ALX - 0x09. Web Infrastructure Design

Task 3: Scale up

For every additional element, why are we adding it; we have added one server and one load balancer. Adding the new server has allowed us to separate each component (web server; Nginx, Application server, code base and Database; MySQL) in their server and yet have 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.

https://ww.foobar.com

8.8.8.8

DNS

DNS

DNS

SSL

8.8.8.8

SSL Certificate

8.8.8.8

Load Balancers (HAproxy)

IP: 8.8.8.8

using **round-robin distribution algorithm**;
where the first request will be sent to server
1, then the second request sent to server 2,
then the third request sent to server 3 ...

Firewall

Firewall

Firewall

Firewall

Web Server
Nginx

Application
Server
Code base

Database
MySQL

Web Server
Nginx

Application Server
Code base

Database
MySQL

Server 1 (Active)

Server 2 (Active)

Server 3 (Active)

Server 4 (Active)

Master DB

Slave DB

70 92 ●● Monitoring
client 1

70 92 ●● Monitoring
client 2

70 92 ●● Monitoring
client 3

70 92 ●● Monitoring
client 4

Sumologic