

Extra Credit Design & Implementation Explanation

CS 3251 Project 2 (Hangman)

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The multiplayer (two players) mode is an extension of the solo (single player) mode. In this version, when the first client is connected, she/he will be asked if they want to play the two players version of the game. If they say yes, they are asked to wait until another client is connected and wanted to play the two players version too. Then, the server will start a new game in multiplayer mode with both clients.

If the client did not to play the multiplayer mode, they will be asked whether they want to start a new game in single player mode.

In the two players version, the two clients alternate guesses. One player is asked to wait while their partner is asked for a guess. Both players share correct and incorrect guesses. If one player guessed a letter, their partner will not be able to guess the same letter. For example, if client #1 have already guessed letter a, client #2 will not be able to guess it. This applies to correct and incorrect guesses. Finally, the game is over when ever there is a total of 6 wrong guesses or the whole word is guessed correctly.

This server implementation can handle up to three concurrent games, where the games can be any combination of single or multiplayer games.

To run the standard project:

\$ make run-client

\$ make run-server

To run the extra credit version:

\$ make run-client-e

\$ make run-server-e