

Design and Implementation

For a client to enter multiplayer mode
they must enter yes('y') to both prompts

```
Ready to start game? (y n):y  
Two Player? (y/n):y
```

For multiplayer mode
If a client wants to start a multiplayer game and there is no client waiting, they will received the message
Waiting for other player!

Once a second client has entered
Client 1 will receive the message
Game Starting Player1!
Your Turn!

and Client 2 will receive the message
Game Starting Player 2!
Waiting on Player 1 ...

A Clients turn is denoted by the message
"Your Turn!"

Followed by the word their trying to guess and a prompt for their letter guess

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-----  
Incorrect Guesses: a d  
Letter to guess: "
```

Once they enter a guess, they will receive the message

```
Waiting on Player X ...
```

If their combined guesses have guessed the correct word before 6 incorrect guesses
You win! will appear on the screen
else You lose!

Explanation

I chose a simple design where I have a waiting room (array) that holds 1 client's connection until a second client is available, then starts a simulation with both clients and clears the array.

In the simulation to reuse a lot of the game logic used in the single player game i pause a client's simulation after their guess to allow another client to guess and always printing out the current progress of their word there are trying to guess.

I chose after 6 incorrect guesses to make both clients automatically lose to mimic the single player mode, since the logic to keep track o the incorrect guesses I reused from the single player mode.