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Text: Silberschatz, Galvin, Gagne
Operating System Concepts
Seventh Edition

Office Hours: 9-12 MWF, 8-12:00 TR

All class members are required to subscribe

1. Aug 20	Syllabus and Class Roll.	
2. Aug 22	What and why is an operating system?	Chapter 1
3. Aug 24		
4. Aug 27	Hardware Organization	Chapter 2
5. Aug 29		
6. Aug 31		
7. Sep 3	Labor Day	
8. Sep 5	Operating System Structure	Chapter 3
9. Sep 7	Processes and Threads	Chapters 4 and 5
10. Sep 10		
11. Sep 12		
12. Sep 14	CPU Scheduling	Chapter 6
13. Sep 17	Exam Review	
14. Sep 19	Exam #1	
15. Sep 21		
16. Sep 24		
17. Sep 26	Process Synchronization	Chapter 7
18. Sep 28		
19. Oct 1		
20. Oct 3	Deadlocks	Chapter 8
21. Oct 5		
22. Oct 8	Memory Management	Chapter 9
23. Oct 10		
24. Oct 12	Fall Break	
25. Oct 15		Chapter 10
26. Oct 17		
27. Oct 19	Virtual Memory	
28. Oct 22	File Systems (in memory)	Chapter 11
29. Oct 24	Review for Exam #2	
30. Oct 26	Exam #2	
31. Oct 29		
32. Oct 31	File Systems (on disk)	Chapter 12
33. Nov 2		
34. Nov 5	I/O Systems and Mass-Storage Structure	Chapters 13 and 14
35. Nov 7		
36. Nov 9		
37. Nov 12	Distributed System Structures	Chapter 15
38. Nov 14		
39. Nov 16		
40. Nov 19		
41. Nov 22	Thanksgiving	
42. Nov 24	Thanksgiving	
43. Nov 26	Distributed File Systems	
44. Nov 28	Distributed Coordination	
45. Nov 30		
46. Dec 3	Review for Final	
Final Exam:	Saturday Dec 8, 2:00-4:00 PM (Rogers 104) (Tentative)	

Course Objectives

By the time you have finished with this course, you should be familiar enough with the principles of operating systems that you could (at least theoretically) construct your own operating system for a new computer. To accomplish this goal, there are several smaller objectives that we must meet. These are as follows.

1. Learn where the boundary lies between hardware and software. When you interact with any computer system, part of the interaction is handled by the hardware (moving mouse-ball, depression of keyboard keys) and part of the interaction is handled by the software (displaying characters on the screen). We need to know where the boundary lies so that we know what is available in the hardware, and what must be implemented in software.
2. Learn how operating system code gets executed. Despite the sophistication of today's computers, for the most part they still execute only one instruction at a time. That means when a user program is executing, the operating system must be idle. One of the most important things you will learn is the mechanisms that are used to give the operating system its "turn to execute."
3. Learn the types of tasks that are normally relegated to an operating system. Some things that seem to be part of the operating system are not. For example the LINUX shell is not part of the LINUX operating system.
4. Learn the most common and popular algorithms and data structures for performing standard operating system tasks. If an operating system must perform a particular task for virtually every program (memory allocation is an example) then you should know the most common methods for performing the task.

Grading

Final Exam: 35%
Projects and homework: 15%
Other Exams: 50% -- Equally divided among all exams.

Other Information

University attendance policy will be enforced.

The class blog is located at URL http://csi4337.petermmaurer.com All information regarding this class will be distributed through this blog. If I post something on this blog I will expect that you have seen it. You can subscribe through E-Mail or through RSS. Make sure if you use E-Mail that it is an address you check at least once a day. If you use an RSS feed, make sure your reader is running all the time and is uncluttered enough that you won't miss anything.

Do not leave early!
Do not come late! (But if you're late, come in!)

I have an open door policy with respect to students. I'm in my office most of the time. I am willing to meet with you any time I am in my office. Feel free to come to me with any matter that is troubling you, even if it has nothing to do with the class.