15-112 Term Project Proposal

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For my term project, I plan to develop an on-line multiplayer game that I call it XXX (I don’t have a cool name yet…).

At least 2 players need to be on-line at the same time. 2 – 8 players will be in a same “room” to begin the game. In each turn, the server will randomly give one player (the ‘host’) a word from words pool, while other players cannot see the word. The host needs to draw a picture on board to explain the word and other people can see the board at the same time and need to guess the word. If the word is successfully guessed, both the drawing player and the first player who figured out the word will gain scores. There is a timer counting the time after each turn begins. The less time passed when the word is successfully guessed by either player, the higher the score will be. As the time passed for a while, if nobody can guess the word, there would be hints provided (such as numbers of letters, word category, letters contained etc.). Both the host and other players can choose to give up. If the host or all of the other players give up, this turn will immediately end and nobody gain scores. Players will be ‘host’ in turns.

To implement the game, several modules are needed:

Use PIL and Tkinter to draw pictures, so I can manipulate the picture by pixels easier.

Twisted for handling client-server communications.

The server needs to determine the on-line status of each player, generate new words to draw, and determine who the host is for each turn. The client will display different user interface depending on the current player is drawing or guessing. Client that is drawing will send the canvas to server and server will synchronize other clients’ viewing window.