

CMPS128: Midterm review topics

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1. Models
 - (a) Events-and-messages model (Lamport diagrams)
 - (b) Network models
 - (c) Failure models
 - (d) Consistency models
2. Ordering
 - (a) FIFO order
 - (b) Causality
 - (c) Total orders
 - (d) Anomalies
 - (e) Mechanisms
 - i. FIFO Delivery protocol
 - ii. Lamport clocks
 - iii. Vector clocks
 - iv. Consistent snapshots
3. Fault-tolerance
 - (a) Reliable delivery
 - (b) Reliable broadcast
 - (c) Data replication
 - i. Strong consistency
 - A. Relationship to total orders
 - B. Replication mechanisms
 - ii. Weak consistency
 - iii. CAP Theorem