CS 5204 Operating Systems Lecture 2

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Announcements

• Need to actually submit force-add form
• Project – will give handout with details next week
  – but do start thinking about it
• Honor code reminder
  – acknowledge sources used during presentations

Reading List

• Topics reflect what I think graduate students should know about operating systems, and systems students in particular
  – Some papers are “classics”, some are brand new
  – Willing to exchange papers to match your interests; however: quality must match that of existing list
• Please sign up for a paper
  – ✓ means already taken
  – Check website

Topic I: Concurrency

• Eraser ✓
• On the duality of OS structures ✓
• SEDA ✓
• Capriccio

Topic II: Distributed Systems

• Remote Procedure Calls ✓
• Clocks & Event Ordering
• Leases ✓
• Byzantine Fault Tolerance
• End-to-End Argument ✓

Topic III: Scheduling

• Effects of clock resolution ✓
• VTRR (Virtual-time round robin scheduling)
Topic IV: File Systems
- Transactions ✓
- Journaling vs Soft Updates ✓
- Google FS ✓

Topic V: Virtual Memory
- Mach ✓
- Mondrix
- Asbestos ✓

Topic VI: Kernels
- Exokernel
- SPIN

Topic VII: Reliability
- Metal
- SFI
- Nooks
- Rx

Topic VIII: Virtual Machines
- KaffeOS
- Xen