Final: Core Concept

A Lucky Fact

- Chapter 1 and 2 are only for common knowledge
- Examples for other operating systems (e.g., windows, solaris) will not be covered
- No problem for detailed kernel codes
- Only three discussion questions.
- Not very difficult

Process (12)

- Process State
- Process Data (data, code, heap, stack)
- Process State Transform
- inter-process communication mechanism
- Task struct
- CPU Scheduling Algorithm
- Linux Scheduling Algorithm

Process

- Thread vs Process
- Semaphore
- Synchronization
- Deadlock Avoidance/Prevention
- Bank Algorithm

Memory (10)

- Memory Paging
- TLB and EAT
- Page/Segment based Address Transformation
- Memory Allocation
- Internal/External Fragmentation

Memory

- Page Fault / Demand Paging
- Page Replacement Algorithm
- Dirty Page
- Thrashing
- VMA

File (6)

- File object
- File Access Control
- Linux File System/VFS
- Disk Allocation Algorithm
- SCAN/C-SCAN/Look/C-Look

Others

- System Call
- Cache and Spooling
- Interruption
- The process of Linux start up
- Commonly used Shell Cmd