

Concurrent Programming

- Multiple Threads:
 - Processing different bank account operations, what if 2 threads change the same account at the same time
 - Use a shared cache of recent files, what if 2 threads insert the same file at the same time
 - Creating pipeline with a queue for handling work to the next thread in sequence, what if enqueueer and dequeuer adjust a circular array queue at the same time
- Why Threads?
 - Code structures for responsiveness
 - Processor Utilization
 - Failure isolation
- Mutual Exclusion , on thread only works on one section e.g. one bank account
- We need a Lock, a java lock is an ADT
 - new, acquire, release