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Project #4 Report

This project put all the knowledge from this semester together and tested our ability to implement various JavaFX features. I formed a group with Tyler Morrison and Allison Chen, and I took on the job of the format, adding shapes, input validation, and styling and final finishing details. I also collaborated with both of my partners on their tasks because we needed to make sure all of our separate parts work together. My main challenge was making sure the right variables and objects were global so that every method had access to the parts they need to work. Also, organizing and establishing a functioning outline of how we were going to code the program and how it was going to look visually was daunting. At first I considered making a class for each type of shape so that we could manipulate each shape's characteristics easier. However, after a lot of trial and error, I decided that creating an ArrayList with all of the shapes that the user adds manually would ensure that every part of the program would have access to the location and dimensions and of each shape. There were also multiple border panes, many variables, and many methods that I tried to keep as orderly as possible while making sure the program is user-friendly.

The most difficult part of our entire program was getting our saved files to import correctly. The first thing that made this challenging is that the team member that worked on the menu system, which included importing and saving files, worked individually, so we had a hard

time integrating that part into the rest of the program. We all got together to work on this part in order to make sure the “save” EventHandler was using the Arraylist we created and grabbing the right information to save onto our file. Then, the next challenge was importing the shapes and the entire SubScene’s features correctly. Because our source code was so long, it was easy to make silly mistakes such as forgetting to rename variables or accidentally changing a single line that made our whole system fail. After many hours of collaboration, we managed to run a completed program that works how we wanted it to.