

Overview:

This project wraps a list so that it is thread safe and can be ran in a multithreaded environment. I used an external library for this list that is linked in the bin folder, the header can be found in include. I was provided with a producer consumer simulation found in pc.c that creates a number of producers and consumers to produce/consume items of the item class. The main focus of this project was writing the list_mt.c wrapper, which wraps functions in list.c using the pthread library.

Usage:

Compile with make.

Run pc.c with the following arguments:

<poolsize> <#items/producer> <#producers> <#consumers> <sleep interval(microsecs)>

Alternatively run test-pc which will run pc.c with a variety of different input.