

Problem Set 6 Report

We use synchronized messages all throughout our Sketch class to avoid possible interferences between different clients. One such interference could happen if two clients were simultaneously attempting to apply changes to the same object in the sketch. Operations like drawing or deleting, where the user is manipulating the IDs of the shapes in the sketch, could potentially be troublesome without the methods being synchronized.

In our program, we saw a downside of using synchronized methods when one client was performing an action (like moving) a shape for an extended period of time. In this case, the other clients were not able to move shapes as a synchronized method can only run for a single thread at a time.

In the grand scheme of things, however, the synchronized methods did not cause issues.