

Nicholas  
Rahbany

UML Class Diagram
+ Set + <u>Set()</u> + <u>makeEmpty()</u> + <u>isEmpty()</u> + <u>add(int)</u> + <u>remove(int)</u> + <u>elementOf(int)</u> + <u>size()</u> + <u>union(Set)</u> + <u>intersection(Set)</u> + <u>setDifference(Set)</u> + <u>toString()</u> + <u>valueAt(int)</u>

Legend
+ Public
- Private
Package
# Protected

Data Table - Set Class		
Variable	Type	Purpose
array	int[]	A public array that is manipulated in the code

Data Table - Set		
Variable	Type	Purpose
array	int[]	Generates a new array

Data Table - makeEmpty		
Variable	Type	Purpose
index	int	Used as an index for loops

Data Table - isEmpty		
Variable	Type	Purpose

Data Table - add		
Variable	Type	Purpose
newArray	int[]	A second array that the modifications will be saved to
index	int	Used as an index for loops

Data Table - remove		
Variable	Type	Purpose
newArray	int []	A secondary array that the modifications will be saved to
index	int	Used as an index for loops
counter	int	Used as a secondary index

Data Table - elementOf		
Variable	Type	Purpose
index	int	Used as an index for loops
result	boolean	Used as the return value; true if a number needs to be removed

Data Table - size		
Variable	Type	Purpose

Data Table - union		
Variable	Type	Purpose
newSet	Set	Used as a new Set object for changes made
index	int	Used as an index for loops

Data Table - intersection		
Variable	Type	Purpose
newSet	Set	Used as a new Set object for changes
index	int	Used as an index for loops

Data Table - setDifference
----------------------------

Variable	Type	Purpose
unionSet	Set	Creates a set object that will be used for the union function
intersectionSet	Set	A Set object that Is used for the intersection function
differenceSet	Set	A Set object that Is used for the setDifference function

Data Table - toString		
Variable	Type	Purpose
result	String	The value that will be returned
index	int	Used as an index for loops

Data Table - valueAt		
Variable	Type	Purpose