

```
1  public class BoundedQueue<T> {
2      ReentrantLock enqLock, deqLock;
3      Condition notEmptyCondition, notFullCondition;
4      AtomicInteger size;
5      volatile Node head, tail;
6      final int capacity;
7      public BoundedQueue(int _capacity) {
8          capacity = _capacity;
9          head = new Node(null);
10         tail = head;
11         size = new AtomicInteger(0);
12         enqLock = new ReentrantLock();
13         notFullCondition = enqLock.newCondition();
14         deqLock = new ReentrantLock();
15         notEmptyCondition = deqLock.newCondition();
16     }
17     ...
18 }
```

**FIGURE 10.2** The BoundedQueue class: fields and constructor.