Question:

- For every additional element, why you are adding it
- What are firewalls for
- Why is the traffic served over HTTPS
- What monitoring is used for
- How the monitoring tool is collecting data
- Explain what to do if you want to monitor your web server QPS

Answers:

1. We have added three firewalls in order to prevent the server from unauthorized access. We also secured a version of Hypertext Transfer Protocol(secure) to protect our sensitive data, we added monitoring clients to collect logs from the servers and send them to our sumo logic monitor whose duty is to help analyze and visualize data and to send alerts if any threat is found.

2. Firewalls are network security system that monitors and controls incoming traffic based on predetermined rules. It establishes barriers between trusted users and untrusted users.

3. The HTTPS information is encrypted using the TSL or SSL which makes the data more secure, unlike HTTP which transfers data in plain text.

4. The monitor detects any threats from web applications' performance

5. It collects logs from the server(either the web server, application server, or the database).

6. I would monitor it from the network application level since one web server handles 1k queries per second (QPS).

- You must be able to explain what the issues are with this infrastructure:
    - Why terminating SSL at the load balancer level is an issue
    - Why having only one MySQL server capable of accepting writes is an issue
    - Why having servers with all the same components (database, web server and application server) might be a problem.