**Assignment 8**

**Queue ADT**

**Linked List Implementation**

**Description**

Write a Queue class that uses a linked list for the underlying data structure.

**Class Methods**

Canonical functions

Enqueue - Puts the data item at the end (tail) of the queue.

Dequeue - Removes and returns the data item at the front of the queue.

Front - Returns a reference to the data in the front of the queue. This will allow the consumer to modify the element at the front of the queue.

Size – Returns the number of items currently in the queue.

isEmpty - Returns true if the stack is empty.

**Stipulations**

1. You must use the doubly-linked list class you created in Assignment 2.
2. You must throw an exception for the Underflow condition.
3. The queue will dynamically resize as needed.