

Team Number: 3

Section: 11 AM

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Group Project 5

Goal

We want to create a four player competitive game. This game will be competitive in the sense that players will have to complete all the puzzles. Once a player has completed all the puzzles, that player is pronounced victor.

Objective

The Server:

- Four clients will be able to join the game
- Keep track of players point
- Implement countdown that kicks player once time has run out
- Implement winner that rewards player once they have completed all the puzzles

The Client:

- Will connect to the Server
- Will keep track of own score, updating points once it successfully completes challenge
- Will Send updated score to server
- Will successfully be kicked out from the server once time is up or winner

The Server:

ServerConnection Class

Will be an abstract class that will implement a Thread method for listening for clients that want to connect to the server. Once a client is connected to the server, the ServerConnection will store the client into an array. We need this to be in a thread, since listening for a client will halt until a client is connected.

- Store the clients to an Array. This will allow us to control what the clients are doing
- Will run on a separate thread. This will allow the program to run without halt

Server:

Will inherit from the ServerConnection. Since every server needs a listening port and client handler, We decided to keep that process abstract and implement it in the server class.

Timer Thread:

This Thread will be the time managing thread. Once all the players are connected to the server, the timer will begin to count down. This needs to be in a thread, since the timer needs to run independently from the programs processes. Once it counts down, it removes all players from the server.

ServerFX:

Will implement the server GUI

The Client:

ClientConnection:

Will implement a Thread method for connection to the server and keeping the connection open.

- Will successfully read input from the server
- Will successfully send output to the server

The Client:

Will inherit from the Client connection. This will allow for simplicity and organization

Game class:

Will implement different games. This will allow us to implement game methods, keeping the main client code simple.

ClientFX:

Will be the GUI of the program



