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**CS 132 Lab 12**

**4 hours**

**Other than not understanding how to properly include Node.java, this lab was pretty smooth.**

2. The green bar appeared for this test. In this case the add(), get() and size() methods worked as intended and passed successfully.

5. Same applies, the test runs smoothly for BonaLinkedList.

6. The add() and get() methods run smoothly after a bit of tweaking.

**public** **class** BonaLinkedList<E> {

**private** Node<E> head;

**private** **int** size;

// Default constructor

**public** BonaLinkedList() {

head = **null**;

size = 0;

}

// Size method

**public** **int** size() {

**return** size;

}

**public** **void** add(E element) {

Node<E> newNode = **new** Node<>(element, **null**);

**if** (head == **null**) {

head = newNode;

} **else** {

Node<E> current = head;

**while** (current.getNext() != **null**) {

current = current.getNext();

}

current.setNext(newNode);

}

size++;

}

**public** E get(**int** index) {

**if** (index < 0 || index >= size) {

**throw** **new** IndexOutOfBoundsException("Index out of bounds");

}

Node<E> current = head;

**for** (**int** i = 0; i < index; i++) {

current = current.getNext();

}

**return** current.getData();

}

**public** **void** clear() {

head = **null**;

size = 0;

}

**public** **boolean** contains(E element) {

Node<E> current = head;

**while** (current != **null**) {

**if** (current.getData().equals(element)) {

**return** **true**;

}

current = current.getNext();

}

**return** **false**;

}

}