

edu.gmu.cs.swe619.assignments.assignment03

Class **GrowList<E>**

java.lang.Object
 edu.gmu.cs.swe619.assignments.assignment03.GrowList<E>

Type Parameters:

E - the type of object to store in the list

```
public final class GrowList<E>
extends java.lang.Object
```

GrowList is a list that only gets longer. It is immutable, meaning that instances can never be changed after creation. Rather, operations on a GrowList object will return a new instance.

Constructor Summary

Constructors

Constructor and Description

GrowList()
 Construct an empty GrowList

Method Summary

All Methods	Static Methods	Instance Methods	Concrete Methods
Modifier and Type	Method and Description		
GrowList<E>	add(E o) Add to the end of the list		
E	get(int i) Get ith value in list.		
static void	main(java.lang.String[] args) Main method.		
GrowList<E>	set(int i, E o) Update ith value in list		
int	size()		

Get the number of values in list

java.lang.String

toString()

String representation of the object.

Methods inherited from class java.lang.Object

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

Constructor Detail

GrowList

```
public GrowList()
```

Construct an empty GrowList

Method Detail

add

```
public GrowList<E> add(E o)
```

Add to the end of the list

Parameters:

o - the new element

Returns:

a new GrowList, with the new element added at the end

size

```
public int size()
```

Get the number of values in list

Returns:

the list size

get

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

Get ith value in list. This list is 0-indexed.

Parameters:

i - the index in the list to retrieve an element from

Returns:

the element in the GrowList at index i

Throws:

java.lang.IndexOutOfBoundsException - if the given index is not valid

set

```
public GrowList<E> set(int i,  
                        E o)
```

Update ith value in list

Parameters:

i - the index in the GrowList to replace

o - the new object to save in the GrowList

Returns:

a new GrowList that is a copy of the original GrowList, with the specified element replaced

Throws:

java.lang.IndexOutOfBoundsException - if the given index is not valid

toString

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

String representation of the object.

Overrides:

toString in class java.lang.Object

Returns:

the elements of the GrowList represented as a String

main

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

Main method. Runs a simple test example.

Parameters:

args - Arguments to the program

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