edu.uci.ics.jung.algorithms.shortestpath

Class PrimMinimumSpanningTree<V,E>

java.lang.Object
  └ **edu.uci.ics.jung.algorithms.shortestpath.PrimMinimumSpanningTree<V,E>**

Type Parameters:

V - the vertex type
E - the edge type

All Implemented Interfaces:

org.apache.commons.collections15.Transformer<Graph<V,E>,Graph<V,E>>

```
public class PrimMinimumSpanningTree<V,E>
extends Object
implements org.apache.commons.collections15.Transformer<Graph<V,E>,Graph<V,E>>
```

For the input Graph, creates a MinimumSpanningTree using a variation of Prim's algorithm.
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Field Summary

protected org.apache.commons.collections15.Factory<? extends Graph<V,E>>	**treeFactory**
protected org.apache.commons.collections15.Transformer<E,Double>	**weights**

Constructor Summary

PrimMinimumSpanningTree(org.apache.commons.collections15.Factory<? extends Graph<V,E>> factory)
Creates an instance which generates a minimum spanning tree assuming constant edge weights.

PrimMinimumSpanningTree(org.apache.commons.collections15.Factory<? extends Graph<V,E>> factory, org.apache.commons.collections15.Transformer<E,Double> weights)
Creates an instance which generates a minimum spanning tree using the input edge weights.

Method Summary

protected V	**findRoot**(Graph<V,E> graph)
Graph<V,E>	**transform**(Graph<V,E> graph)
protected void	**updateTree**(Graph<V,E> tree, Graph<V,E> graph, Collection<E> unfinishedEdges)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait