

Reflection Log: QueueList Program

The QueueList program demonstrates a strong understanding of implementing a queue data structure using a LinkedList in Java. Each method—enqueue, dequeue, peek, and isEmpty—is properly implemented and thoroughly tested in the main method. The addition of the printQueue method allows for a clear visualization of the queue's current state, which aids in debugging and user interaction. The code is properly formatted, and the program is both efficient and easy to follow.

I engaged with the task by ensuring the logical flow of enqueueing and dequeueing was seamless. While testing, I considered edge cases, such as dequeuing from an empty queue, and verified that the program handled them gracefully by displaying appropriate messages. I also appreciated the opportunity to improve my understanding of LinkedList methods like addFirst and removeFirst.

Key Takeaway: This program reinforced my knowledge of queue operations and their real-world implementation in Java using a LinkedList.