ALX Project

Web infrastructure design

**Task 3.**

**Definitions and Explanations.**

1. For every additional element, why are adding it:- The load balancer can then relay traffic to each of them, allowing to grow the capacity to serve more clients without asking those clients to connect to each server directly. HAProxy receives the traffic and then *balances* the *load* across the servers. This technique hedges against any one of server failing, since the load balancer can detect if a server becomes unresponsive and automatically stop sending traffic to it. Adding the new server has allowed us to separate each component (web server; Nginx, Application server; code base and Database; MySQL) in there own server and yet having one extra server with all the components to serve as a backup if any of the components or server fails. Each server is being monitored and has a firewall. We have also added an extra load balancer that will assist in handling more traffic across the whole infrastructure