

CS 129 HW6 – Two Panels

Write a program with two panels. Hint: You should use two frames as well. You can use `frame.setLocation(x, y);` to set the panel's starting location on the screen. Both panels must use the same class (-50% otherwise). That is, you can have multiple panel objects, but they must be based on the same class, like so:

```
Display panelLeft = new Display(400, 400, Color.white);
Display panelRight = new Display(400, 400, Color.white);
```

Each panel maintains a grid of 99 squares, evenly sized and evenly spaced apart, and starting in a random color. I used a size of 25 with 10 padding between them in the samples below, on a 400 by 400 panel.

Implement the following functionality:

- When a square is left clicked, hide that square, and the one in the same spot in other panel.
 - For example, clicking the first square hides the first square on both panels. Clicking the tenth square hides the tenth square in both panels. Etc.
- When a square is right clicked, hide it only in that panel.
- When the “A” key is pressed, reveal all the squares in the panel that’s in focus.
 - Hint: The frame where you last clicked is in focus. Key presses automatically go only to the panel that’s in focus.
- When the “S” key is pressed, reveal all the squares in both panels
- When the “D” key is pressed, the two grids swap colors. The first square on the left gets the color of the first square on the right, and vice-versa. The second squares swap colors too, and so forth.
 - Extra credit (10%) if at least one of the squares that should swap is hidden, the swap doesn’t occur
- When the “F” key is pressed, all the colors in the grid move to the right by one tile. So the second tile becomes the first tile’s color. The third becomes the second tile’s color, and so forth. The first tile becomes the last tile’s color.
 - Extra credit (10%) if hidden tiles are skipped, and stay the same color that they were
- Both panels should display how many hidden squares there are at any given time

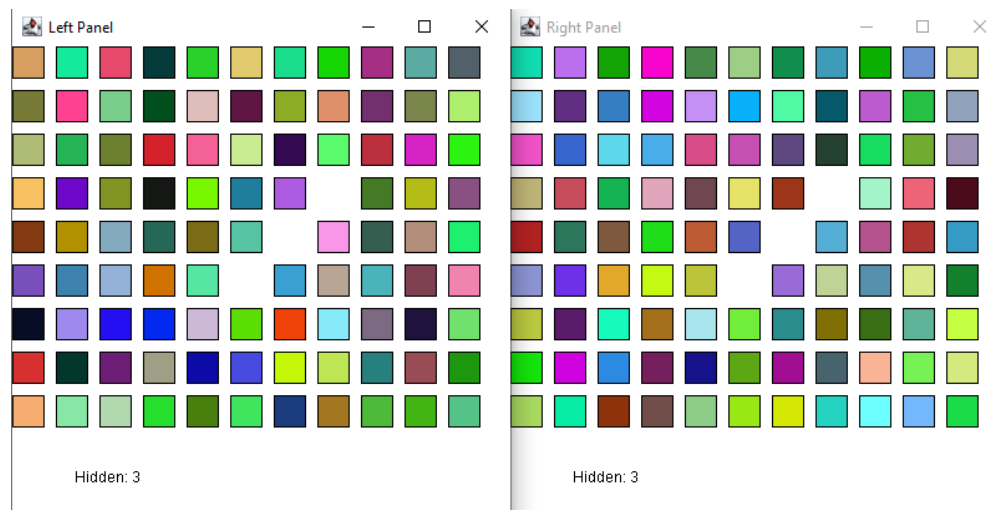
As always, up to 5% extra for exceptional documentation.

Bonuses not pictured

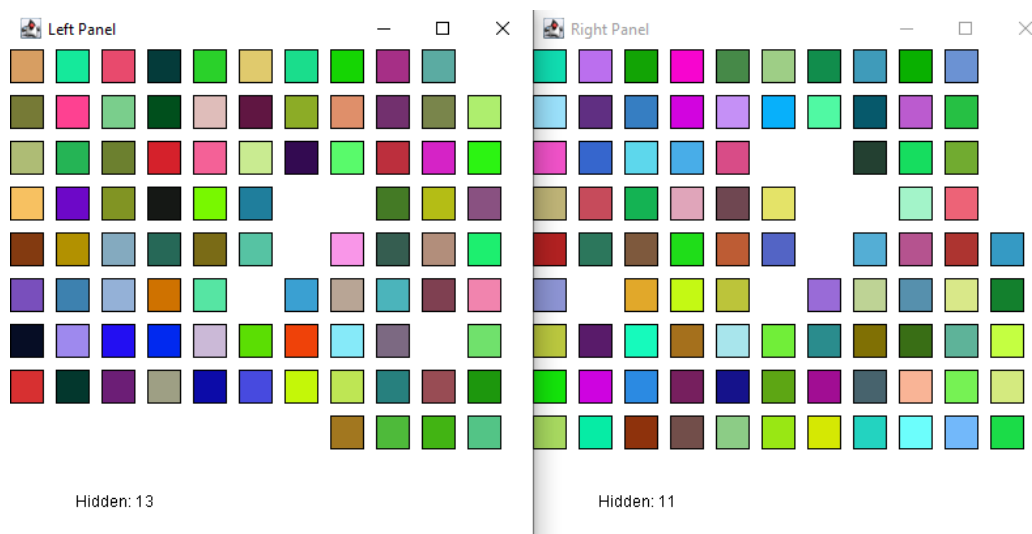
Start



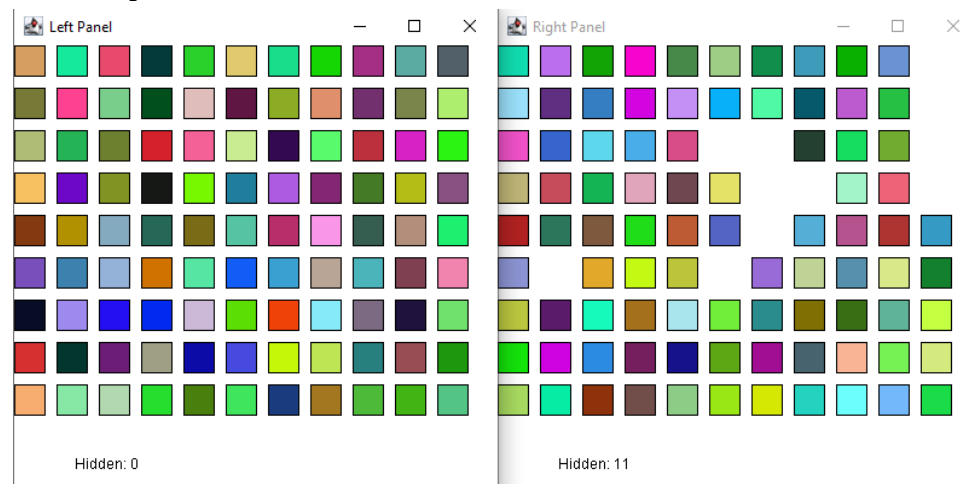
A few left clicks later



Some right clicks on each panel



Pressed “A” on the left panel



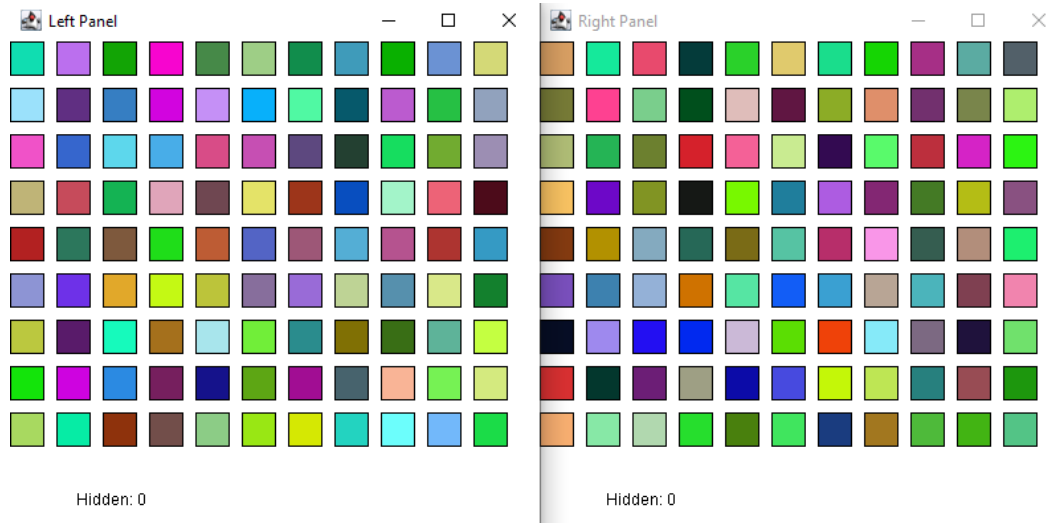
Left clicked some more



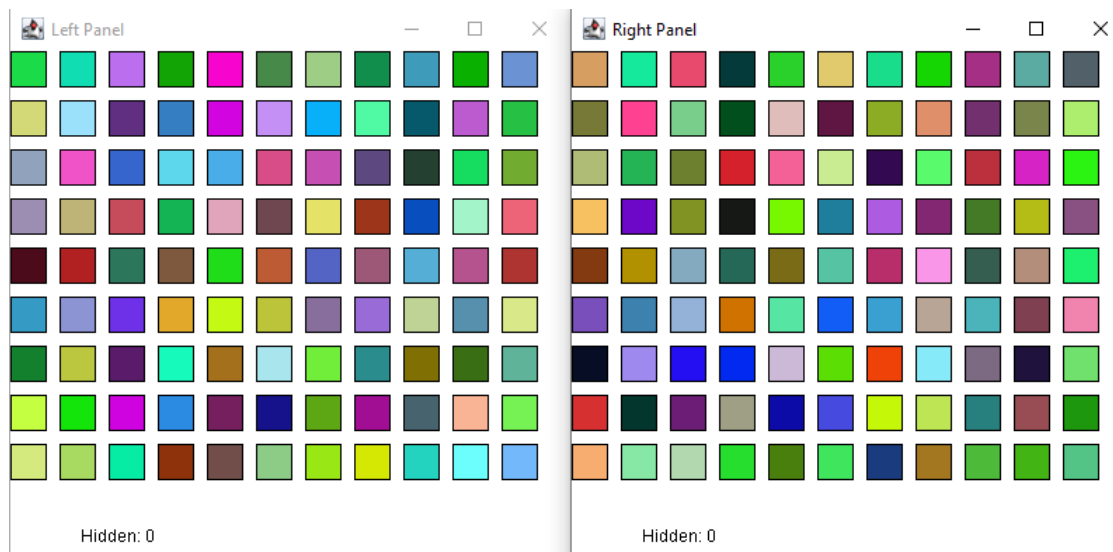
Pressed “S” on either panel



Pressed “D” on either panel (colors from the left are now on the right, and vice-versa)



Pressed “F” on the left panel once



Pressed “F” a few more times

