

```
1  class MemManager {  
2      void register_thread(int num); // called once, before any call to op_begin()  
3          // num indicates the maximum number of  
4          // locations the caller can reserve  
5      void unregister_thread(); // called once, after the last call to op_end()  
6  
7      void op_begin(); // indicate the beginning of a concurrent operation  
8      void op_end(); // indicate the end of a concurrent operation  
9  
10     bool try_reserve(void* ptr); // try to protect a pointer from reclamation  
11     void unreserve(void* ptr); // stop protecting a pointer  
12     void sched_for_reclaim(void* ptr); // try to reclaim a pointer  
13 }
```

**FIGURE 19.2** An interface for protecting memory during an optimistic operation.