

## Homework #5 Lexi, Command, ChainOfResponsibility, and Prototype

**Issued:** Thursday, April 4

**Due:** Thursday, April 18

### Purpose

This assignment allows you to learn about the Command(233), ChainOfResponsibility(223), and Prototype(117) design patterns. You should also use Singleton(127).

### Assignment

Design (in UML) and implement (in Java) the User Operations part of the Lexi editor, as described in Section 2.7 of our textbook.

Your program should accept the following keystrokes and perform the following operations:

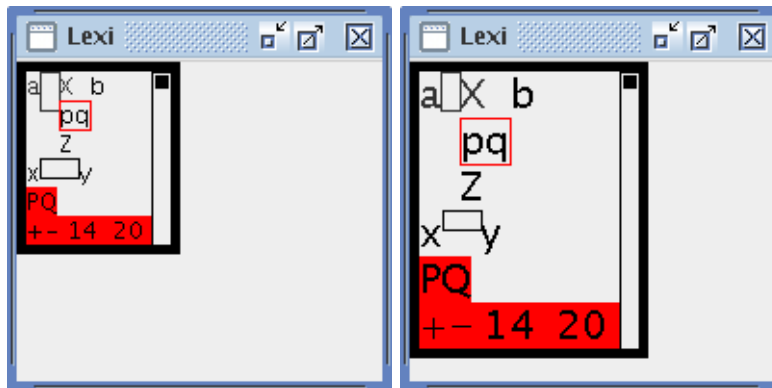
- i: Increment the font size by one.
- d: Decrement the font size by one.
- u: Undo.
- r: Redo.

Your “main program” should construct and display buttons, which when clicked perform the following operations:

- Increment the font size by one.

- Decrement the font size by one.
- Set the font size to fourteen.
- Set the font size to twenty.

Test your solution with a simple graphical demonstration. For example, these are the results of my tests:



## Notes and Suggestions

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

```
pub/hw5
```
- As usual, casting is prohibited!
- As usual, indicate with a comment at the top of each source file, the relevant patterns and participants.