**Project Name:** 20 Questions

**List of Members:** Rafael Perez, other members pending.

**Overview:**

The 20 Questions project is an individual project that consists of a server that will connect two clients and keep track of a game of 20 questions between the two. It will keep score of the game and give players many different capabilities, such as being able to view previous questions as well as making bets. After the game is over a winner is determined, the server will close elegantly.

**Functions:**

There are 4 major functions of the 20 Questions program.

1. **[Significant]** The first function is the programs ability to connect two available clients synchronously and let them play a game of 20 Questions where each players enter a word they want their opponent to guess and then ask each other a series of questions with “Yes” or “No” responses. Whoever can correctly guess what their opponent’s word is first is the winner.
2. **[Significant]** Another function of the app is the clients ability to view previous questions and answers they made earlier in the game as well as the current score in the game. The server will store the scores and the questions and responses and return them on demand. For instance, a client can ask for output of only the questions by the opponent, or just their own questions they asked.
3. **[Significant]** A betting system that lets players make bets at the start of the game and will save their earnings as they continue playing. For instance, a player can earn 20 and then 30 credits and when they exit it notifies them of their total earnings.
4. **[Significant]** In the case of a tie, the game gives the clients the option of playing another round of 20 Questions or playing an extra game of Prisoner’s Dilemma that puts their money on the line for the potential 4Xs earnings.