**Team Number: 3**

**Section: 11 AM**

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**Title:**

Puzzle Gauntlet

**Objective:**

Try to get complete ten puzzles the quickest! There will be more than 40 puzzles to choose from. Each puzzle is one point, so the first person to get to ten points wins!

**Number of players:**

4

**Languages:**

Java

**UI Look and Feel:**

To be decided

**Description:**

* The game will not start until there are 4 players in the server
* Each player needs to finish ten puzzles before everyone else, or ***cease to exist***
* There will be an arraylist of “Puzzles” where each puzzle is a scene
  + Only one person can be working on a puzzle at a time to add a sense of urgency to gameplay
  + Puzzles can be riddles, easy, or tricky
* CLIENT SIDE
  + The Client will be in a room, they will need a way to choose which puzzle to do
  + The clients will also need a way to keep track of their own score
* SERVER SIDE
  + There will be a timer thread that keeps track of the times of the different clients
  + The Server will be responsible for most of the game logic. The Server project will contain all the scenes needed. Each puzzle will be its own scene, which will also be contained in an object called “Puzzle”
  + Each puzzle needs a way to be completed, or to be given up on.
  + When a player chooses to do a puzzle, they occupy the space needed to complete that puzzle. This means that no one can be working on the same puzzle at the same time.
  + The object Puzzle contains a scene and a boolean flag “inUse”
  + The game will implement an arrayList of Puzzles. When a player chooses a puzzle:
    - The player will send a message to the server indicating that they want to do a puzzle
    - The player will then send a message indicating whichpuzzle number they want to do. Each number corresponds to its location in the arrayLIst
    - If a client wishes to solve a puzzle, then the server will send that scene to the player, and a flag in that arrayList will inform the server that it cannot give that puzzle to another client as someone else is solving it
    - When a player reaches 10 points, they win the puzzle gauntlet
    - Everyone else will become Tonight’s Biggest Losers.