

## **Java ArrayList: Basic Use**

Full Documentation: <http://docs.oracle.com/javase/7/docs/api/java/util/ArrayList.html>

How to declare an array list:

```
ArrayList<String> list = new ArrayList<String>();
```

Any class name can be placed in the <>.

### Adding an item to an ArrayList

- 1) list.add(item) - this adds the item to the end of the list
- 2) list.add(index, item) - this inserts the item to location index.

### Retrieving an item from an ArrayList

String ans = list.get(index) - this returns the item stored in index.

### Removing an item from an ArrayList

String ans = list.remove(index) - removes the item at index  
boolean success = list.remove(item) - tries to remove the first occurrence of item, returning whether or not the item was found.

### Changing an item in an ArrayList

list.set(index, item) - this sets the object at index to item.

### Getting the size of an ArrayList

```
int n = list.size();
```

### Two Ways to Loop through the Items in an ArrayList

Regular Way:

```
for (int i=0; i<list.size(); i++) {  
    // list.get(i) retrieves item i.  
}
```

New Way for Collections:

```
for (String s: list) {  
    // s retrieves the next item...  
}
```