May 9, 2017

To Bruce Bolden
From Megan Phelan (Team 3)
Subject Final Development Sprint

Introduction

This is a summary of my work in the final development sprint for the Goofy Lights Editor team project.

Overview

Wrapping up the Goofy Lights Editor team project.

Summary

For the final sprint I had some additional work to do on the save catch before exiting the program. I had not thoroughly tested my code enough to realize that the cloning classes that I had written were not cloning down to the color of the node. This failure caused the cloned frames to be references to the frames they were meant to clone. To fix this I added @Override to the clone method in the Frame class and added a cloning method to the node class to clone the color of each node. The exit catch will now properly check for any changes in the nodes and frames on exit since the last save.

Appendix

The following is a screenshot of the code for cloning a frame. I realized the builtin Java clone method was being used rather than my method, so I had to override the builtin method.

```
37⊖      @Override
38       public Frame clone(){
39           Node[][] clonedNode = new Node[getHeight()][getWidth()];
40           Frame clonedFrame = new Frame();
41           for(int i=0; i<getHeight(); i++) {
42               for(int j=0; j<getWidth(); j++) {
43                   clonedNode[i][j] = nodes[i][j].clone();
44               }
45           }
46           clonedFrame.nodes = clonedNode;
47           clonedFrame.startingTime = startingTime;
48           return clonedFrame;
49       }
```

Figure 1: Must Override Java Clone Class

The following is a screenshot of the pop up window if any change has been made to the frames since the last save. If even a single node color has been changed since the file was last saved this prompt window will show up before closing the program. If any nodes are changed to a different color, but changed back to the color they were last saved as, essentially no change was made and the program will close without the prompt. Selecting yes will save the updates to the tan file and close the program. Selecting no will close the program without saving, and selecting cancel will return the user to the program without closing. If the file has not been previously saved, the save as dialog box will appear for the user to give the file a name and location to be save at.
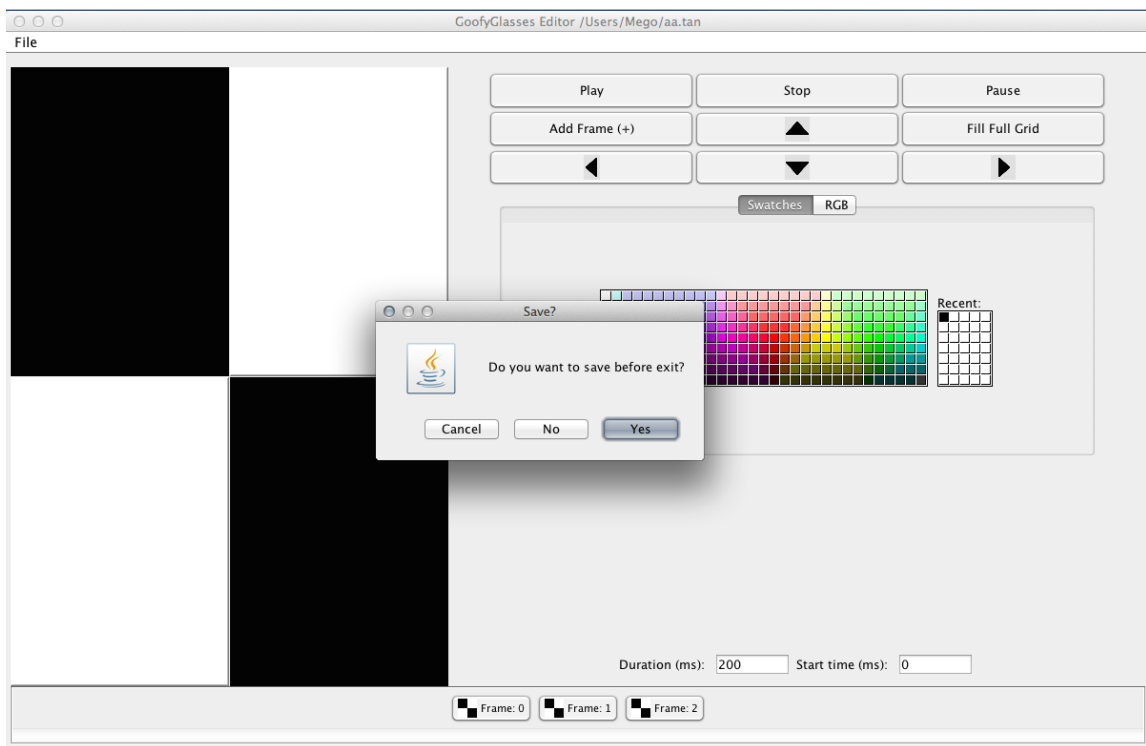

Figure 2: Save Prior to Exit