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Subject: CS 383 Final Memo (Team 3)  
Date: 5/5/17

## 1 Introduction

This summarizes my efforts towards team three's final sprint.

## 2 Overview

In this sprint, we were wrapping up some loose ends. My part in this was to create the ability to edit the duration and start time of each frame.

## 3 Summary

The team met on 4/27/17 for our sprint planning meeting. One of the items that we discussed was adding the ability to edit duration and start times for each frame. Since I worked on the animations last sprint (which is closely related to this task), I volunteered to do this.

First, I created the GUI elements. I needed to figure out the correct panel to put the elements into and what elements to make. I ended up making 2 JLabels and 2 JTextFields and added them to the correct panel.

I then worked on adding listeners for the text fields. I wanted to update the data values that the fields corresponded to when the fields were updated. I also needed to implement some error handling. For example, a frame's start time cannot be equal to or less than its predecessor's start time. I decided to make the labels corresponding to the text fields red when the values in the text fields were invalid.

For duration, I also needed to loop the subsequent frames to update their start times. In the background, I decided to only keep track of start time and not duration.

Throughout this process, I wanted to make my code readable and succinct. Thus, I tried to break up the code into reasonably small functions that, in some cases, are reused.

## 4 Appendix

### 4.1 Project Screenshot

This screenshot shows a simple tan filed opened. I edited the start time of frame 0 to the value 2. This can be seen towards the bottom of the screen. Since this is the first frame, clearly the start time should be 0. Thus, the "Start time (ms):" label is red.

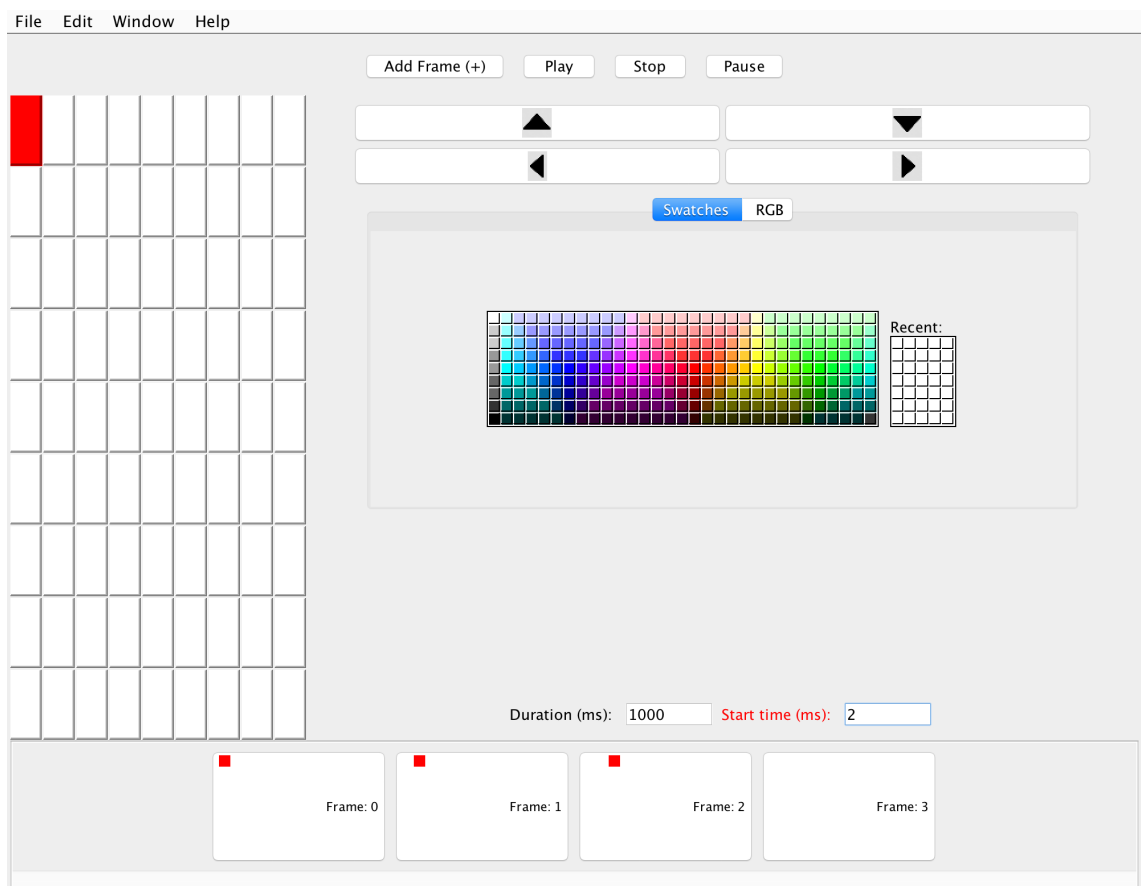


Figure 1: Project Screenshot