

edu.gmu.cs.swe619.assignments.assignment04

Class GrowListMutation2<E>

java.lang.Object
edu.gmu.cs.swe619.assignments.assignment04.GrowListMutation2<E>

```
public class GrowListMutation2<E>  
extends java.lang.Object
```

GrowList is a mutable list that only gets longer.

Constructor Summary

Constructors

Constructor and Description

GrowListMutation2()
Create a new GrowList

Method Summary

All Methods	Static Methods	Instance Methods	Concrete Methods
Modifier and Type	Method and Description		
void	add(E o) Add to the end of the list, contains a mutation.		
E	get(int i) Get ith value in list		
static void	main(java.lang.String[] args) Main method with a simple test routine		
E	set(int i, E o) Update ith value in list		
int	size() Number of elements in list		
java.lang.String	toString() Serves as the abstraction function (AF) for GrowList		

Methods inherited from class java.lang.Object

equals, getClass, hashCode, notify, notifyAll, wait, wait, wait

Constructor Detail

GrowListMutation2

```
public GrowListMutation2()
```

Create a new GrowList

Method Detail

add

```
public void add(E o)
```

Add to the end of the list, **contains a mutation.**

NOTE: This method contains a mutation that makes it incorrect because the element is not actually added to the list!!

Parameters:

o - the new element to add to the list

Throws:

java.lang.RuntimeException - if the rep invariant is violated

size

```
public int size()
```

Number of elements in list

Returns:

size of the list

get

```
public E get(int i)
```

Get ith value in list

Parameters:

`i` - the index to retrieve an element from

Returns:

the element at index `i`

Throws:

`java.lang.IndexOutOfBoundsException` - if index `i` is not valid

set

```
public E set(int i,  
             E o)
```

Update `i`th value in list

Parameters:

`i` - index of element to replace

`o` - new element to save at index `i`

Returns:

previous value or null if none

Throws:

`java.lang.IndexOutOfBoundsException` - if index `i` is not valid

`java.lang.RuntimeException` - if the rep invariant is violated

toString

```
public java.lang.String toString()
```

Serves as the abstraction function (AF) for `GrowList`

Overrides:

`toString` in class `java.lang.Object`

Returns:

a string representing the `GrowList`

main

```
public static void main(java.lang.String[] args)
```

Main method with a simple test routine

Parameters:

`args` - command line arguments

