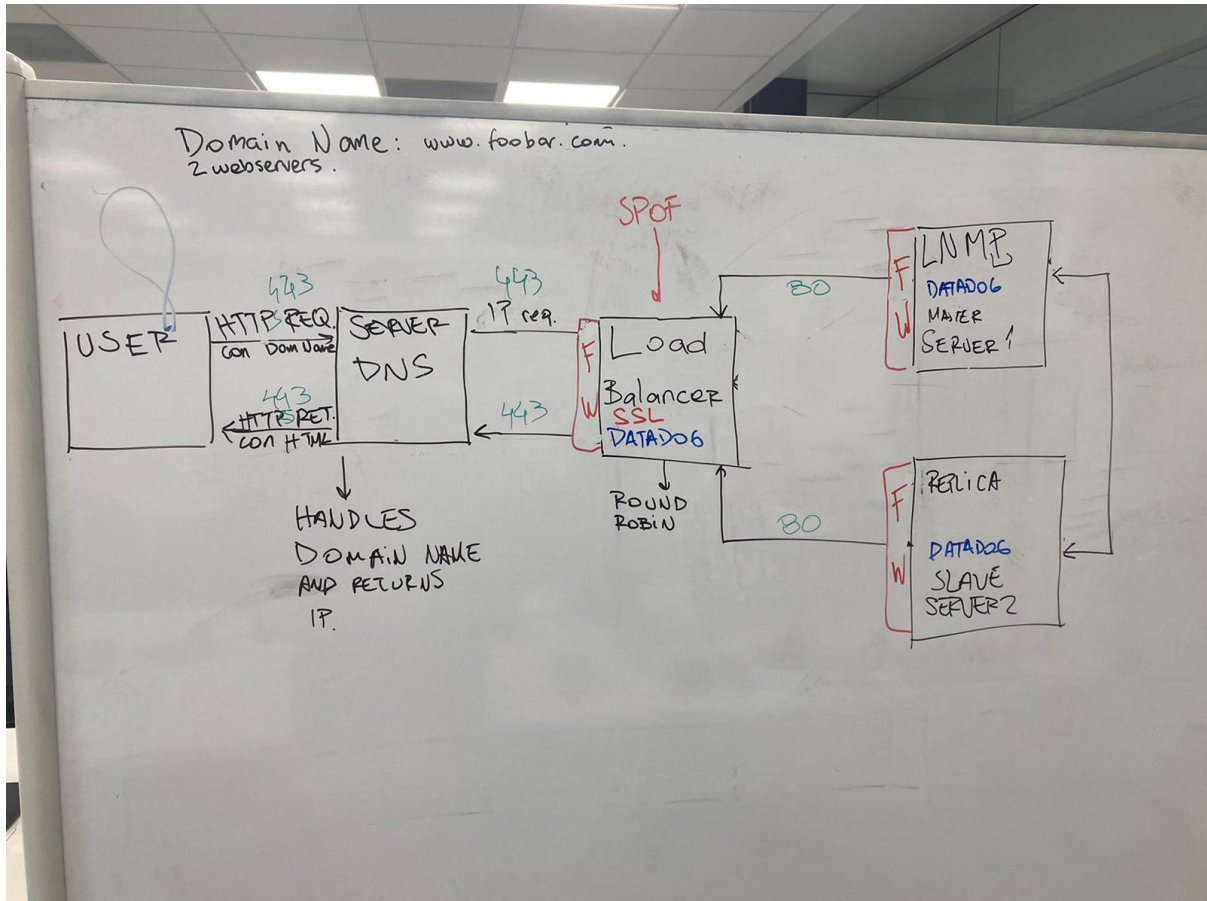


2. Secured and monitored web infrastructure



Here we are adding 3 firewalls, 3 monitoring clients and 1 SSL certificate in order to make our infrastructure secure.

Firewalls: Firewall is like a road block for network traffic that is based on preconfigured set of rules. Also comes at use to access private networks through secure authentication and logins. We added 3 one in each point of entry to our separate servers

1 SSL certificate: The SSL certificate is like the manual or way of encrypting the request from the client and the request from the server so that our messages or data cannot be interfered and read simply. It turns the traffic from HTTP(port 80) to HTTPS(port 443 which is encrypted)

3 monitoring clients: The monitoring clients which are present in each of the servers same as the firewalls, are in charge of monitoring the overload of the servers as well as any failure in application. We are using the datadog client.

Problems:

Terminating the SSL at the load balancer is a problem because there could be a breach in a deeper level in the other servers and we have our request and response via HTTP in port 80.

Having only one write capable server is a problem because in the case of downtime we can only run a replica of when the server went down and not pass new requests where a write into the database is needed.

We can have all the components separated in different servers to further improve handling and everything.