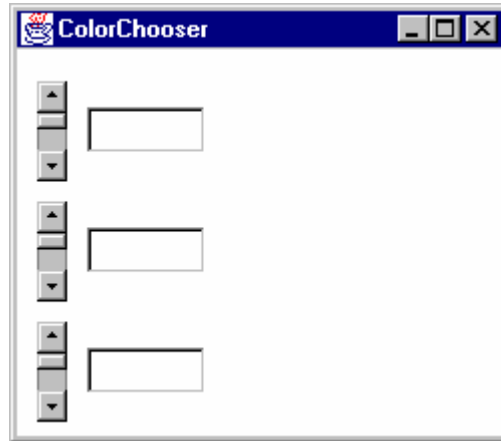


Lab 8. Problem 3

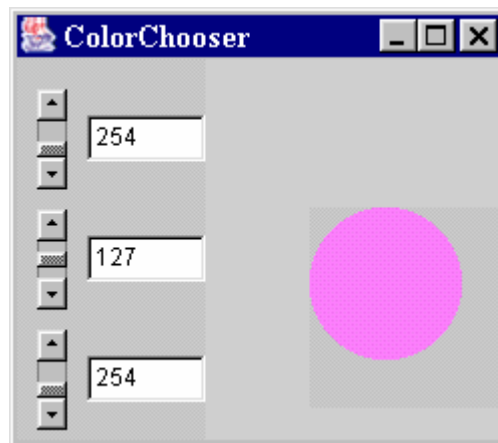
Event Handling. Listener interfaces

A. Construct a frame with three scrollbars , three corresponding text fields and a panel on the left side as presented in the following figure:



Each scrollbar represents values from 0 to 255, which are nuance of the three fundamentals colors: red, green, and blue. The current value of each scrollbar is shown in the near text field. Changing the value in a text field provokes a changing of the corresponding scrollbar's knob position.

B. Add the handling of events of the AdjustmentEvent type launched by the Scrollbar objects, such that the program can compose a color from the current values of the scroll bars and draw each time the scrollbar is released a disc filled with this color and which re-dimensionns its diameter each 500 milliseconds from 0 to the maximum dimension allowed by the panel. like in the next figure:



Furthermore, the user can also introduce a integer value in a text field to set the values of the current color. When the Enter is pressed on a text field then the scrollbar should be set to the value and the self-dimensioning disc should be drawn again,

Hint

1. The controller which manages the AdjustmentEvent events implements the interface AdjustmentListener with its unique method:

```
public void adjustmentValueChanged(AdjustmentEvent e);
```

When the AdjustmentEvent object is called with getValue() it returns a positive integer representing the position of the knob in the scrollbar (from 0 to 100 in the default case, from 0 to 255 in our case).

2. The knob position in a JScrollbar object can be set from the program with the setValue(int value) method.