Assignment 9 Writeup

The goal of this assignment is to build a text-based UI that runs on the command-line and implement a client-server application.

To initialize the game, the user provides hostname and port number for setting up the socket. The arguments are accepted through command-line, and are handled by a CmdHandler. After a socket is created, the program initializes a YahtzeePlayer to play the game. Since the Yahtzee server requires two players to start the game (unless the DEV mode is selected), we need to run two main methods of PlayYahtzee after starting the server.

In the class YahtzeePlayer, we use a BufferedReader to read the server message from the input stream of socket, and we use a PrintWriter to write and send the client message. The ServerMessageTranslator is used to translate the server message into readable information so that it can be printed to console. The ClientMsgGenerator is used to generate client messages based on what kind of message the server is waiting for. If the server is asking client which dices to keep or which score slot to choose, the ClientMsgGenerator will read and validate the system input and transform the input to a valid client message.