

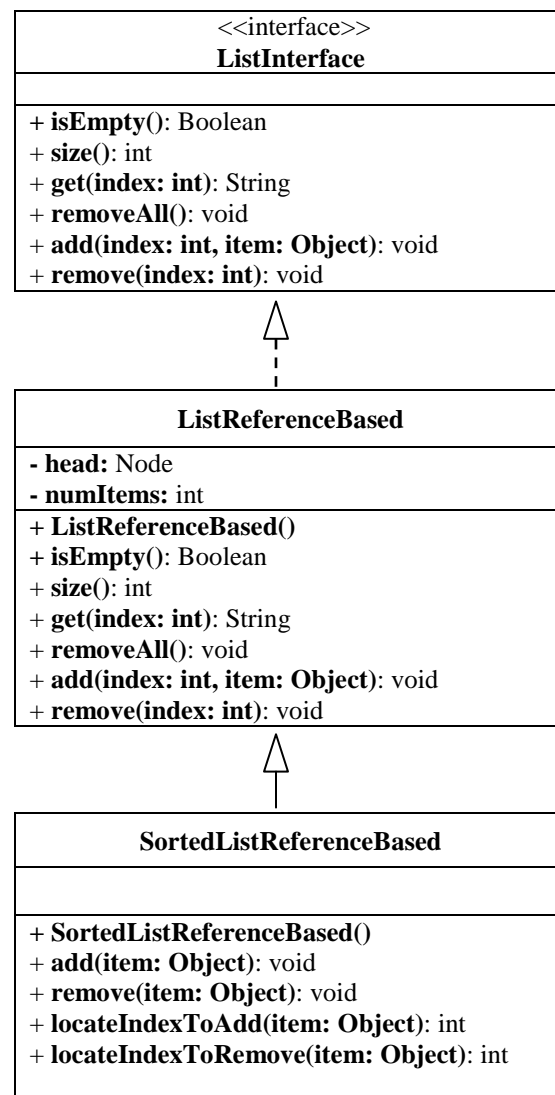
## SortedListReferenceBased

---

### Topics

- Throughout this lab, we want to practice abstract data type (ADT).
- In the previous lab/assignment, you were asked to implement a SortedListArrayBased class, while this lab asks you to implement two classes: “ListReferenceBased.java” and “SortedListReferenceBased.java”.
- After finishing this lab, you will be more confident in manipulating reference.

### Activities



- Start with the following supportive files (“ListException.java”, “ListIndexOutOfBoundsException.java”, “ListInterface.java”, “Node.java”, “SortedListDriver.java” “ListReferenceBased.java”, and “SortedListReferenceBased.java”).
- The first five java files are complete, thus use them as they are. You’re asked to show your work on the two java files, “**ListReferenceBased.java**” and “**SortedListReferenceBased.java**”.
- In Ch. 5, we discussed the required implementation details of “**ListReferenceBased.java**”. Also, please refer to your “**SortedListArrayBased.java**” in the previous lab/assignment for “**SortedListReferenceBased.java**”.
- You should keep the sorted (say, non-decreasing) order of items, while adding and deleting an item using “add()” and “delete()”, respectively. Keeping the sorted order of the contents in the list is the key in this lab.
- Note that index starts from 0, not 1. Therefore, the valid index ranges from 0 to size()-1.

---

## Running Example

0. apples 1. black beans 2. bread 3. butter 4. chicken 5. eggs 6. flour 7. milk 8. pecans 9. rice 10. sausage numItems is now: 11  Adding juice ... item 5 is: eggs 0. apples 1. black beans 2. bread 3. butter 4. chicken 5. eggs 6. flour 7. juice 8. milk 9. pecans 10. rice 11. sausage numItems is now: 12	Removing juice... 0. apples 1. black beans 2. bread 3. butter 4. chicken 5. eggs 6. flour 7. milk 8. pecans 9. rice 10. sausage numItems is now: 11  Adding banana ... 0. apples 1. banana 2. black beans 3. bread 4. butter 5. chicken 6. eggs 7. flour 8. milk 9. pecans 10. rice 11. sausage numItems is now: 12	Removing sausage... 0. apples 1. banana 2. black beans 3. bread 4. butter 5. chicken 6. eggs 7. flour 8. milk 9. pecans 10. rice numItems is now: 11  Removing cheese... 0. apples 1. banana 2. black beans 3. bread 4. butter 5. chicken 6. eggs 7. flour 8. milk 9. pecans 10. rice numItems is now: 11 Press any key to continue ...
--	--	--

---

## What to Hand in

- Turn in your programs, “**ListReferenceBased.java**” and “**SortedListReferenceBased.java**”, via Blackboard.