Announcements

- Send email now if you need to be registered and aren’t yet.
- Project – will give handout with details next week – but do start thinking about it
- Honor code reminder – acknowledge sources used during presentations

Quiz Results

Reading List

- Topics reflect what I think graduate students should know about operating systems, and systems students in particular
  - Some papers are “classics”, many are brand new
  - Allow study of new trends
  - Willing to exchange papers to match your interests; however; quality must match that of existing list
- Please sign up for a paper – Check website

Topic I: Concurrency

- Eraser
- Lockless synchronization/RCU – Read-Copy-Update
- Transactional Memory

Topic II: Threads vs. Events

- On the duality of OS structures
- Capriccio
- TAME or “Events Can Make Sense”
Topic III: Scheduling
• VTRR

Topic IV: Kernel Structures
• SPIN
• Exokernel
• HiStar

Topic V: Virtual Machines
• OS Support for VM
• Xen
• Memory Management in VmWare/ESX Server

Topic VI: Distributed Systems
• Time, clocks, and events
• Implementing RPC
• Structured Streams

Topic VII: File and Storage Systems
• Journaling vs. Soft Updates
• Google FS
• Bigtable
• Byzantine Fault-tolerant Storage

Topic VIII: Robustness
• Nooks
• SFI
• Rx
• Explode
• Using JIT to instrument OS
Others?

• Trends:
  – OS support for web technologies: AjaxScope, MashUp OS
  – Virtual Memory (Mondrix, Mach?)
  – P2P Decentralized Storage
  – More VMM (Terra – virtual machines for security?)