

Package [main](#)

Interface IQuadTree

All Known Implementing Classes:

[QuadTree](#)

```
public interface IQuadTree
```

The IQuadTree interface contains methods that support the functionalities of the QuadTree

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Method Summary

All Methods	Instance Methods	Abstract Methods
Modifier and Type	Method	Description
Range	enclosingQuad (java.util.List < Location > locs)	enclosingQuad() returns the smallest possible Range that includes all given Locations; it also re-initialize the root of the QuadTree
boolean	insert (Location loc)	insert() inserts a new Location into the QuadTree
java.util.List < Location >	search (java.lang.String type, Range range)	search() returns a list of Locations of a given type within a given Range by traversing the QuadTree

Method Detail

insert
<pre>boolean insert(Location loc)</pre>



true if the new Location has been successfully inserted and false otherwise

search

```
java.util.List<Location> search(java.lang.String type,  
                                Range range)
```

search() returns a list of Locations of a given type within a given Range by traversing the QuadTree

Parameters:

type - the type of Locations we want to search(e.g. "School")

range - the search range

Returns:

a list of Locations of the given type within the given Range

enclosingQuad

```
Range enclosingQuad(java.util.List<Location> locs)
```

enclosingQuad() returns the smallest possible Range that includes all given Locations; it also re-initialize the root of the QuadTree

Parameters:

locs - a list of Locations

Returns:

the smallest possible Range that includes all given Locations