CSCE 221 Cover Page
Programming Assignment #3 Pt. 1

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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 http://aggiehonor.tamu.edu/

- **Complexity Analysis**
  SimpleDoublyLinkedList

  $Node * Node :: insert\_before(intd)//\mathbf{O(1)}$
  $Node * Node :: insert\_after(intd)//\mathbf{O(1)}$
  $voidNode :: delete\_before()//\mathbf{O(1)}$
  $voidNode :: delete\_after()//\mathbf{O(1)}$
  $voiddisplay_list(Node * header, Node * trailer)\ //\mathbf{O(n)}$

  DoublyLinkedList

  $DoublyLinkedList :: DoublyLinkedList(constDoublyLinkedList\&dll)//\mathbf{O(n)}$
  $DoublyLinkedListDoublyLinkedList :: operator = (constDoublyLinkedList\&dll)//\mathbf{O(n)}$
  $voidDoublyLinkedList :: insertFirst(intnewobj)//\mathbf{O(1)}$
  $voidDoublyLinkedList :: insertLast(intnewobj)//\mathbf{O(1)}$
  $intDoublyLinkedList :: removeFirst()//\mathbf{O(1)}$
  $intDoublyLinkedList :: removeLast()//\mathbf{O(1)}$
  $DoublyLinkedList ::\ DoublyLinkedList()//\mathbf{O(n)}$
  $intDoublyLinkedList :: first()const//\mathbf{O(1)}$
  $intDoublyLinkedList :: last()const//\mathbf{O(1)}$
  $intDoublyLinkedListLength(DoublyLinkedList\&dll)//\mathbf{O(n)}$
  $ostream\&operator << (ostream\&out, constDoublyLinkedList\&dll)//\mathbf{O(n)}$

- Template Arguments are the same as the Doubly Linked List Arguments

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 (signature) Alexander Kaiser Date 10/6/16