

System Design Basics

Introduction to System Design

System design is about building scalable and reliable systems.

It involves architecture and planning.

Scalability

Systems should handle increased load.

Horizontal and vertical scaling are key strategies.

Load Balancing

Load balancers distribute traffic across servers.

This improves availability and performance.

Databases

Choosing SQL or NoSQL depends on requirements.

Replication and sharding improve performance.

Caching

Caching stores frequently accessed data.

Tools include Redis and Memcached.