

Design Notebook

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11:58 PM

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CS1450 -02
Assignment #8
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Problem:

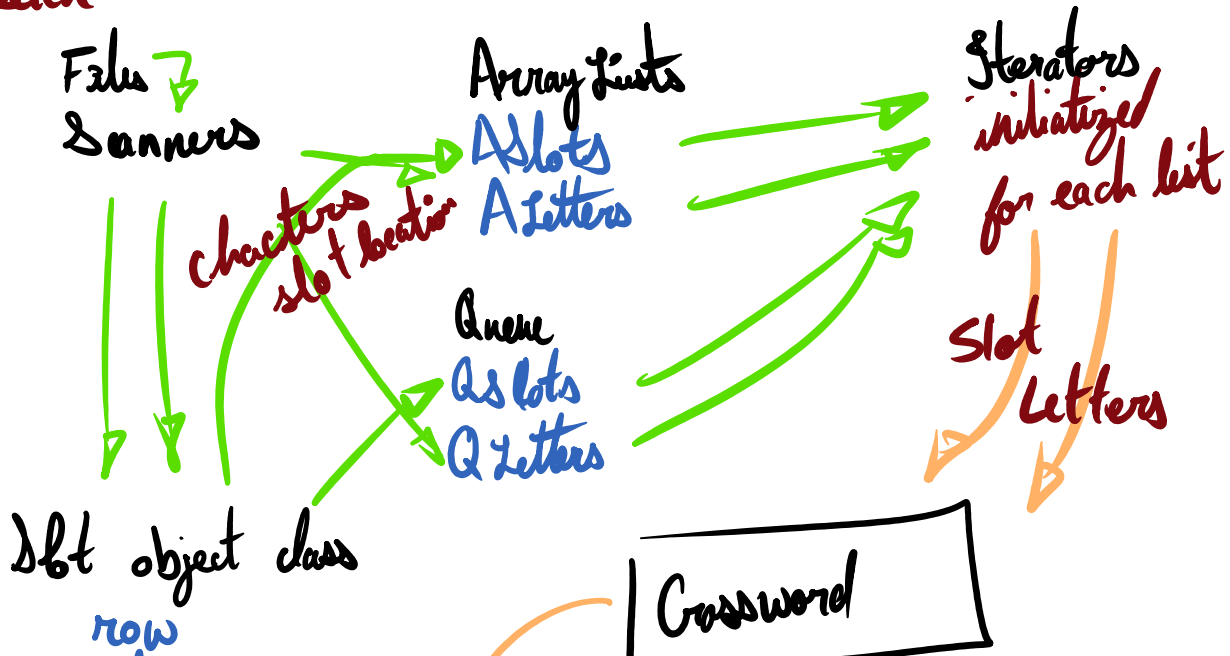
Create an array list of characters from a file and an arraylist of slot objects that hold an index where the character belongs in a crossword. Using iterators, the program creates 2 crosswords with an arraylist and a Queue.

Understanding:

What I know: • object manipulation • Queue + List Implementation and methods.

What I don't: • creating + implementing iterators • reading from iterators • syntax for creating iterators

Sketch



row
column

Crossword

Constructor
// fills every value
with '-' before
filling in others

char[][] array

Empty Character = '-';

enterLetters()

// using Slots and Letters
lists, fills the array
correctly

printCrossword()

prints every location in
array

Pseudocode

Note: Iterators for lists must be initiated after the list
is filled

Ex:

```
Queue<Character> qLetter = new LinkedList<>();  
while(scanner.hasNext()) {  
    qLetter.add(scanner.nextValue())  
}
```

```
Iterator<Character> qChar = qLetter.iterator();
```

enterLetters() method was pretty straight-forward

Other Hiccup: converting strings to characters

Other Hiccup: converting strings to characters

Ex.

```
String Aletter = (letter scanner).next();
```

```
char Acharacter = Aletter.charAt(0);
```

which collects that first char of the string

Lessons Learned

- Syntax + initialization for iterators
- iterator methods