My open source journey with LFX Mentorship and Litmus

Discovering CNCF Landscape:

As previously I've worked with open source projects both for personal use and for contributing to get hands-on new skills, I got to know about the CNCF ecosystem and cloud-native projects, and started to contribute to it. In the beginning my contributions were focused on cloud-monitoring projects like Thanos and Prometheus, later I got to know about the likes of chaos-engineering through LitmusChaos and Chaos Mesh.

A bit about LFX Mentorship:

The LFX Mentorship Program is a focused 12-week initiative designed to link aspiring contributors with experienced mentors in the open-source community. The program's main objective is to nurture both personal and professional growth by providing mentees with valuable guidance, consistent support, and essential insights.

For detailed information, you can explore the comprehensive [LFX Mentorship Docs.](#)

The application process is straightforward, beginning with the creation of an LFX Mentee account and selecting projects from the platform. You'll need to submit a resume and cover letter including a draft design of how you are going to implement the various technicalities of the project as part of your application.
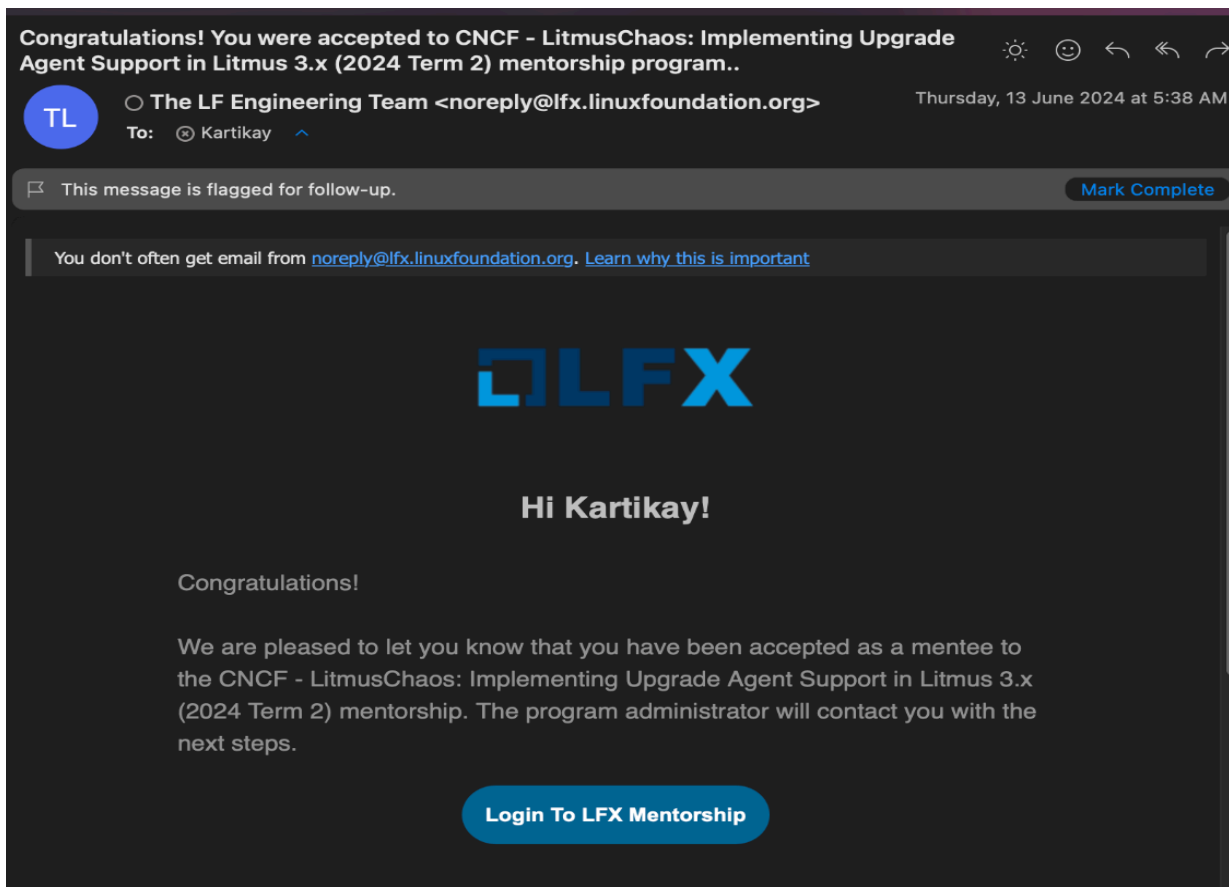
Navigating through different projects:

I navigated to different projects of the organisations I've contributed to, each project looked intriguing in their own way.

But I really liked the project [Add support for upgrade-agent for Litmus 3.x](#), as I was also interested with the particular org too, so I decided to give it a shot.
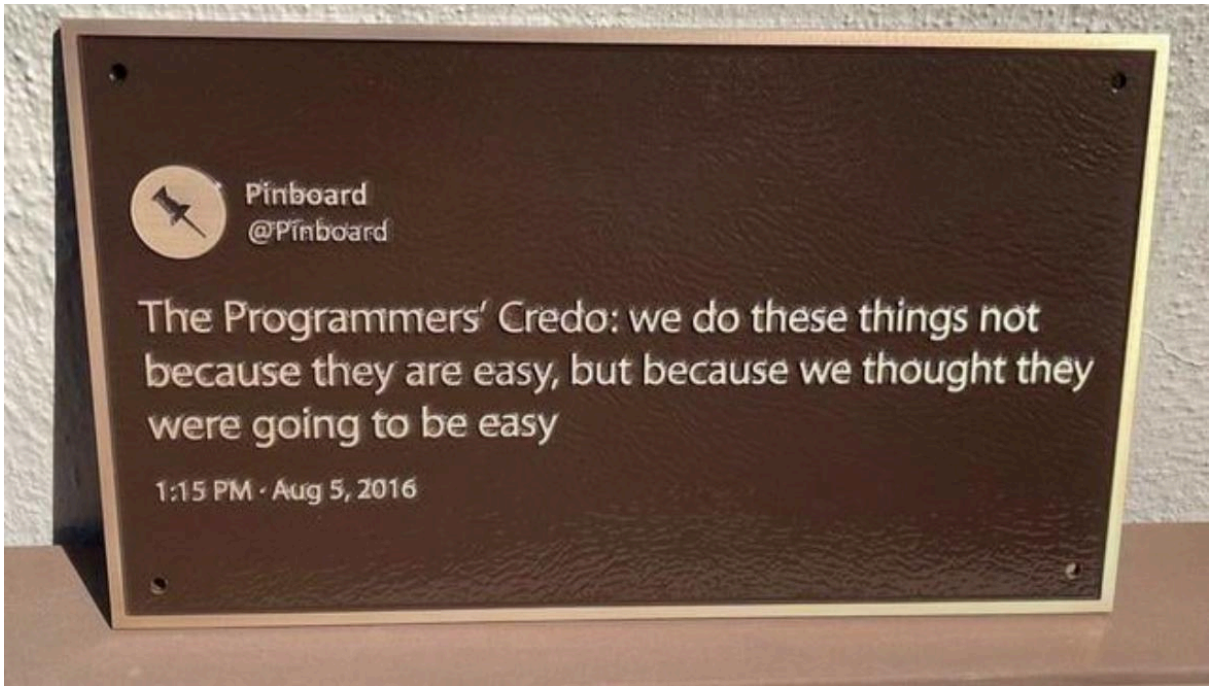

I applied to the project and waited for the results, and then it arrived. I opened the inbox and it flashed with the subject "Congratulations! You were accepted to CNCF - LitmusChaos: Implementing Upgrade Agent Support in Litmus 3.x"

Congratulations! You were accepted to CNCF - LitmusChaos: Implementing Upgrade Agent Support in Litmus 3.x (2024 Term 2) mentorship program..

The LF Engineering Team <noreply@lfx.linuxfoundation.org>   Thursday, 13 June 2024 at 5:38 AM
To: Kartikay

This message is flagged for follow-up.   Mark Complete

You don't often get email from noreply@lfx.linuxfoundation.org. Learn why this is important

Hi Kartikay!

Congratulations!

We are pleased to let you know that you have been accepted as a mentee to the CNCF - LitmusChaos: Implementing Upgrade Agent Support in Litmus 3.x (2024 Term 2) mentorship. The program administrator will contact you with the next steps.

Login To LFX Mentorship

Now the commitment being made, and being selected, I decided to start the project, to explore the various components being required to revamp and implement the upgrade-agent. Now was the time to explore the world of chaos even more!

Starting the work:

I started with having a few meets with my mentors who helped a lot and provided support throughout the mentorship program, Saranya Jena and Sarthak Jain, we laid down a basic implementation of how the upgrade-agent would be implemented.

Pinboard
@Pinboard

The Programmers' Credo: we do these things not because they are easy, but because we thought they were going to be easy

1:15 PM · Aug 5, 2016

We agreed on a sequential upgrade path would be adopted by the agent, with the agent upgrading to the intermediate versions and notifying the user through logs, and example workflow with example situations would look like something below.

Here, the upgrade-agent goes from version v2.3.0 to v2.5.0, the upgrade agent looks for intermediate versions (such as v2.4.0) and goes like v2.3.0 ->

v2.4.0 -> v2.5.0, while upgrading the collections and documents wherever necessary.

For example while upgrading to version v3.9.0, the following changes are to be made in the db:-

- In projects collection (auth DB), member role is updated from Editor to Executor
- New is_initial_login field in users collection (auth DB) whose value is set as false

To execute the upgrades, run the agent while specifying the version as "3.9.0", I have included more information in the contributing guide of the upgrade-agent and you can check it out from there.

This was possible with the help of weekly meetings and valuable feedback and guidance from the mentors and am grateful for them.

Conclusion:

Reflecting on my experience with the LFX Mentorship Program and LitmusChaos, it has been a journey filled with both challenges and rewards. While initially daunting, navigating the extensive CNCF project landscape as a beginner transformed into an exciting adventure with the right resources and guidance.

The LFX Mentorship Program connected me with experienced mentors who provided invaluable support throughout. The key lessons I learned include the importance of choosing a project that aligns with your interests, preparing a strong application, and actively participating with mentors and the community.

Throughout the mentorship, I made significant contributions to LitmusChaos, which not only honed my skills but also enriched the LitmusChaos ecosystem, benefiting others as well.

As I conclude this program, I am eager to continue exploring Chaos Engineering and contributing to open source. For anyone considering a similar path, I encourage you to seize the opportunity, learn, and grow within the open-source community. Your adventure is just beginning!

Before I sign off, I want to express my deepest gratitude to the incredible Litmus team. Your commitment to developing such an outstanding tool like LitmusChaos is truly appreciated.

Join our community on [GitHub](#) and [Slack](#) to learn more about LitmusChaos.