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**From** Joshua Bonn  
**Subject** Development Sprint 2  
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## **Introduction**

This was our second development sprint. My job was to create a visual for the multiple frames that create a show.

## **Overview**

### Planning

To create this, I first needed to understand QScrollArea, QHorizontalScrollBar, and QHBoxLayout. After spending a few days studying them, I developed my first draft.

### First Draft

My first draft consisted of a set of buttons that could be scrolled through. This proved the functionality of the QScrollArea. My next goal was to add deleting of frames in the animation.

### Final Draft

I used the pre-existing grid code to create small widgets that could fit inside my scroll area. For awhile, my grid would look terribly out of proportion until more frames were added. I fixed this by using spacers to push it to the left until more frames were added. I added live updates of the animation frames whenever the main grid was changed.

### Next Step

My next goal is to track which frame the user is working on by moving the scrollbar across the frames. I will also add functionality for accessing the animation frames anywhere and adding and deleting ones from the middle.

## **Summary**

Everything went smoothly, even as we switched from hard code in mainwindow to classes, very few problems arose. Everyone knows what to do next, and have already began researching.

## Appendix

Below are two pictures on the development of the animation frames display. The first one shows the sizing errors that I was experiencing as well as color updating errors. The second one is the final product.

