# Distributed Systems – Fault Tolerance

### Lab 1

#### 2021/2022

## **Naive replication**

Attempt to provide fault tolerant operation by having multiple servers for the lin-kv service.

#### **Steps**

- 1. Run multiple instances of the same server and recognize the need to propagate updates.
- 2. Implement and test a simple strategy to keep servers synchronized.
- 3. Retest with increasing request rate (--rate) and network lantency (--latency).
- 4. Retest with network partitions (--nemesis partition).
- 5. Discuss problems found and speculate about solutions.

**Learning Outcomes** Recognize and discuss the challenges of fault tolerant replica-