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**Link to Project:** <https://github.com/hvluu/CS380/tree/master/Projects/Project6>

**TicTacToeClient.java**

*import java.io.IOException;*

*import java.io.ObjectInputStream;*

*import java.io.ObjectOutputStream;*

*import java.net.Socket;*

*import java.net.UnknownHostException;*

*import java.util.Scanner;*

*public class TicTacToeClient {*

*public static void main(String args[]) throws UnknownHostException, IOException {*

*try (Socket socket = new Socket("18.221.102.182", 38006)) {*

*System.out.println("Connected to server...");*

*ObjectInputStream inStream = new ObjectInputStream(socket.getInputStream());*

*ObjectOutputStream outStream = new ObjectOutputStream(socket.getOutputStream());*

*//This thread checks for messages and decodes/outputs them*

*Thread getMessage = new Thread() {*

*public void run() {*

*Object message;*

*while (true) {*

*try {*

*message = inStream.readObject();*

*if (message.getClass().equals(BoardMessage.class)) {*

*BoardMessage bmess = (BoardMessage) message;*

*printBoard(bmess.getBoard());*

*int win = checkWin(bmess.getBoard());*

*switch (win) {*

*case 1:*

*System.out.println("You Win!");*

*outStream.writeObject(new CommandMessage(CommandMessage.Command.EXIT));*

*System.exit(0);*

*break;*

*case 2:*

*System.out.println("Computer Wins!");*

*outStream.writeObject(new CommandMessage(CommandMessage.Command.EXIT));*

*System.exit(0);*

*break;*

*case 3:*

*System.out.println("Tie Game.");*

*outStream.writeObject(new CommandMessage(CommandMessage.Command.EXIT));*

*System.exit(0);*

*break;*

*default:*

*break;*

*}*

*} else if (message.getClass().equals(ErrorMessage.class)) {*

*ErrorMessage err = (ErrorMessage) message;*

*System.out.println(err.getError());*

*}*

*} catch (Exception e) {*

*e.printStackTrace();*

*}*

*}*

*}*

*};*

*Scanner sc = new Scanner(System.in);*

*System.out.print("Enter Username: ");*

*String username = sc.next();*

*outStream.writeObject(new ConnectMessage(username));*

*outStream.writeObject(new CommandMessage(CommandMessage.Command.NEW\_GAME));*

*getMessage.start();*

*while (true) {*

*System.out.println("Enter the number for where you want to move (-1 if you want to surrender): ");*

*int move = sc.nextInt();*

*switch (move) {*

*case 1:*

*outStream.writeObject(new MoveMessage((byte) 0, (byte) (0)));*

*break;*

*case 2:*

*outStream.writeObject(new MoveMessage((byte) 0, (byte) (1)));*

*break;*

*case 3:*

*outStream.writeObject(new MoveMessage((byte) 0, (byte) (2)));*

*break;*

*case 4:*

*outStream.writeObject(new MoveMessage((byte) 1, (byte) (0)));*

*break;*

*case 5:*

*outStream.writeObject(new MoveMessage((byte) 1, (byte) (1)));*

*break;*

*case 6:*

*outStream.writeObject(new MoveMessage((byte) 1, (byte) (2)));*

*break;*

*case 7:*

*outStream.writeObject(new MoveMessage((byte) 2, (byte) (0)));*

*break;*

*case 8:*

*outStream.writeObject(new MoveMessage((byte) 2, (byte) (1)));*

*break;*

*case 9:*

*outStream.writeObject(new MoveMessage((byte) 2, (byte) (2)));*

*break;*

*case -1:*

*outStream.writeObject(new CommandMessage(CommandMessage.Command.SURRENDER));*

*break;*

*case 0:*

*outStream.writeObject(new CommandMessage(CommandMessage.Command.EXIT));*

*System.exit(0);*

*break;*

*}*

*}*

*}*

*}*

*public static void printBoard(byte[][] board) {*

*}*

*public static int checkWin(byte[][] board) {*

*}*