## LiveBoard: Whiteboarding Over a Network Ryan Ronish

## **Project Description**

LiveBoard is a network-based whiteboard that allows multiple users to draw together in real time. The application relies on a client server architecture. The server handles incoming drawing events from clients and relays them to all other clients so they can render the same updates on their canvas. Each client connects to the server by entering its IP address and port number.

This project makes extensive use of network communication each drawing action is transmitted via TCP to all participants. Each person will be able to see the changes each other user is making in real time. Without this communication, users cannot see or contribute to the shared board, making networking a core component. Clients will have a user interface for drawing using Java Swing, and the server will be console-based or use a log window to show user connections. The application will rely on message delivery using TCP sockets to ensure accurate drawing actions by the user.