

```

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.