
Week 13 Class Diagrams

Group 5

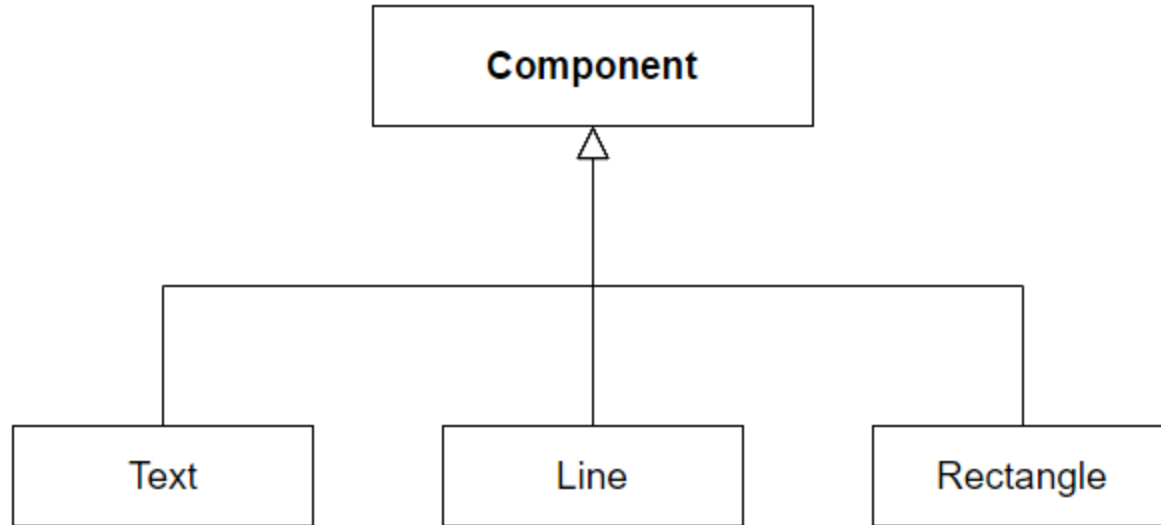
Schematic Capture Systems

Requirements Statements

- In schematic capture application, there are some basic components that can be drawn such as Text, Line and Rectangle.
- The user can group basic components to form larger components, which in turn can be grouped to form still larger components.

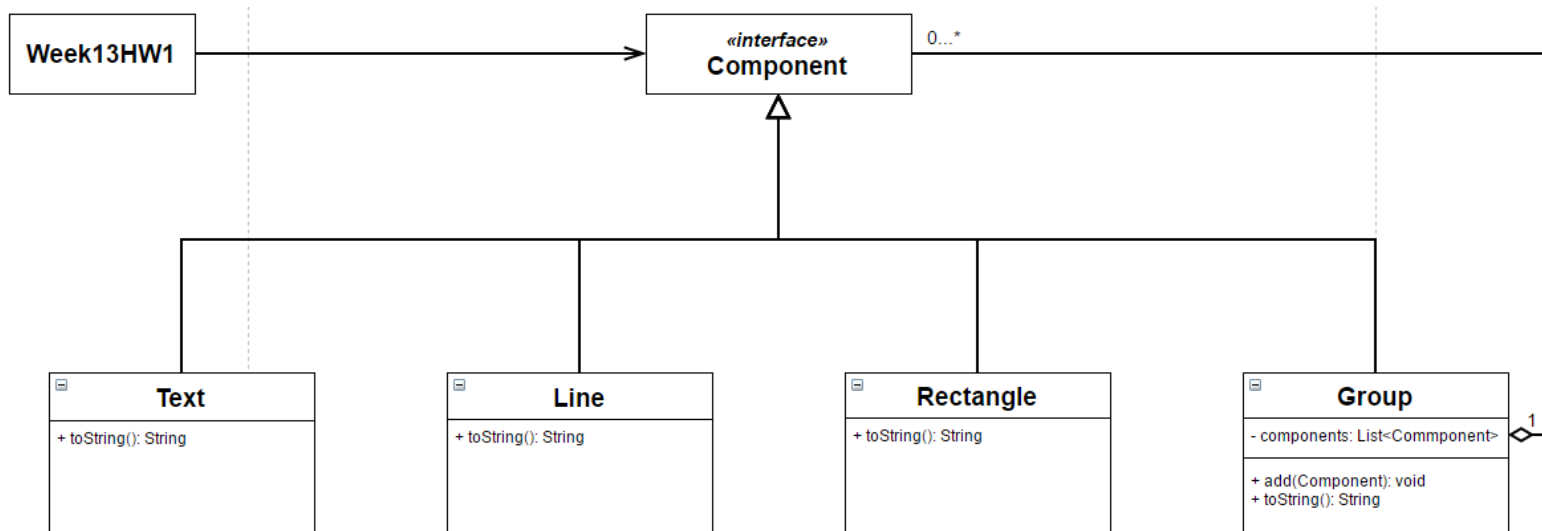
Schematic Capture Systems₁

In schematic capture application, there are some basic components that can be drawn such as Text, Line and Rectangle.



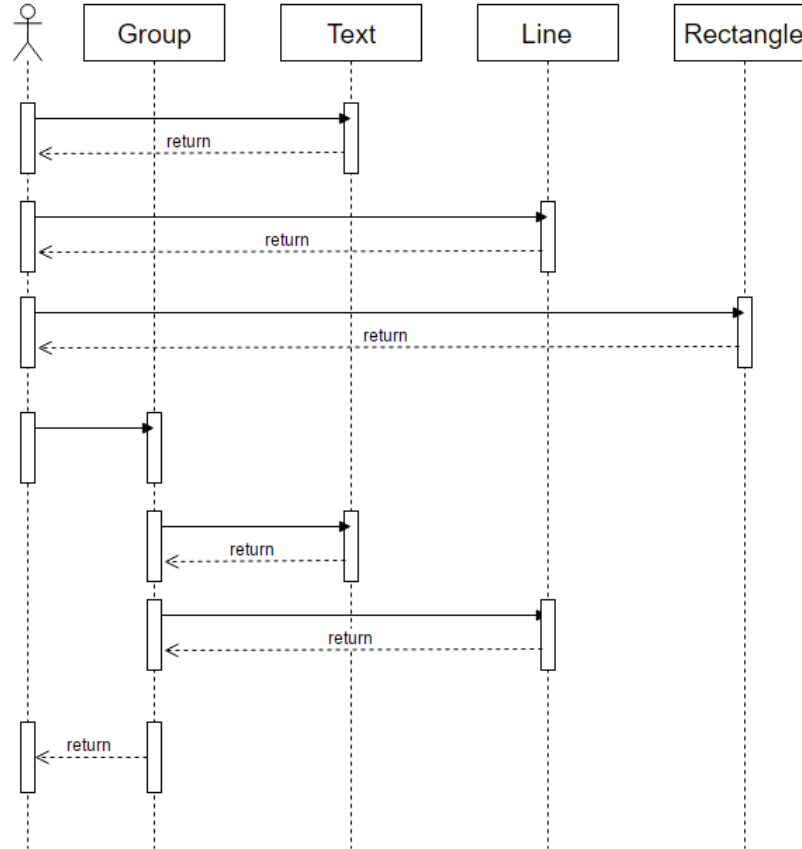
Schematic Capture Systems₂

The user can group basic components to form larger components, which in turn can be grouped to form still larger components.



Schematic Capture Systems

Sequence Diagram



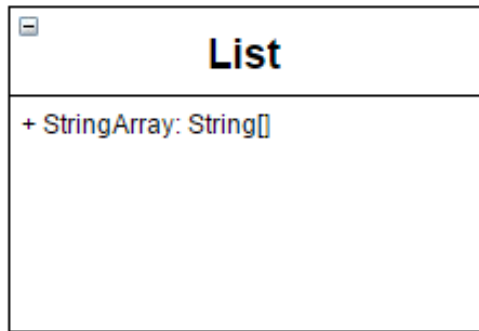
Print Out Items in Different Data Structures

Requirements Statements

- A List data structure is implemented with a String array which can contain a series of String objects.
- We can access List by calling the `get()` method with an index, and know how many Strings inside the List with a public attribute: `length`.
- Furthermore, another data structure called `SkipList` which consists of a series of `SkipNodes`.
- Each `SkipNode` can be accessed by invoking the `getNode()` method in `SkipList` with an index. And we have the idea about the size of `SkipList` with its `size()` method.
- Now we have to traverse both List and `SkipList` to print out those object items in the two different data structures for some purpose.

Print Out Items in Different Data Structures₁

A List data structure is implemented with a String array which can contain a series of String objects.



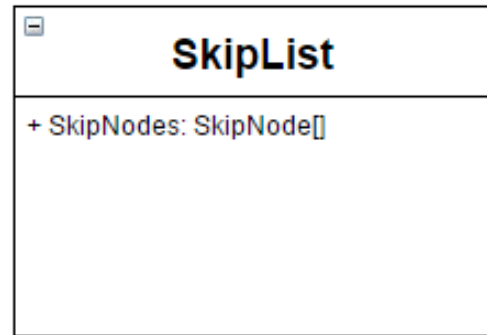
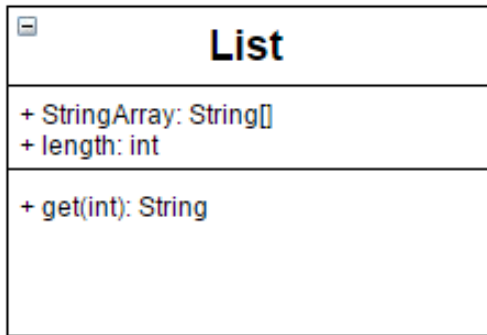
Print Out Items in Different Data Structures₂

We can access List by calling the `get()` method with an index, and know how many Strings inside the List with a public attribute: `length`.

List
+ StringArray: String[] + length: int
+ get(int): String

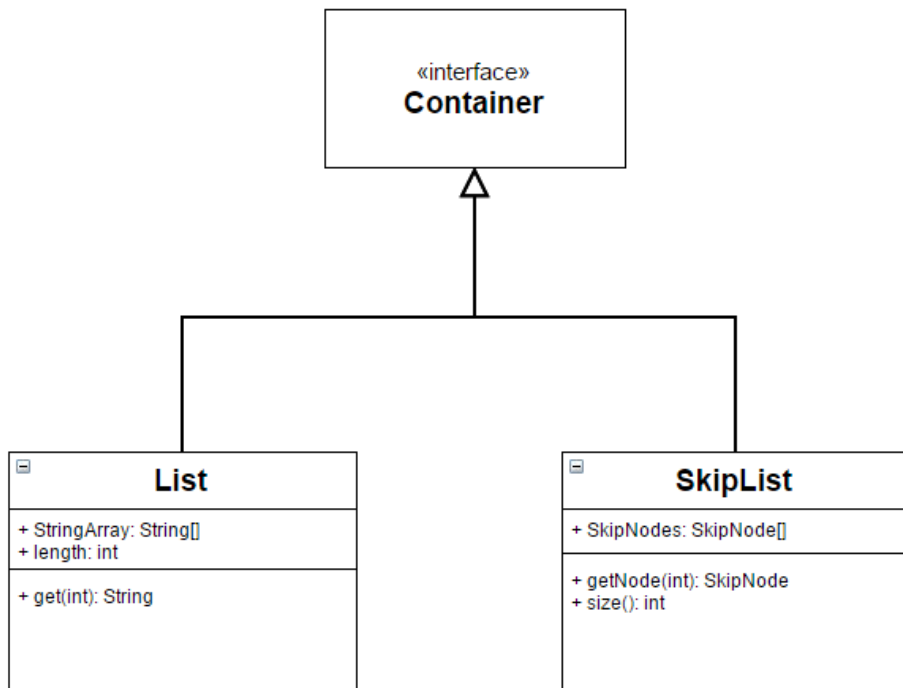
Print Out Items in Different Data Structures₃

Furthermore, another data structure called SkipList which consists of a series of SkipNodes.



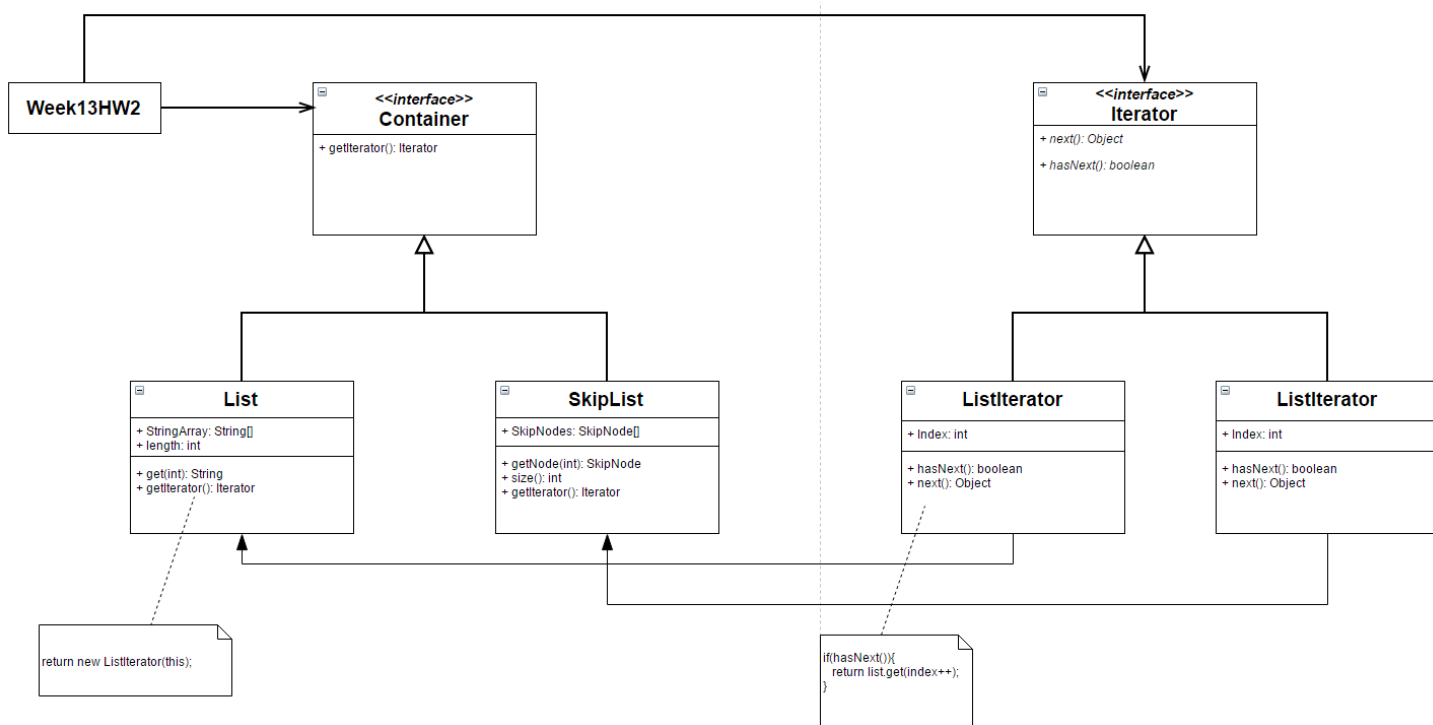
Print Out Items in Different Data Structures₄

Each SkipNode can be accessed by invoking the getNode() method in SkipList with an index. And we have the idea about the size of SkipList with its size() method.



Print Out Items in Different Data Structures₅

Now we have to traverse both List and SkipList to print out those object items in the two different data structures for some purpose.



Print Out Items in Different Data Structures

Sequence Diagram

