Assignment-4

Jason   D1228792   5/5

When doing the homework, I have met some problems.

I didn't know what was class. So I went to Jack for help. He explain the meaning and the using method. Finally, I realized it and started to try to work on the homework.

program steps:

Setup:

The code includes necessary libraries (iostream, time.h, stdlib.h) and a custom header file "IQueue.h" which likely contains the queue implementation.

It also imports the std namespace for convenience.

Main Function:

The main function serves as the entry point of the program.

Variable Declarations:

It declares variables to control the number of trials (n), loop counters (i, k), and counts for enqueue and dequeue operations (enqueueCount, dequeueCount).

IQueue queue; creates an instance of a queue.

Random Number Generation:

The srand(time(NULL)); line seeds the random number generator using the current time.

n = rand() % 10 + 1; generates a random number (n) between 1 and 10, determining the number of trials.

Trials Loop:

The loop runs n times, representing each trial.

Queue Operations:

Enqueue:

Randomly determines the number of elements to enqueue (enqueueCount) and adds them to the queue.

Dequeue:

Randomly determines the number of elements to dequeue (dequeueCount) and removes them from the queue.

Output:

The code prints information about each trial, including the number of elements enqueued and dequeued, as well as the current state of the queue.

End of Trial:

A separator is printed at the end of each trial for clarity.

Return:

The main function returns 0, indicating successful completion of the program.