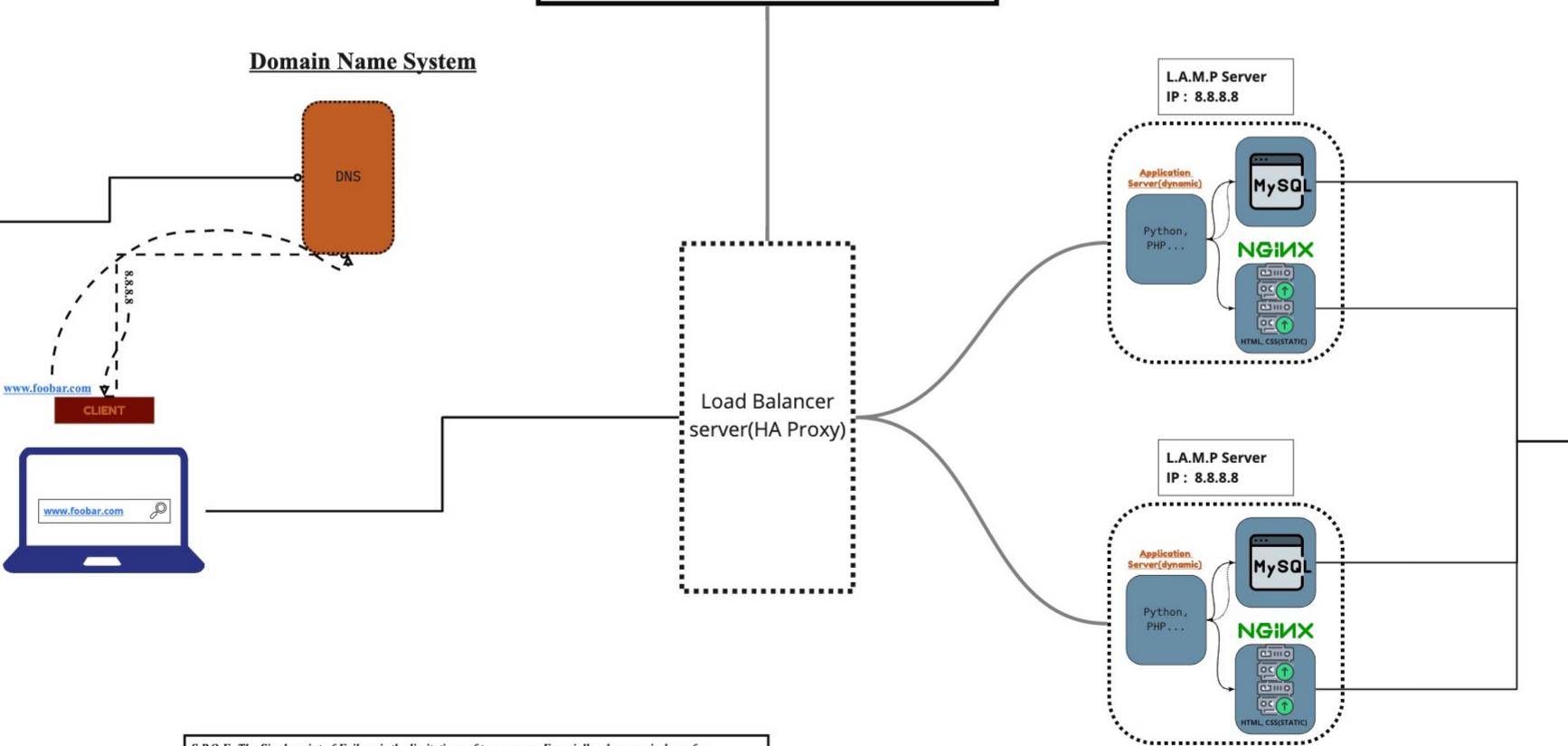


- The OS(operating system) and browser check cache.
- Checks with Resolver and check its cache.(ISP is resolver).
- Checks Root Server for TLD(Top-Level Domain) server.
- Checks authoritative name server for the corresponding Name Server.
- The Resolver then save the memory of the IP address and returns it directly to the OS, subsequently giving it to the browser which then connects to their browser.

- The HA Proxy load balancer is Using the Round Robin One after another approach to scheduling requests. For one two L.A.M.P Servers.
- The Load balancer is currently configured with and Active-Active Setup to help distribute the load to all available servers. This improves Scalability reliability of said server. This differs from Active-Passive as Active-Passive relies on one server. In addition to this it has a server on standby in case of failure.



- The Server contains an application server that allows for the use of MySQL database. As well as Web Server that handles the HTML & HTTP Protocols on port 80. This give the static content of the website HTML and CSS.
- The database is used for the storage of information in a way that makes a website more dynamic, such as filtering of information on a website, the addition of new users and user information.
- These two works alongside the application server which is what host the

MySQL Database and the Web application server.

S.P.O.F: The Single point of Failure is the limitations of two servers. Especially when one is down for maintenance. Subsequently, causing all traffic to be directed to the active server.

