

## CSE 165: Introduction to Object-Oriented Programming Lab 3

Your task in this lab is to create a simple demo application with the following features:

- 1. At startup, your program should display several rectangles of random sizes in random positions. They should all be a different color, except for white or black.
- 2. Clicking on a rectangle should change its state to "selected", and it should be represented by a white border around the rectangle.
- 3. The selected rectangle should be on top of all the others.
- 4. Make the selected rectangle draggable, which means we can change its position by dragging the mouse.
- 5. Make the selected rectangle resizable. When the user drags the bottom right corner, the size should change.
- 6. If the mouse pointer falls inside multiple rectangles while clicking, only the topmost rectangle should handle the click event.
- 7. See video in CatCourses for an example of what your program should do.