

Table 1: Instantiation of a **BasicCollection**

Operation	Purpose	Object State	Expected Result
Collection c = new BasicCollection()	To create a basic collection with the default constructor.	size = 0 empty = true	A new Collection object with default values for the attributes.
c.size()	To verify instantiated size.		0
c.isEmpty()	To verify instantiated object is empty.		true

Table 2: Adding objects to an instantiated collection.

Operation	Purpose	Object State	Expected Result
BasicCollection<String> c = new BasicCollection<String>()	To create a basic string collection with the default constructor.	size = 0 empty = true	A new Collection object with default values for the attributes.
c.add(new String("A"))	Add a string to the collection.	size = 1 empty = false	The collection contains the string we've added.
!c.isEmpty()	To verify instantiated object isn't empty.		true
c.contains("A")	Check that our collection contains the string added.		true
c.contains("Missing")	To verify that other objects don't falsely report to be in our collection.		false

Table 3: Ability to remove unique elements from the collection.

Operation	Purpose	Object State	Expected Result
<code>BasicCollection<String> c = new BasicCollection<String>()</code>	To create a basic string collection with the default constructor.	size = 0 empty = true	A new Collection object with default values for the attributes.
<code>c.add(new String("A"))</code>	Add a string to the collection.	size = 1 empty = false	The collection contains the string we've added.
<code>c.add(new String("B"))</code>	Add another string to the collection.	size = 2 empty = false	The collection contains the string we've added.
<code>!c.isEmpty()</code>	To verify instantiated object isn't empty.		true
<code>c.size()</code>	Check that our contains two elements.		2
<code>c.remove("B")</code>	To remove an individual item from the collection.	size = 1	
<code>c.size()</code>	To check the updated size of our collection.		1
<code>c.contains("B")</code>	To ensure our item was removed.		false

Table 4: Ability to add multiple items to a **BasicCollection**.

Operation	Purpose	Object State	Expected Result
<code>BasicCollection<String> c = new BasicCollection<String>()</code>	To create a basic string collection with the default constructor.	size = 0 empty = true	A new Collection object with default values for the attributes.
<code>c.add(new String("A"))</code>	Add a string to the collection.	size = 1 empty = false	The collection contains the string we've added.
<code>!c.isEmpty()</code>	To verify instantiated object isn't empty.		true
<code>c.contains("A")</code>	Check that our collection contains the string added.		true
<code>c.contains("Missing")</code>	To verify that other objects don't falsely report to be in our collection.		false

Table 5: Ability to remove all items to a **BasicCollection**.

Operation	Purpose	Object State	Expected Result
<code>BasicCollection<String> c = new BasicCollection<String>()</code>	To create a basic string collection with the default constructor.	size = 0 empty = true	A new Collection object with default values for the attributes.
<code>c.add(new String("A"))</code>	Add a string to the collection.	size = 1 empty = false	The collection contains the string we've added.
<code>!c.isEmpty()</code>	To verify instantiated object isn't empty.		true
<code>c.contains("A")</code>	Check that our collection contains the string added.		true
<code>c.contains("Missing")</code>	To verify that other objects don't falsely report to be in our collection.		false