Assignment 6

Using the graphic in Figure 11.49 as a guide, write a program that draws simple stars, \(\{n/k\}\) where \(n\) and \(k\) are relatively prime. Your program:

1. accepts the \(n\) value from a JTextField
2. accepts the \(k\) value from a JTextField
3. accepts 1 of 7 colors in the order of the visible light spectrum from a JList object
4. accepts 1 of 3 sizes (small, medium, large) from a JList object
5. places a star of the chosen type in the drawing area when the user left-clicks
6. draws a trail of stars across the screen when the user holds the mouse button down
7. displays an error, using JOptionPane, if \(n\) and \(k\) are not relatively prime

Design Issues:

Use Ball/BallWorld1/BallWorld1Demo as a model for how to construct your program. Your GUI code belongs in StarWorld. Your star code belongs in Star. Your star control code belongs in StarWorld.

Follow the instructions under Submitting Assignments.