

```
1
2 package adt;
3
4 /**
5  *
6  * @author Chew Lip Sin
7  * @param <T> type of elements stored in the stack.
8  */
9 public interface StackInterface<T> {
10
11     /**
12      * Task: Adds a new entry to the top of the stack.
13      *
14      * @param newEntry an object to be added to the stack
15      */
16     public void push(T newEntry);
17
18     /**
19      * Task: Removes and returns the stack's top entry.
20      *
21      * @return either the object at the top of the stack or, if the stack is
22      * empty before the operation, null
23      */
24     public T pop();
25
26     /**
27      * Task: Retrieves the stack's top entry.
28      *
29      * @return either the object at the top of the stack or null if the stack is
30      * empty
31      */
32     public T peek();
33
34     /**
35      * Task: Detects whether the stack is empty.
36      *
37      * @return true if the stack is empty
38      */
39     public boolean isEmpty();
40
41     /**
42      * Task: Removes all entries from the stack
43      */
44     public void clear();
45
46     /**
```

```
47      *
48      * @return size of stack
49      */
50      public int size();
51 } // end StackInterface
```