

# Homework #2

**Your Name:** \_\_\_\_\_

**Due Date:** Thursday, April 23, Beginning of class

*Please write your answers directly on this sheet and hand in the hardcopy.*

## **Textbook Reading Assignment**

Chapter 3: Memory Management (through page 216) by Thursday, April 23

Chapter 3: Memory Management (remainder) by Thursday, April 30

Chapter 4: File Systems, by Thursday, May 7

## **Exam Reminder**

Thursday, April 23, 2009

## **Last Part of Chapter 2 (Processes and Threads)**

1. Briefly describe what a “user-level thread package” is.

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2. Assume a thread wishes to make a blocking system call. How can a user-level threads package prevent that call from blocking all the threads in the process?

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3. What is reentrant code?

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4. If several thread can access shared memory, why does each thread need its own private stack?

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5. What is a “race condition”?

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6. What is a “spin lock”? When is it reasonable to use?

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7. What is “starvation”?

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8. What is a “CPU-bound” process? What is an “I/O-bound” process?

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9. Describe “preemptive” and “non-preemptive” scheduling.

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10. What scheduling algorithm is used in the BLITZ scheduler?

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