Let me explain some specifics about this infrastructure:

- For every additional element, why you are adding it:

  * We are adding two servers to host the web server, the application server, and the application files. This way, we can distribute the load and increase the availability of the website.

  * We are adding a web server (Nginx) to handle the HTTP requests from the clients and serve the static files (such as images, CSS, JavaScript, etc.).

  * We are adding an application server to run the dynamic code (such as PHP, Python, Ruby, etc.) and communicate with the database.

  * We are adding a load balancer (HAproxy) to balance the traffic between the two servers and provide failover in case one of them goes down.

  * We are adding a database (MySQL) to store and retrieve the data for the website.

- What distribution algorithm your load balancer is configured with and how it works:

  * One possible distribution algorithm is round-robin, which assigns each request to the next available server in a circular order. This ensures a fair distribution of requests across the servers.

  * Another possible distribution algorithm is least connections, which assigns each request to the server with the least number of active connections. This helps to avoid overloading a server that may be processing long or complex requests.

- Is your load-balancer enabling an Active-Active or Active-Passive setup? Explain the difference between both:

  * An Active-Active setup is when both servers are running at the same time and receiving requests from the load balancer. This provides high availability and performance for the website.

  * An Active-Passive setup is when only one server is running at a time and receiving requests from the load balancer, while the other server is on standby and ready to take over in case of failure. This provides fault tolerance and redundancy for the website.

- How a database Primary-Replica (Master-Slave) cluster works:

  * A database Primary-Replica cluster is when one database server (the primary or master) is responsible for writing and updating the data, while one or more database servers (the replicas or slaves) are responsible for reading and replicating the data from the