EECS 111: System Software Lecture 6

Rainer Dömer

doemer@uci.edu

The Henry Samueli School of Engineering Electrical Engineering and Computer Science University of California, Irvine

Lecture 6 Overview

- Course Administration
 - Assignment 2
- Threads
 - Multithreading Models
 - Thread Libraries
 - Threading Issues

EECS111: System Software, Lecture 6

(c) 2010 R. Doemer

(c) 2010 R. Doemer 1

Assignment 2

- Discussion
 - Process creation, Context switch
- Project
 - Parallel Processes, Inter-Process Communication
 - Program fibo2 to compute Fibonacci numbers
 - · Create two parallel child processes
 - Child 1 computes Fibonacci(n-1)
 - Child 2 computes Fibonacci(n-2)
 - Parent waits for children and combines results
 - Communication via POSIX shared memory
 - · Analyze and compare execution times
 - Due
 - Tuesday, April 20, 2010, 12:00pm (noon)

EECS111: System Software, Lecture 6

(c) 2010 R. Doemer

3

Threads

- "Operating System Concepts", 8th Edition, by A. Silberschatz, P. B. Galvin, G. Gagne, John Wiley & Sons, 2009.
- Chapter 4
 - Multithreading Models
 - Thread Libraries
 - Threading Issues

EECS111: System Software, Lecture 6

(c) 2010 R. Doemer

4

(c) 2010 R. Doemer 2