# LAMP Stack Implementation – DevOps Project

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Date: 12th August 2025

Program: StegHub

## 1. Introduction

This document presents my first DevOps project completed under the mentorship of StegHub. The project involved setting up a LAMP (Linux, Apache, MySQL, PHP) stack from scratch, hosting a simple PHP application, and managing source code using Git and GitHub.  
I am grateful to StegHub for providing structured guidance and a supportive learning environment that has allowed me to gain hands-on experience in real-world DevOps practices.

## 2. Project Overview

The purpose of this project was to understand the step-by-step process of implementing a LAMP stack for web hosting and database connectivity.

Technologies used:

• Linux – Server environment

• Apache – Web server

• MySQL – Database management

• PHP – Server-side scripting

• Git/GitHub – Version control & collaboration

## 3. Steps Taken

• Server Setup – Configured a Linux environment for hosting.

• Apache Installation – Installed and verified Apache web server functionality.

• MySQL Installation – Installed MySQL and configured database access.

• PHP Setup – Installed PHP and tested integration with Apache.

• Application Deployment – Created a PHP test page to confirm the stack was functional.

• Version Control – Initialized Git in the project directory.

• Remote Repository – Created a GitHub repository and pushed the project files.

## 4. Challenges & Learnings

Challenges:

• Initial Git push errors due to remote changes.

• Understanding server directory structures for web files.

Learnings:

• How to set up and configure each component of the LAMP stack.

• Handling Git conflicts and repository management.

• Improved confidence in Linux command-line operations.

## 5. Project Links

• GitHub Repository: [**https://bit.ly/4fzVlAm**](https://bit.ly/4fzVlAm)

• LinkedIn Post: <http://bit.ly/41GhKWK>

## 6. Acknowledgments

I would like to thank StegHub for their mentorship and for creating an environment where I could learn by doing. This experience has given me a strong foundation in DevOps practices and encouraged me to explore more advanced projects in the future.