Homework #6 Lexi, Iterator, and Visitor

Issued: Wednesday, April 20
Due: Wednesday, April 27

Purpose

This assignment allows you to learn about the Iterator(257) and Visitor(331) design patterns. You should also use Command(233). By using Iterator(257), you will be using FactoryMethod(107) implicitly.

Assignment

Design (in UML) and implement (in Java) the Textual Analysis part of the Lexi editor, as described in Section 2.8 of our textbook. Rather than spell-checking and hyphenation, add a Command to compute the set of "words" in a Glyph structure, and write them to `System.out`.

Notes and Suggestions

- Use the design suggestions from our textbook.
- Use the Java code in:

    pub/hw5

  There is no new code for this assignment.
- As usual, casting is prohibited!
- As usual, indicate with a comment at the top of each source file, the relevant patterns and participants.
- Store the new Command in your KeyMap, under "w" for words.
- Glyph iterators make `Glyph.child()` obsolete. Remove it.

- Use the PreorderIterator developed in lecture. Graduate students must make this class reusable! You may want to research Java 1.5 generics in more detail. For example:

  `pub/assignments/hw6/generics-tutorial.pdf`