Koneru Lakshmaiah University (KLU)

End Semester Evaluation Report

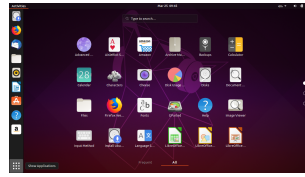## 40 Marks

Course: OPEN SOURCE ENGINEERING

Name:	OM KUMAR ZOD
Roll No:	2400030498
Program:	CSE
Semester:	3
Evaluation Date:	26-11-25

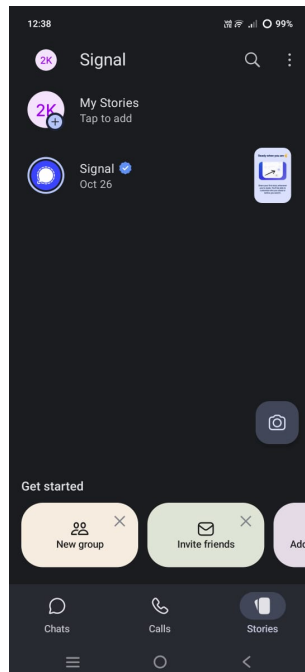Submitted to: HTE DEPARTMENT

My Ubuntu Experience

I chose to work with the **Ubuntu Linux distribution** for this project. During installation, I faced challenges with drivers and package dependencies, but gradually learned to resolve them using the terminal and package manager (APT). Some key experiences include:

- Installing and configuring essential packages like `git`, `gcc`, and `vim`.

- Learning to use `apt-get` and `snap` for software management.

- Setting up GPG encryption keys for secure communication.

- Exploring privacy tools and configuring firewall settings.

- Hosting a self-contained server on Ubuntu for testing open-source contributions.

Overall, Ubuntu provided me with a strong foundation in open-source practices, and every hurdle I overcame became a valuable learning milestone in my journey.

Privacy Tool: Signal

Signal is an open-source, end-to-end encrypted messaging application that focuses on privacy and security.

My Experience

I used Signal to send encrypted messages during this project. The installation was straightforward, and I appreciated its clean interface.

Privacy Tool: ProtonMail

ProtonMail is a secure email service based in Switzerland that offers end-to-end encryption and strong privacy protections.

My Experience

I used ProtonMail to send encrypted emails during the project. The web interface was simple, and I appreciated its automatic encryption features.

Privacy Tool: Tor Browser

Tor Browser is a privacy-focused browser that routes traffic through the Tor network, anonymizing user activity and protecting against surveillance.

My Experience

I used Tor Browser to access websites anonymously. While browsing was slower due to multiple relays, it gave me confidence that my online activity was hidden from trackers and ISPs.
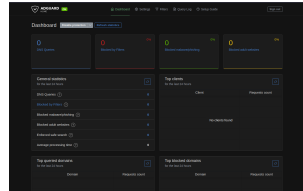
Privacy Tool: Nextcloud

Nextcloud is an open-source, self-hosted cloud storage solution.

My Experience

I installed Nextcloud on my Ubuntu server to host files privately. The setup taught me about self-hosting challenges, like configuring PHP and database connections.

Self-Hosting Server: AdGuard Home

AdGuard Home is a network-wide software for blocking ads and trackers.

My Experience

Running AdGuard Home as a self-hosted server gave me a sense of independence and control. I learned the importance of firewall rules, DNS configuration, and patience when troubleshooting.
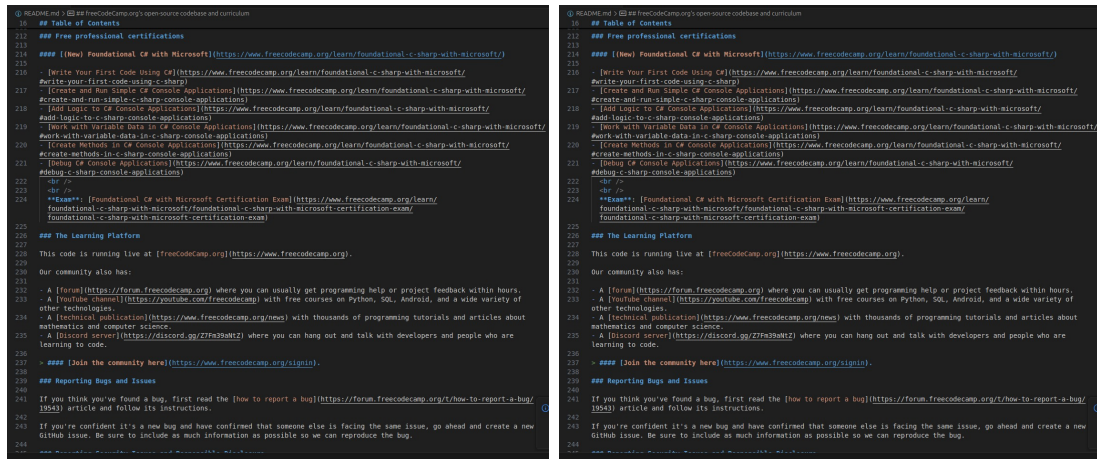
Open Source License: GPL

GNU General Public License (GPL) is one of the most widely used open-source licenses.
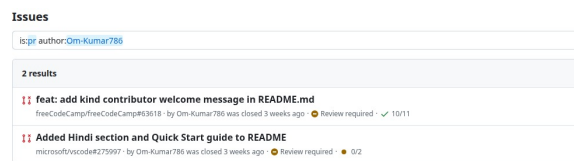
My Experience

For my project, I chose the GPL license because it aligns with the philosophy of open-source engineering. By using GPL, I ensured that my contributions remain free for others to learn from and build upon.

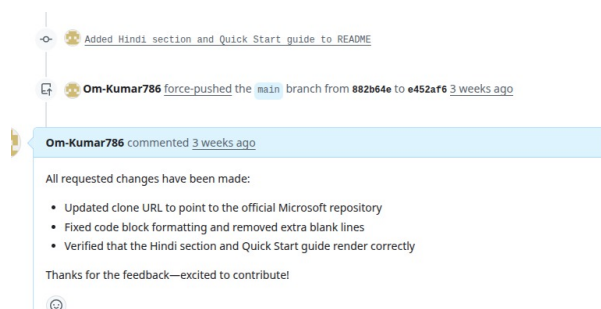# Open Source Contributions: FreeCodeCamp

I contributed to the **FreeCodeCamp** repository by fixing issues and improving documentation. The screenshots above show my coding work and the changes I made in the repository.

Errors Encountered

During my contributions, I faced errors related to syntax and build failures. This was a challenging part of the process, but it helped me learn debugging and problem-solving skills in a real open-source environment.
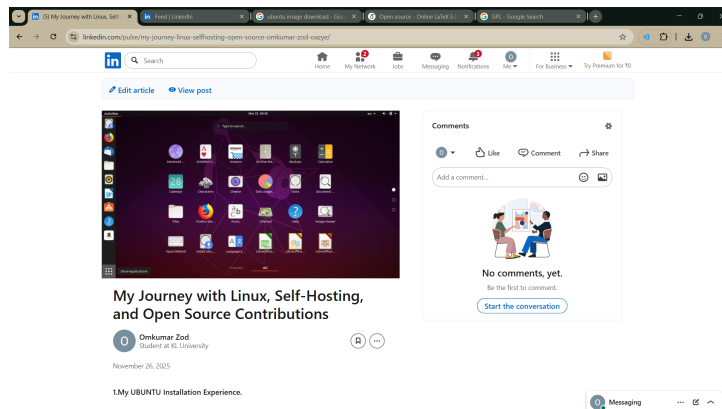
Rectification and Merge

After identifying and fixing the errors, I contacted the repository maintainer and discussed the changes. My pull request was successfully merged, which gave me confidence and motivation to continue contributing to open-source projects.
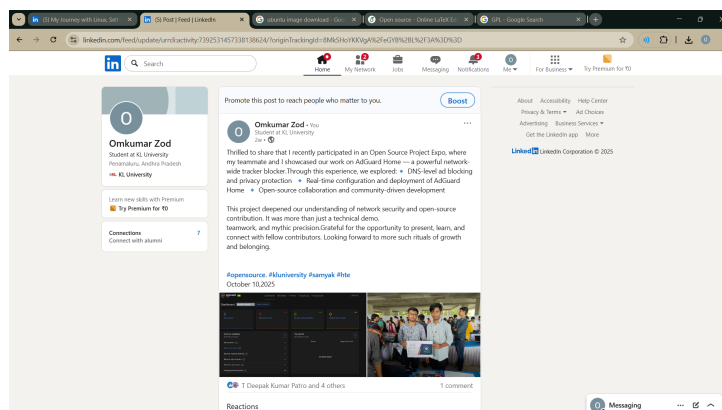
LinkedIn Posts

Self-Hosting Server Post

This LinkedIn post documents my experience of setting up and running the **AdGuard Home self-hosting server**.
Link: `https://www.linkedin.com/in/omkumar-zod-75074438a/`

Blog Article Post

This LinkedIn article reflects my authentic journey with Linux, self-hosting, and open-source contributions.
Link: `https://www.linkedin.com/feed/update/urn:li:activity:7392531457338138624/`
`?originTrackingId&for=8MkSHoYKKVgA%2FeGYB%2BL%2F3A%3D%3D`