitHub and search for easy, beginner-friendly, or good first issues.
3. Get more involved in technical communities