Real-time Collaborative Text Editor with CRDTs - Applied

Madiba Hudson-Quansah

Contents

Chapter 1

Background

- Sequential Data types - Concurrent Data Types - Wait-Free Lock-Free Data Types - Conflict-Free Replicated Data Types
- The Consistency Availability Partition tolerance theorem
- Optimistic Replication
- State Based vs Operation Based CRDT implementations
- Commutative vs Non-Commutative operations
- Standard Execution Model of Operation-based CRDTs
- Last Writer Wins
- Causal Order
- Unique Set

Chapter 2

Strat

2.1 Research Topics

2.1.1 Delta CRDTs

2.1.1.1 Research Problem

2.1.1.2 Literature Review

2.1.1.2.1 Current State of the field

2.1.1.2.2 Gaps / Problems in the field