

ALX Project

Web infrastructure design

Task 3.

Definitions and Explanations.

1. **For every additional element, why you are adding it:** The introduction of an additional server and a load balancer has brought several advantages to our infrastructure. The new server allows for the segregation of each component (Nginx for the web server, the application server housing the code base, and MySQL for the database) onto individual servers. Simultaneously, the extra server serves as a backup, providing resilience in case of component or server failures. Each server is under continuous monitoring and fortified with a firewall for enhanced security. Furthermore, the added load balancer contributes to improved traffic handling across the entire infrastructure, optimizing performance and ensuring scalability.