

Homework #4 Lexi and Bridge

Issued: Thursday, November 1

Due: Tuesday, November 13

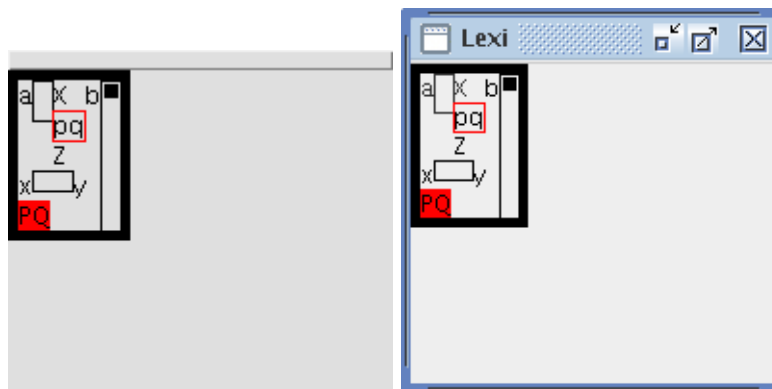
Purpose

This assignment allows you to learn about the Bridge(151) design pattern. You can also use AbstractFactory(87), FactoryMethod(107), and Singleton(127).

Assignment

Design (in UML) and implement (in Java) the Multiple Window Systems part of the Lexi editor, as described in Section 2.6 of our textbook. Support two window systems: AWT and Swing.

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



The left one is AWT. The right one is Swing.

Notes and Suggestions

- Use the design suggestions from our textbook.

- Use the window interface and implementations in:

~buff/classes/472/pub/hw4

- As usual, casting is prohibited!
- As usual, indicate with a comment at the top of each source file, the relevant patterns and participants.
- Use the value of an environment variable to select the window system. For example:

```
1   String s=System.getenv("LexiWindow");
2   if (s!=null && s.equals("Awt"))
3       ...
4   else
5       ...
```