**Program 2 – Socket Painter**

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Almost everything in the program is working smoothly. The hub can have threads running for each connected painter, and when a painter disconnects the hub prints a message to the console and is able to continue serving the other threads. As a painter connects, the hub gives it a list of the objects currently drawn for it to draw to its own surface.

The hub handles painter input with one thread per painter for listening and distributing information among all other painters. Currently the painter needs to be connected to the server to work, and closes if it cannot connect to the server, or if the server closes unexpectedly.

The drawing and message sending works by comparing the object read from the input stream’s class to a couple of template classes to determine what the object is and what to do with it. The object is then casted to whichever type it was determined to be and dealt with accordingly. The work is distributed solely from the hub, and as such the painters are dependent on the server to update its own board and chat log.

The drawing and message functions of the painter are in working order, but I had some trouble lining up where was clicked on the screen with where the line and circles were drawn. I ended up guessing what I believe to be the border size and subtracting it from the position of the click to correctly place the object on the painting panel.