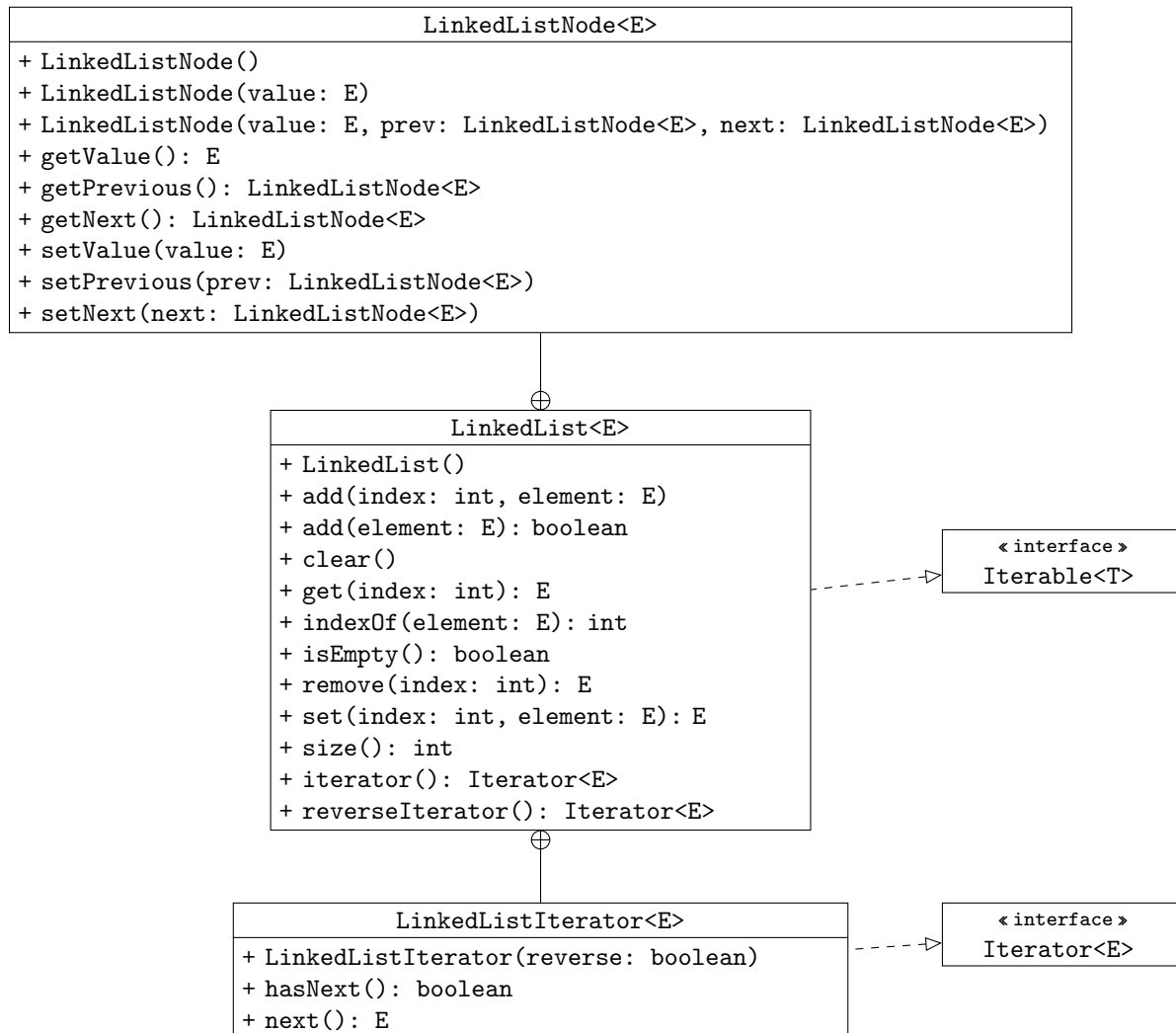


Program 6

Class `LinkedList<E>` is a *doubly-linked* list of `LinkedListNode<E>`, such that a node contains a reference to some object of type `E`. The class should internally maintain some notion of *head* and *tail*, and support forward and reverse iteration by implementing the `Iterable` interface. Each node should internally maintain some notion of *previous* and *next*.

Class Diagram



Implementation Notes

- All behaviors of class `LinkedList` should be semantically equivalent to those of class `ArrayList` from the previous assignment.
- Instances of class `LinkedListNode` should *not* be leaked outside of any instance of class `LinkedList`; i.e., nodes are strictly used as *private internal state* only.
- Forward iteration visits nodes from *head* to *tail*; reverse iteration visits nodes from *tail* to *head*.