

Project Title: Deceiver's Dice

Group Name: The Bots

High-level requirements:

1. Prospective users should be able to create an account, defining a username and password.
2. The system should maintain a database of users along with their login information.
3. Users should be able to log in to their account with their username and password.
4. Upon login, users should be directed to a welcome screen.
5. Users should be able to access a tutorial for how to play Liar's Dice.
6. A user should be directed to a lobby screen upon clicking the Create Game button on the welcome screen. This player will be considered the upcoming game's host.
 - a. The lobby screen will display all players (users and bots) in the lobby.
 - b. The lobby screen will display the lobby id.
 - c. The host should be able to add bots with varying degrees of skill level.
 - d. The host should be able to change the starting number of dice (between 1-5).
 - e. The lobby should permit up to 10 players to join a game.
 - f. The host should be able to start the game once 2 players have joined the lobby.
7. Users should be able to join a game by clicking the Join Game button and entering a valid lobby id.
8. All users in the lobby should be redirected to the game following setup.
 - a. A random player is chosen to create the first bid for the first round.
 - b. Each player should be given a set of face values for their dice.
9. The first player should be able to begin the game by specifying a bid consisting of a face value, between 2 and 6, and the quantity of dice in the game that they believe are showing that face value.
10. Turn order proceeds according to player index (the order they joined the lobby).
11. A player should have the option to "doubt" or "raise" the previous bid on their turn.
 - a. If the player opts to "raise", they should have the ability to specify a new bid.
 - i. Raises must be validated – that is, either:
 1. The face value of the new bid is greater than the current face value and the new quantity equals the current quantity, or
 2. The quantity of the new bid is greater than the current quantity.
 - b. If the player opts to "doubt", all players' face values should be displayed.
 - i. If the current player doubts the previous guess but the previous guess is correct, or if the next player doubt's the current player's bid and the current bid is incorrect, one of the current player's dice should be removed from play.
12. After a player loses a die, a new round begins; each player should be given a new set of face values.
 - a. The player who lost a die should make the starting bid; if that player was eliminated, the next player makes the starting bid.
13. A player should be removed from the game once they have lost all their dice.
14. If a user leaves before the game concludes, their player will be replaced with a medium bot.
15. At all times the game screen should display the user's current hand, the number of dice that each player has, the round, and the bid history.

16. The game should end when only one player remains.
17. Upon the conclusion of a game, every user should be redirected to the lobby.
18. A user should be able to view personal performance statistics including caught raises, successful doubts, and unsuccessful doubts.
19. Users should be able to log out.