Task 1: Distributed Web Infrastructure

Description:

This project implements a distributed web infrastructure for www.foobar.com.

Components:

- 2 servers

- 1 web server (Nginx)

- 1 application server

- 1 load balancer (HAproxy)

- 1 set of application files (code base)

- 1 database (MySQL)

Explanations:

- **Server 1**: Hosts web server, application server, and load balancer.

- **Server 2**: Hosts application server and database.

- **Web Server (Nginx)**: Handles HTTP requests and serves static content.

- **Application Server**: Executes dynamic code.

- **Load Balancer (HAproxy)**: Distributes traffic across servers.

- **Database (MySQL)**: Primary-Replica cluster for data redundancy.

Issues:

- Single Point of Failure (SPOF)

- Lack of security measures (no firewall, no HTTPS)

- Absence of monitoring