**Report   
Programming Assignment #3**

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Please list all sources in the table below including web pages which you used to solve or implement the current homework. If you fail to cite sources you can get a lower number of points or even zero, read more in the Aggie Honor System Office.

|  |  |  |  |
| --- | --- | --- | --- |
| Type of sources | 1 | 2 | 3 |
| People |  |  |  |
| Web pages (provide URL) |  |  |  |
| Printed material | Textbook |  |  |
| Other Sources | Lecture Slides |  |  |

**Part 1:**

* Doubly Linked List is a list of Nodes, which contains object, next pointer and previous pointer.
* Complexity of different functions present in the DoublyLinkedList class.

1. int first() –
2. int last() –
3. void insertFirst( int newobj) -
4. void insertLast( int newobj) -
5. int removeFirst() -
6. int removeLast() -
7. void insertBefore( DListNode &p, int newobj) -
8. void insertAfter( DListNode &p, int newobj) -
9. int removeBefore( DListNode &p) -
10. int removeAfter( DListNode &p) -

* Evidence of testing part 1:

A screenshot of a computer

Description automatically generated

**Part 2:**

* MinQueue is a minimum priority queue. Hence, it removes the smallest value in the list first. It inserts a new element at the end of the queue. It can be implemented using a Doubly Linked List.
* Complexity of different functions present in the MinQueue class.

1. void enqueue( int obj) -
2. int size() -
3. int dequeue() -
4. int min() -

* Evidence of testing part 2:

A picture containing indoor, wall

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I certify that I have listed all the sources that I used to develop the solutions/code to the submitted work.

“*On my honor as an Aggie, I have neither given nor received any unauthorized help on this academic work.*”

Your Name: Pratik Patel Date: 03/05/2019