

edu.gmu.cs.swe619.assignments.assignment04

Class **GrowList<E>**

java.lang.Object

edu.gmu.cs.swe619.assignments.assignment04.GrowList<E>

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

GrowList is a mutable list that only gets longer.

Constructor Summary

Constructors

Constructor and Description

GrowList()

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
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

GrowList

```
public GrowList()
```

Create a new GrowList

Method Detail

add

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

Add to the end of 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 ith 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

