CS 499 – Distributed Systems  
Friday, December 04, 2009

Final Exam review:

* Logical Clocks
  + vector
  + normal Lamport clocks
  + example of applications
* Global State
  + Terminology
    - cuts
    - consistent cuts binary
    - Diagram!!!
  + Snapshot algorithm
    - limitations
* Concurrency Control
  + serial equivalence & how achieve
  + 2-phase locking
  + strict 2 phase locking
  + strict execution
    - how applies to Optimistic Concurrency Control
  + Deadlocks
    - philosophy
    - how to resolve
    - Etc…
* Coordination and agreement & questions (8 questions)
  + Mutual Exclusion
  + Central Server Algorithm
    - in context of Mutual Exclusion conditions
  + overall picture of Election Algorithm
    - What process are we really choosing?
      * Bully Algorithm – form quizzes
  + Consensus Question - form quizzes
    - in context of the internet
* Multicast Communication (three questions)
  + ordering principles
    - comparing
    - understanding
      * using the example from the bulletin board
* Grad Project Questions
  + //slide presentations should be online
  + one question for each topic area
  + two questions for grad students