

Concurrent Queue Exercises

std::queue

- Briefly explain why, as it stands, std::queue is not suitable for use as a concurrent queue

Concurrent Queue Implementation

- Implement a concurrent queue which uses locks
- Make sure your implementation is thread-safe and exception-safe
- In the event that a client tries to `pop()` from an empty queue, your implementation throws an exception
- Write a multi-threaded program to exercise your implementation
- Your program should call `pop()` on an empty thread and catch the exception in the thread which called `pop()`