

Winter of Code '18

Student Manual

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What is Winter of Code(WoC)?

You saw the website of **WoC** and we hope that you've got the gist of it but what exactly is **WoC**?

Winter of Code is an initiative by Open Source Student Community called **Devlup Labs** at IIT Jodhpur for the ones, who have never done any open-source project oriented contributions or collaboration with other people. Free and Open Source Software (FOSS) development is something that students will get to involve in during the winter vacations and kick start their journey of Open Source contributions.

All of the work will be done by the student under the guidance of her/his mentor(s). **WoC** is similar to **Google Summer of Code (GSoC)** but limited to students from IIT Jodhpur only. GSoC is a global program that matches students up with open source, free software and technology-related organizations to write code and get paid for the same.

WoC in a similar way, is aimed at introducing students to the open-source world. Registered students can apply for at max 3 projects from the project list, which will be released on October 14, 2018.

Every project in the list will have at least one mentor. Students will then write a proposal and pitch it to the mentor who shall be guiding them on the project once agreed upon.

Why Should I Apply?

Well now you've known that WoC seems like something productive to do in the end of the semester and during winter vacations. But am I good enough? Do I even need to do this? etc...

Mock for GSoC

If you wish to apply for GSoC in the coming summers, WoC is probably one of the best things going to happen with you in December. It will be very much similar to GSoC but conducted at institute level.

Work Experience

WoC is a place where you don't just get to apply your skills but also get to acquire a bunch of new ones. Working in collaboration is one important skill for anyone to have in their arsenal. On the other hand, the mentors of the projects themselves have recently been through their internships and other sources of experience, similar to what you would be going through while

creating your first pull request. You'll learn to work collaboratively while working on the code and managing the source with version control.

Boosting Confidence

It's nightmare to send your first pull request! You feel like what is it, how am I gonna read all this code and understand it. But once you push your first pull request, it feels really great. It's good to see your code to be used by several other people.

Acquiring New Skills

You might be adding your piece of code to the existing project, you will get to learn the structure of the software and more about the process of creating it from scratch. This will help you in creating your own projects.

Connect with People

Participation in WoC will help you connect to people on campus and help you build your network which will be beneficial in the long run.

Or simply because you love to code

If you think that coding really fascinates you and you love doing it, then simply express that love, by being a part of Winter of Code!

Skills You Need

Communication! You will have to communicate efficiently. Nobody is going pursue you to apply for WoC. You'll have to get in touch with the mentor regarding the project if you need any clarification or clear your doubt about how certain part of the code works. If you can make others aware about your problems, they'll definitely give you a solution for the same.

Your Gear! Since you'll write code and push it online. This requires you to have a computer and a working internet connection with you.

Tip: Don't be afraid if you don't have a Linux/Ubuntu operating system. Your mentor is there to help you out.

Objectives of the Program

The major objectives of WoC are :

- Inspire students to get involved in Open Source software development.
- Help 1st and 2nd year students to master the development workflow of Git and GitHub.
- Connect with seniors on the campus, this will help them be in contact even after WoC ends.
- Prepare for other Open Source programs like Google Summer of Code, Outreachy, etc.

How To Apply

Registration

Navigate to the WoC website and sign in with your Google account.

Contact your prospective mentor

Each project in the project list will have the details of the mentor(s) for that project. After picking a project you need to setup the project on your local machine and then contact the mentor(s) regarding any doubts/problems you may be facing.

At the same time, we do hope that the students be polite while contacting. One should understand that after all, most of the mentors are students themselves, and they might not always be available. Ideally one should wait for at least a day for the mentor's reply.

Time To Code

Choose A Project

In the beginning you can choose any project you like, go through the project, try to find issues in it, discuss it with mentor(s) and try to fix the issue. After the proposal period, you'll be assigned a project if selected along with respective mentor(s). Projects can be seen under the Projects section of WoC website. Use the [Devlop Labs blog](#) to find resources on learning Git and Github workflow.

Software Development

You'll be writing purposeful code, writing tests to establish that your code works. Add lots of cool stuff depending on your project. After deciding what to code, use Git to keep track of the changes and create pull requests on GitHub. Communicate with your mentor about further requirements and/or improvements.

Coding Style

Every good project follows some guidelines on the code style used in it. Correct indentation, obeying line lengths, etc. are the features which make the code more and more readable. Many of the projects have automated code style checks.

Writing Documentation

Without documentation, it is so hard to read any code. Hence, add information in README, in the comments of code(if necessary) etc.

Submission

Report Submission

At the end of the 5 weeks, you will have to create a report. Failure to do so, will not result in successful participation. The report can be as descriptive as you like, but must contain the following points:

- Features you worked upon
- List of pull requests you created
- Summary of your work

Disclaimer:

In case of any inconsistencies and issues, the decision made by the WoC organising committee members shall be final.

■ ■ ■ ***Talk is cheap! Show me the code!!!***