LinkedStack.java Page 1 of 1


```
1
2 /**
3 * This is based on textbook code fragment 6.4
4 * This stack implementation add the last in element at the head.
5 * @author Richelin Metellus
6 * @param <E>
7 */
                                                                                   Members
                                                                                                      <</pre>
8 public class LinkedStack<E> implements Stack<E> {
    private SinglyLinkedList<E> list = new SinglyLinkedList<>();

    SinglyLinkedList()

10
     public LinkedStack(){}
                                    //empty list
                                                                                       · 🥚 addFirst(E e)
     @Override
11
                                                                                        · ⊚ addLast(E e)
     public int size()
12

        equals(Object o): boolean ↑ Object

13
                                                                                        first(): E
14
        return list.size();
                                                                                        isEmpty(): boolean
                                                                                        | last() : E
15
                                                                                        o removeFirst(): E
16
     @Override
                                                                                        o removeLast() : E
17
     public boolean isEmpty()
                                                                                        o size(): int
18
                                                                                        19
        return list.isEmpty();
                                                                                       - 🖣 head : Node<E>
20
                                                                                       .... 🗐 size : int
21
     @Override
                                                                                       ... 🖣 🛮 tail : Node<E>
22
     public void push(E element)
                                                                                      23
                                                                                         ---- 🔷 Node(E e, Node<E> n)
24
        list.addFirst(element);
                                                                                          ···· 🔘 getElement() : E
25
                                                                                          ···· 🔘 getNext() : Node<E>
26
     @Override
                                                                                          ···· 🔘 setNext(Node<E> newNext)
27
     public E top(){return list.first();}
                                                                                          ---- element : E
28
     @Override
                                                                                         next: Node<E>
29
     public E pop(){return list.removeFirst();}
30 }
31
```