

Concurrency (Ch 26)

Discussion Questions

- How does the thread creation interface presented in this chapter differ from `fork()`?
 - Say we had a new syscall, `thread_fork()`, that made a new thread that started at the return of this call. How would this differ from `fork()`?
 - Do we need to flush the TLB when context switching between threads in the same process?
 - What is a race condition?
 - How are race conditions and critical sections related?
 - How does mutual exclusion prevent race conditions?
 - How does atomicity prevent race conditions?
 - Why are atomic instructions an impractical solution, by themselves, to prevent race conditions?
- would need an atomic operation for every possible use case: add to a queue, insert into a b-tree, etc..
 - What does it mean for a program to be deterministic?
 - What does it mean for a program to be indeterminate?