



Title: A class UML diagram for read-and-sort application

Function: Read scanned integers from user and sort them in a LinkedList from smallest to largest

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Description:

1. Dependency:

1) SorterFactory and Message:

SorterFactory depends on the *Message* class to display warnings when the input sorter type is invalid.

2) ReadAndSortApp and Message:

- *ReadAndSortApp* depends on the *Message* class to display warnings while user input is empty in *askInput* method.

- *ReadAndSortApp* depends on the *Message* class to display warnings, successes and sorted result lists in *printResult* method.

2. Implementation:

The *LinkedListSorter* class implements and specifies the sort method from the interface *CollectionSorter*.

3. One-to-One Composition:

The instance of *LinkedListSorter* class is created in the *SorterFactory* class when sorter type is LinkedList or the fallback situation occurs.

4. One-to-One Aggregation:

1) SorterFactory and ReadAndSortApp:

An object of the *SorterFactory* class is passed to call *run* method of a *ReadAndSortApp* object.

2) StringToListParser and ReadAndSortApp:

An object of the *StringToListParser* class is passed to call *run* method of a *ReadAndSortApp* object.

