

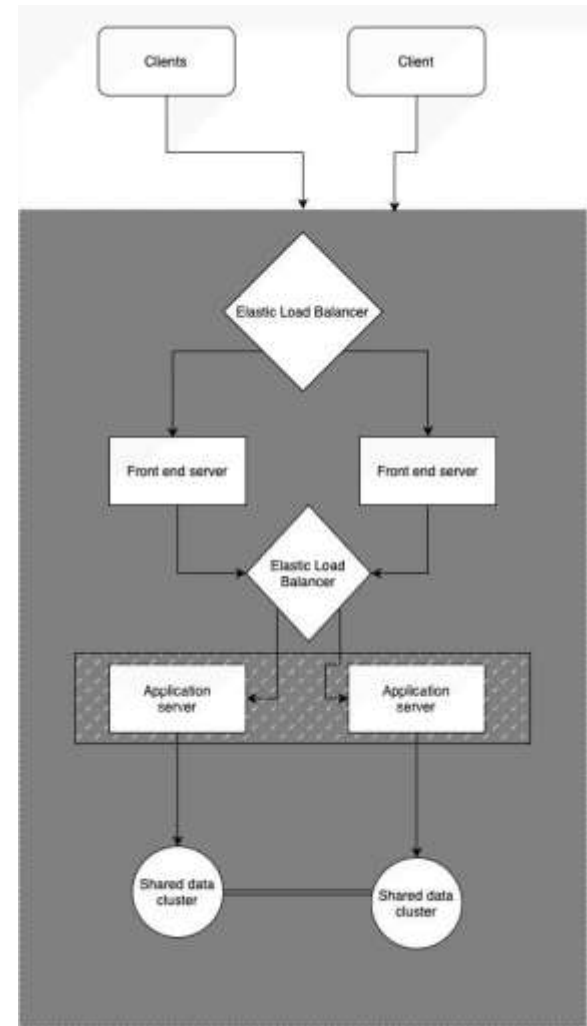
Assignment 1.10

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Scenario: eCommerce platform

Architectural diagram:



Server architecture features:

Load Balancing - Implement a load balancer to evenly distribute incoming customer requests across multiple web servers to ensure high availability, reliability and efficient use of resources.

Clustering - Usage of server clustering to ensure database redundancy and fault tolerance. This can involve replicating the database across multiple servers to handle high traffic loads.

Containerization - Containerization of the micro services such as payment systems so in the case where the front end of the e-commerce website is compromised it will not be affected because the individual micro services will be isolated and secure.

Blacklisting - Setup blacklists to block known malicious IP addresses of bad actors, malware and devices. Continuously update the blacklist against known security threats and fraud.

Whitelisting - Implement and maintain a list of trusted entities (eg. partners), users, devices and IP addresses/ports to access the API of the platform.