Use case: Start multi-player game

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| Use Case Name | Start multi-player game |
| Scope | Game app, Game server |
| Level | User goal |
| Primary Actors | Player |
| Stakeholders and Interests | - Player: Wants to begin a two-player match against an opponent over the internet |
| Preconditions | - User has installed and started the game application, has created an account, and is signed in with that account within the game app.  - The game application (client) has an internet connection and can connect to the server. |
| Success Guarantee | The player will be matched with another player also requesting to start a multi-player game, a level will be chosen by the system, and a two-player game session (match) will begin. |
| Main Success Scenario | 1. System asks the player to choose single-player or multi-player mode.  2. Player chooses multi-player mode.  3. The client creates a connection to the game server and requests to start a multi-player match.  4. The system performs a test to measure network latency between the client and the server. If this is within an acceptable range, the system continues to the next step.  5. (At least one other player with their own client has been following these same steps.)  6. The system chooses one of the other players also requesting to play a multi-player match and matches them with the first player.  7. The system chooses one of the levels available for multi-player at random for this match to be played on.  8. An appropriate message is displayed to each player, the chosen level appears and a countdown to the start begins.  9. When the countdown finishes, play begins. |
| Extensions | 4a. If the latency is found to be outside the range deemed acceptable for multi-player, the player is shown a message. The player may try again, but cannot proceed as long as the test fails.  6a. If there are no other players waiting for a match, the player is given the option to wait, or cancel. |
| Special Requirements |  |
| Technology and Data Variations List |  |
| Frequency of Occurrence | High |
| Miscellaneous |  |