EECS 211:
Advanced System Software
Lecture 18

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Lecture 18: Overview

- Assignment 5
  - User programs and system calls in Nachos
- Assignment 6
  - Complete Assignment 5
- Course Administration
  - Final Course Evaluation

- Distributed Systems
  - Distributed System Structures

Assignment 5

- Schedule (two-week assignment!)
  - posted Feb 20, 2008 (week 7)
  - due Mar 5, 2008 (week 9)
- User programs and system calls in Nachos
  - Task 1: Implement exception handling and system calls
    - Implement `ExceptionHandler()`; handle 9 exceptions
    - Implement `SystemCall()`; handle 7 (out of 9) system calls
  - Task 2: Validate using small test programs
    - "good" programs: `Hello.c`, `Name.c`, and `View.c`
    - "bad" programs: `Zero.c`, `Read.c`, and `Write.c`
- Deliverables
  - `addrspace.h, addrspace.cc, exception.cc`
  - `Hello.c`, `Name.c`, `View.c`, `Zero.c`, `Read.c`, `Write.c`
  - brief explanation (in body of email)
  - Email to doemer@uci.edu

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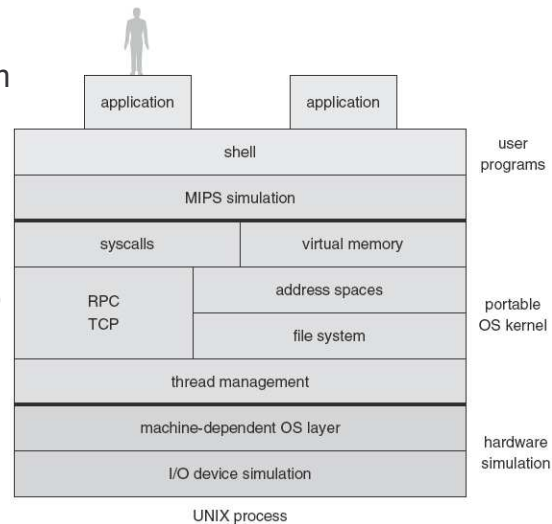
Assignment 5

- Overview
  - The Nachos System

  - User code: emulated by MIPS simulator

  - Kernel: normal (debug'able) Unix process

  - I/O System: simulated by std. process I/O

application		application	
shell			user programs
MIPS simulation			
syscalls		virtual memory	
RPC TCP	address spaces		portable OS kernel
	file system		
thread management			
machine-dependent OS layer			hardware simulation
I/O device simulation			
UNIX process			

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Assignment 6

- Schedule
  - posted Mar 6, 2008 (week 9)
  - due Mar 19, 2008 (final week)
- User programs and system calls in Nachos
  - Option 1: Leave as submitted (20 extra points)
    - Assignment 5 will be graded "as is"
  - Option 2: Resubmit Assignment 5
    - Assignment 5 will be graded with new files
- Deliverables
  - Email to doemer@uci.edu
  - Option 1: Statement that you choose Option 1
  - Option 2: Files as described in Assignment 5

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Course Administration

- Final Course Evaluation
  - 9th through 10th week
  - March 6, 2008 through March 16, 2008, 11:45pm
  - Online via EEE Evaluation application
- Feedback from students to instructors
  - Voluntary
  - Completely anonymous!
  - Very valuable!
- Help to improve this class!

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Distributed Systems

- Excerpts from chapter 16 of
  "Operating System Concepts", 7th Edition,
  by A. Silberschatz, P. B. Galvin, G. Gagne,
  John Wiley & Sons, 2005.

- Distributed Systems
  – Distributed System Structures