PLC Final Project Proposal

Title: Guess Who Game
Project Members: Olivia Cook and Brian Schweer
Presentation: Yes. We would like to present.

Summary:

Based off of the classic children's game, we will be creating an automated version of "Guess Who". This game will have two different modes: two-player (person vs. person) and one-player (person vs. computer).

The point of the game is to guess the opponent's character first. Potential characters can be eliminated by asking questions about the attributes of the opponent's character. A character is defined by the following attributes: gender (M/F), academic department (CS/ECE), phone preference (iPhone/Android), home country (US, India, etc.), wears glasses (Y/N) and holds cryptocurrency (Y/N).

The game begins with selection of the game mode. Each opponent is then randomly assigned a character. During each turn, the player is shown a list of characters that the opponent might have. The player then selects a question to ask their opponent (e.g. "Does your character wear glasses?") or guesses the name of their opponent's character. As soon as a player makes a successful name guess, the game is over.

In addition to implementing the game, we will also implement a program to add characters to the game. This program will be separate from the game and will store user selections to text files. The contents of these text files are then used during gameplay to create the characters. One last thing we will implement will be keeping track of statistics (e.g. win rates, average number of questions per game).

Technology:
- Language: Haskell
- A lot of the code we write will involve use of the Haskell libraries for I/O (system, file)

Milestone:

For our progress report we would like to have completed the functionality for adding characters to the game. We would also like to have the logic for player turns and character elimination completed.

Backup Plan:

If our goals are too challenging, we will eliminate the statistics feature and possibly the one-player game mode.