

```
1 public final class PrioritySkipList<T> {
2     public static final class Node<T> {
3         final T item;
4         final int score;
5         AtomicBoolean marked;
6         final AtomicMarkableReference<Node<T>>[] next;
7         // sentinel node constructor
8         public Node(int myPriority) { ... }
9         // ordinary node constructor
10        public Node(T x, int myPriority) { ... }
11    }
12    boolean add(Node node) { ... }
13    boolean remove(Node<T> node) { ... }
14    public Node<T> findAndMarkMin() {
15        Node<T> curr = null;
16        curr = head.next[0].getReference();
17        while (curr != tail) {
18            if (!curr.marked.get()) {
19                if (curr.marked.compareAndSet(false, true))
20                    return curr;
21            } else {
22                curr = curr.next[0].getReference();
23            }
24        }
25    }
26    return null; // no unmarked nodes
27 }
28 ...
29 }
```

FIGURE 15.13 The PrioritySkipList<T> class: inner Node<T> class.