JavaScript is disabled on your browser.

[Skip navigation links](#1fob9te)

* [Package](http://docs.google.com/searchTree/package-summary.html)
* Class
* [Use](http://docs.google.com/class-use/SearchTreeMap.html)
* [Tree](http://docs.google.com/package-tree.html)
* [Deprecated](http://docs.google.com/deprecated-list.html)
* [Index](http://docs.google.com/index-files/index-1.html)
* [Help](http://docs.google.com/help-doc.html)
* [Prev Class](http://docs.google.com/searchTree/NonEmptyTree.html)
* [Next Class](http://docs.google.com/searchTree/Tree.html)
* [Frames](http://docs.google.com/index.html?searchTree/SearchTreeMap.html)
* [No Frames](http://docs.google.com/SearchTreeMap.html)
* [All Classes](http://docs.google.com/allclasses-noframe.html)
* Summary:
* Nested |
* Field |
* [Constr](#3znysh7) |
* [Method](#2et92p0)
* Detail:
* Field |
* [Constr](#3dy6vkm) |
* [Method](#4d34og8)

searchTree

## Class SearchTreeMap<K extends java.lang.Comparable<K>,V>

* java.lang.Object
  + searchTree.SearchTreeMap<K,V>
* public class SearchTreeMap<K extends java.lang.Comparable<K>,V>  
  extends java.lang.Object  
  This class provides a partial implementation of the Map interface. The implementation uses classes implementing the Tree interface to represent the actual search tree. All the methods of this class have been implemented, except keyList and subMap.

### Constructor SummaryConstructors

|  |
| --- |
| * + Constructor and Description |
| * + [SearchTreeMap](http://docs.google.com/searchTree/SearchTreeMap.html#SearchTreeMap--)() |

### Method SummaryAll Methods Instance Methods Concrete Methods

|  |  |
| --- | --- |
| * + Modifier and Type | * + Method and Description |
| * + [V](http://docs.google.com/searchTree/SearchTreeMap.html) | * + [get](http://docs.google.com/searchTree/SearchTreeMap.html#get-K-)([K](http://docs.google.com/searchTree/SearchTreeMap.html) k) Find the value the key is mapped to |
| * + [K](http://docs.google.com/searchTree/SearchTreeMap.html) | * + [getMax](http://docs.google.com/searchTree/SearchTreeMap.html#getMax--)() Return the maximum key value in the map |
| * + [K](http://docs.google.com/searchTree/SearchTreeMap.html) | * + [getMin](http://docs.google.com/searchTree/SearchTreeMap.html#getMin--)() Return the minimum key value in the map |
| * + java.util.List<[K](http://docs.google.com/searchTree/SearchTreeMap.html)> | * + [keyList](http://docs.google.com/searchTree/SearchTreeMap.html#keyList--)() Return list of keys in map in natural sorted order |
| * + java.util.Set<[K](http://docs.google.com/searchTree/SearchTreeMap.html)> | * + [keySet](http://docs.google.com/searchTree/SearchTreeMap.html#keySet--)() Return a Set of all the keys in the map |
| * + void | * + [put](http://docs.google.com/searchTree/SearchTreeMap.html#put-K-V-)([K](http://docs.google.com/searchTree/SearchTreeMap.html) k, [V](http://docs.google.com/searchTree/SearchTreeMap.html) v) Update the mapping for the key |
| * + void | * + [remove](http://docs.google.com/searchTree/SearchTreeMap.html#remove-K-)([K](http://docs.google.com/searchTree/SearchTreeMap.html) k) Remove any existing binding for a key |
| * + int | * + [size](http://docs.google.com/searchTree/SearchTreeMap.html#size--)() Return number of keys bound by this map |
| * + [SearchTreeMap](http://docs.google.com/searchTree/SearchTreeMap.html)<[K](http://docs.google.com/searchTree/SearchTreeMap.html),[V](http://docs.google.com/searchTree/SearchTreeMap.html)> | * + [subMap](http://docs.google.com/searchTree/SearchTreeMap.html#subMap-K-K-)([K](http://docs.google.com/searchTree/SearchTreeMap.html) fromKey, [K](http://docs.google.com/searchTree/SearchTreeMap.html) toKey) Return subset of TreeMap between the values fromKey-toKey. |
| * + java.lang.String | * + [toString](http://docs.google.com/searchTree/SearchTreeMap.html#toString--)() Return a string representation of the tree |

### Methods inherited from class java.lang.Objectequals, getClass, hashCode, notify, notifyAll, wait, wait, wait

### Constructor Detail

#### SearchTreeMap public SearchTreeMap()

### Method Detail

#### get public [V](http://docs.google.com/searchTree/SearchTreeMap.html) get([K](http://docs.google.com/searchTree/SearchTreeMap.html) k) Find the value the key is mapped toParameters: k - - Search key Returns: value k is mapped to, or null if there is no mapping for the key

#### put public void put([K](http://docs.google.com/searchTree/SearchTreeMap.html) k, [V](http://docs.google.com/searchTree/SearchTreeMap.html) v) Update the mapping for the keyParameters: k - - key value v - - value the key should be bound to

#### size public int size() Return number of keys bound by this mapReturns: number of keys bound by this map

#### remove public void remove([K](http://docs.google.com/searchTree/SearchTreeMap.html) k) Remove any existing binding for a keyParameters: k - - key to be removed from the map

#### keySet public java.util.Set<[K](http://docs.google.com/searchTree/SearchTreeMap.html)> keySet() Return a Set of all the keys in the mapReturns: Set of all the keys in the map

#### getMin public [K](http://docs.google.com/searchTree/SearchTreeMap.html) getMin() Return the minimum key value in the mapReturns: the minimum key value in the map Throws: java.util.NoSuchElementException - if the map is empty

#### getMax public [K](http://docs.google.com/searchTree/SearchTreeMap.html) getMax() Return the maximum key value in the mapReturns: the maximum key value in the map Throws: java.util.NoSuchElementException - if the map is empty

#### toString public java.lang.String toString() Return a string representation of the treeOverrides: toString in class java.lang.Object

#### keyList public java.util.List<[K](http://docs.google.com/searchTree/SearchTreeMap.html)> keyList() Return list of keys in map in natural sorted orderReturns: list of keys in map in sorted order

#### subMap public [SearchTreeMap](http://docs.google.com/searchTree/SearchTreeMap.html)<[K](http://docs.google.com/searchTree/SearchTreeMap.html),[V](http://docs.google.com/searchTree/SearchTreeMap.html)> subMap([K](http://docs.google.com/searchTree/SearchTreeMap.html) fromKey, [K](http://docs.google.com/searchTree/SearchTreeMap.html) toKey) Return subset of TreeMap between the values fromKey-toKey. It will include fromKey and toKey if they are found in the original map. The values for fromKey and toKey do not actually need to be in the map. You can assume than fromKey is less than or equal to toKey.Returns: TreeMap consisting of subset of SearchTreeMap

[Skip navigation links](#2bn6wsx)

* [Package](http://docs.google.com/searchTree/package-summary.html)
* Class
* [Use](http://docs.google.com/class-use/SearchTreeMap.html)
* [Tree](http://docs.google.com/package-tree.html)
* [Deprecated](http://docs.google.com/deprecated-list.html)
* [Index](http://docs.google.com/index-files/index-1.html)
* [Help](http://docs.google.com/help-doc.html)
* [Prev Class](http://docs.google.com/searchTree/NonEmptyTree.html)
* [Next Class](http://docs.google.com/searchTree/Tree.html)
* [Frames](http://docs.google.com/index.html?searchTree/SearchTreeMap.html)
* [No Frames](http://docs.google.com/SearchTreeMap.html)
* [All Classes](http://docs.google.com/allclasses-noframe.html)
* Summary:
* Nested |
* Field |
* [Constr](#3znysh7) |
* [Method](#2et92p0)
* Detail:
* Field |
* [Constr](#3dy6vkm) |
* [Method](#4d34og8)

[Web Accessibility](https://www.umd.edu/web-accessibility)