**Mastermind Game on Java**

DATA COMMUNICATIONS AND NETWORKING

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Team 6:

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Program Narrative:

**Client:** When the client starts, the user is asked to input a server IP address to connect and play the puzzle game “Mastermind”. When the client is connected to the server, it has the choice to start a game, restart the game or to give up. The user can also view at the help tab for more information about the game. If the user enters numbers other than zero in all 4 blanks, the server will accept those numbers as the answer for the following Mastermind game session. In the hint section of the user interface, a **1** will represent that a color/number is in the correct position and a **2** will represent an input in a mismatched location. After 10 turns, the client will display a red “L” if the client failed to guess the server’s colors/numbers or it will display a green “W” if the user won.

**Server:** When the server starts, it will loop to accept client connections at port 50000. Once the connection has established, the server will wait for the “new game” packet or use the user-provided packet as the answer. The server will stay connected to the same user until the client disconnects. The server will provide the hints to the client. The server can restart the game if the user desires to do so. If the connection to the client drops, the server will stop listening to the current client and start listening for next clients.