WWW.footbar.com

8.8.8.8

8.8.8.8

Nginx

Application server

MySQL

Challenges faced by this infrastructure

Single Point of Failure (SPOF): Because we only have one server, any malfunction in the network, hardware, or software would result in website outage.

Think about load balancing and redundancy (several servers) to lessen this.

Downtime During Maintenance: The web server must be restarted in order to deploy new code or carry out maintenance.

There's a chance the website won't work during this period.

Rolling deployments and using a backup server while performing maintenance are two solutions.

Scalability Difficulties:

Increased traffic can make it difficult for a single server to process requests quickly.

Shared resources make horizontal scaling (adding more servers) challenging.

For improved scalability, take into account distributed architectures and load balancers.

Keep in mind that real-world conditions frequently call for more intricate setups than what is shown in this simplified design. However, it's crucial to comprehend these basic elements.