

Assignment 1: Professional PQueue

Due Wednesday, November 28, 11:59 PM

Introduction

Over the past few weeks we've been discussing features of professional C++ programming, notably `const`, assignment operators, and copy constructors. Now that you're armed with the skills necessary to develop a professional-quality class, it's time to apply your skills to transform the CS106X PQueue into a `const`-correct, deep-copying container!

The Assignment

You are to take the **skip list implementation** of the CS106 PQueue and transform it to meet general C++ standards. Specifically, your PQueue should be `const`-correct and have a correctly-implemented assignment operator, copy constructor, and destructor. You're free to implement these any way you see fit, but make sure that you do not leak any memory or wire pointers from different PQueues together. You should be sure to rigorously test your code before submitting, since it's easy to write incorrect copy constructors or assignment operators.

Deliverables

Please submit your solution for this assignment into the **Assignment 1** folder of the **CS106L** subdirectory of the CS106X **Submissions** folder. Include your name at the top of any files you submit.

Further Reading

The STL has its own `priority_queue` class that uses a heap implementation layered on top of the STL `vector`. You should certainly look into the `priority_queue` class in case you plan on using a priority queue in professional code.