Term Project Milestone 1
CSC 667

Team-B Members: Alex Bautista, Alfred Quezada, Luis Almeida
Github Repository: https://github.com/sfsu-csc-667-spring-2018/term-project-team-b

Product Specifications

Project Specifications....2
Introduction....2
Features....2
Authentication and Permissions....2
Real Time Chat....2
Lobby....2
Waiting Room....2
Results page....2
Game Page....3
Technologies....3
WireFrames....4
Login....4
Register....4
Lobby....5
Waiting Room....5
Gameroom....6
Result....6

Project Specifications

Introduction

Uno is a card game that requires a minimum of 2 to 7 players. Every player picks a card, the person who picks the higher number deals. There are action card in this game that count as zero. Once the cards are all shuffled, each player gets 7 cards. The remainder of the deck is placed face down to form a draw pile. At this point, certain rules start applying depending on the cards being dealt and the actions they want to do. The person to the left of the dealer starts play. The person has to match the card on the discard pile, either by number, color or symbol. For example, if the card is blue 8, the next player must put down a blue card or any color 8. Also, the player could put down a wild card which has different functions to change card color, reverse turns and others. If the player doesn't have a card to match the card on the discard pile, it must take a card from the draw pile. If the card picked up can be played, the player is free to put it down in the same turn. Otherwise, the ply moves to the next person in turn. Players may also choose not to play a playable card in their hand and just skip their turn but the player must draw a card from the pile. If the card is playable, the card can be put down in the same turn, but the player may not use a card from the hand after the draw. First player to reach 500 points wins, and these points are scored by getting rid of all cards in your hand before you opponent(s).

Features

Authentication and Permissions

The application will require users to create an account in order to play and interact with other players in the game. Users will log in using their email address and password which will be protected on our site. Unregistered users will not be able to access the lobby room or game room.

Users will be able to create accounts, log in, and log out. Users won't be allowed to created two accounts using the same email address. We plan on using the authentication library passport.js in order to handle email authentications. Users will only be able to access the login page and individual game pages where they are registered as players or spectators of that specific game.

Real Time Chat

Real time chat will be provided in two locations, one in the main lobby, after the user has successfully logged in, and the other one will be in the individual game rooms. Chat rooms show the user handle, time stamp, and message content for every message sent. Users can only chat with other users in the same game room at the same time, or in the main lobby at the same time.

Lobby

The lobby is the main page where players will be directed to first, as soon as they get through authentications and permissions. This lobby will provide a real time chat section, player list currently in lobby, and necessary features to either create or join a game.

Waiting Room

The waiting room would be where some players can wait for other players to join their game since a game can have minimum of 2 players and a maximum of 4. Waiting room will provide a player

list as well as the real time chat room only for players that are currently in the same room.

Results page

Results page will alert the player if he/she has won or lost, also alerting the player that their current game had ended. A prompt will also be asking if the player wants to play again in the waiting room, go back to main lobby, or logout of the game(going back to login page).

Game Page

The game page will be the page that the players enter after the waiting lobby has filled up, and all the players are ready to play the game. There will be a game board showing all the cards in play, and each player's hands face down in front of them. There will also be a real time chat room for all current players playing the game at the same time in the game page. Each player will have buttons for in game decisions and flow, and click able cards that only they can see.

The game starts with each player being dealt 7 cards one at a time by the dealer (chosen by random at the start), and the remaining cards are placed in the middle face down, with the top card flipped face card up to start the discard pile. The players will then be taking turns one by one playing their turn, either playing a card, skipping, taking a card, challenging the WILD 4 card, etc, depending on the top card showing on the discard pile. The object of the game is to be the first player to get rid of all their cards each round, and be the first player to 500 points. When a player has won a round, the game will alert who won the round, add points to winning player, and start a new round by shuffling and dealing the cards out again. When a player has reached 500 points, the game will alert the players that the game has ended, and then direct the players to the results page where they can view the results and be prompted whether to play again(without creating new game room), go back to main lobby, or logout back to the login page.

Since the game is Uno we will have buttons in the corner, a wild card button, a wild card +4 button a UNO button as well as a skip button. These 4 buttons will be active during the whole game and will display such messages to the player such as, no wild cards in hand, more than 1 card cant say UNO, and select a skip card from hand prior to pressing the skip button. The reason we are deciding on having these buttons is the fact that during a game of UNO the player must remember to say UNO when they have one card left. If the player does not say UNO and another player Presses the UNO button prior then you draw 2 cards. Currently we are supporting max of 4 players so during a match you as a player have your hand right in front of you, and you can select a card from the deck which results in it being highlighted. To place the card in the discard pile you simply click that pile, to draw cards you click the deck. For a 2 player game the other players hand will be visible from the top of the screen area, but only the back side as not to reveal the hand but only the number of cards. If 3 Players we add another hand to the left side and for the 4th the right side.

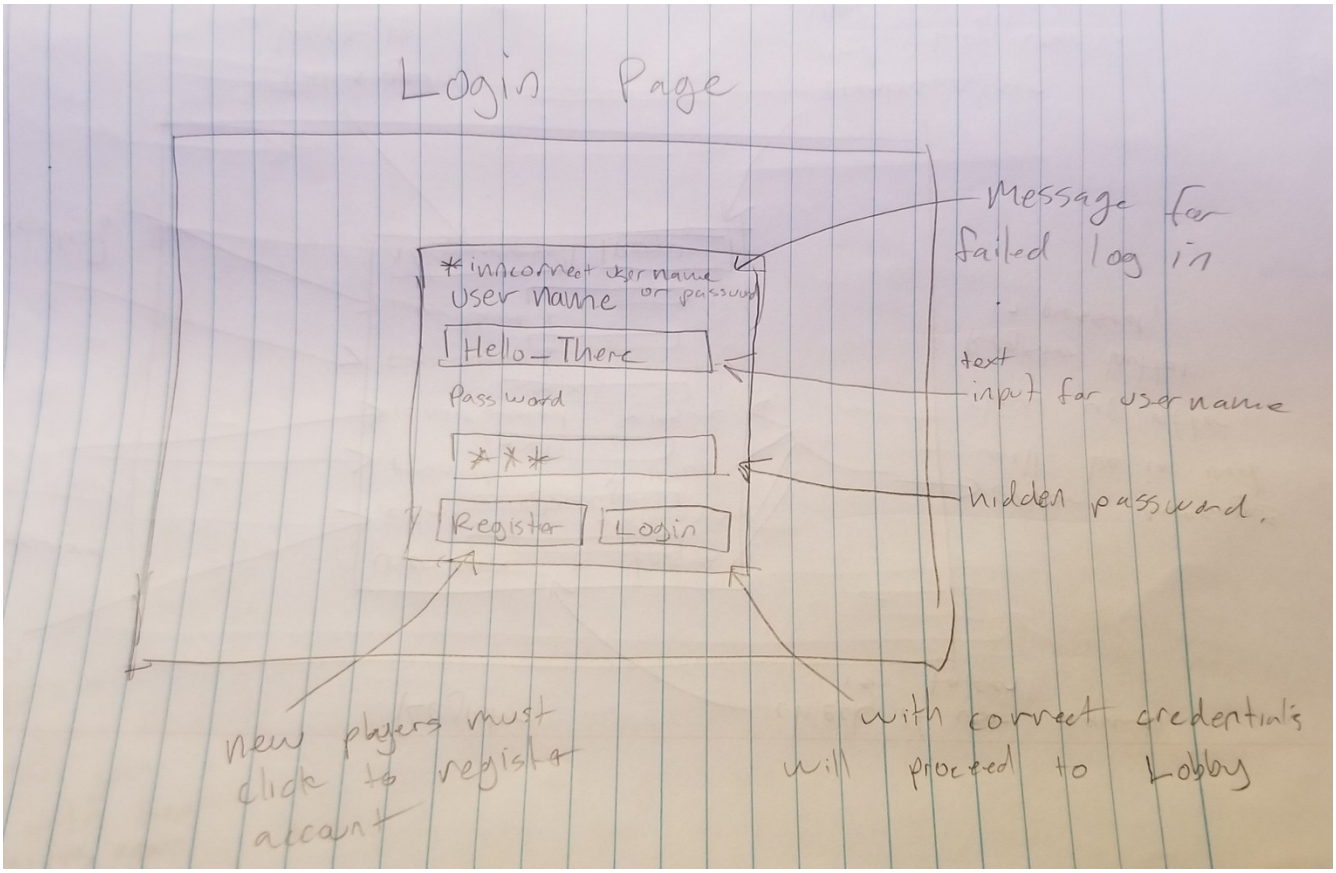
Arbitrary number of game rooms can be hosting games at the same time, and can accommodate players and observers. Games will be saved/recorded to a database so that players can continue past games that were halted.

Technologies

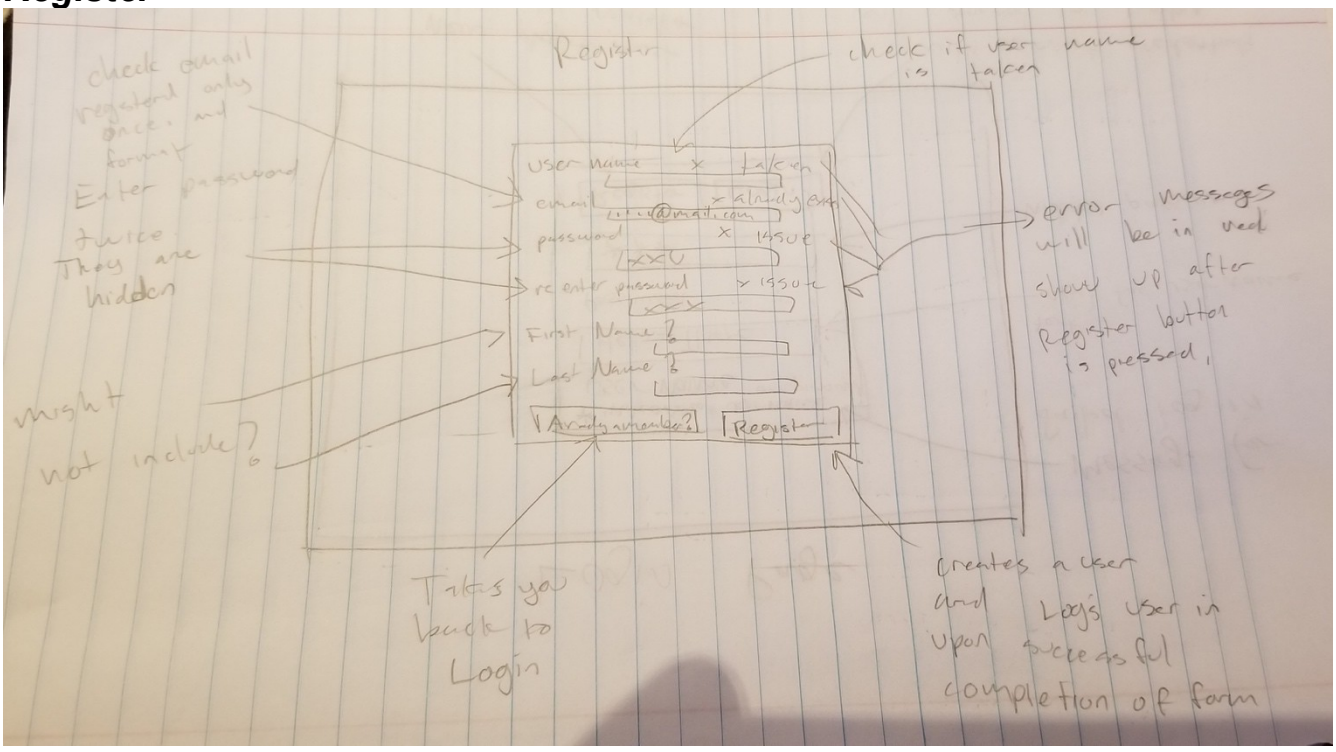
Heroku, Node.js, Express.js, Postgres

WireFrames

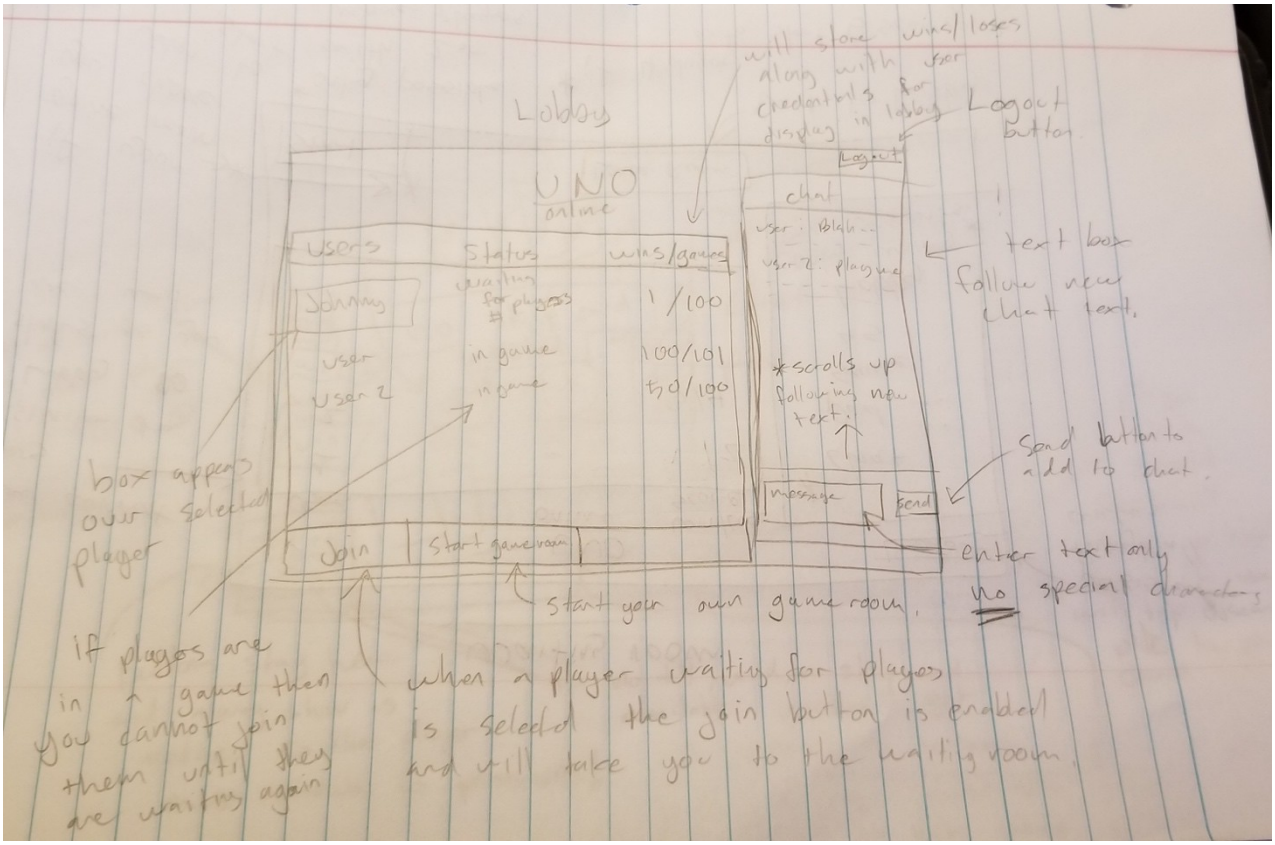
Login



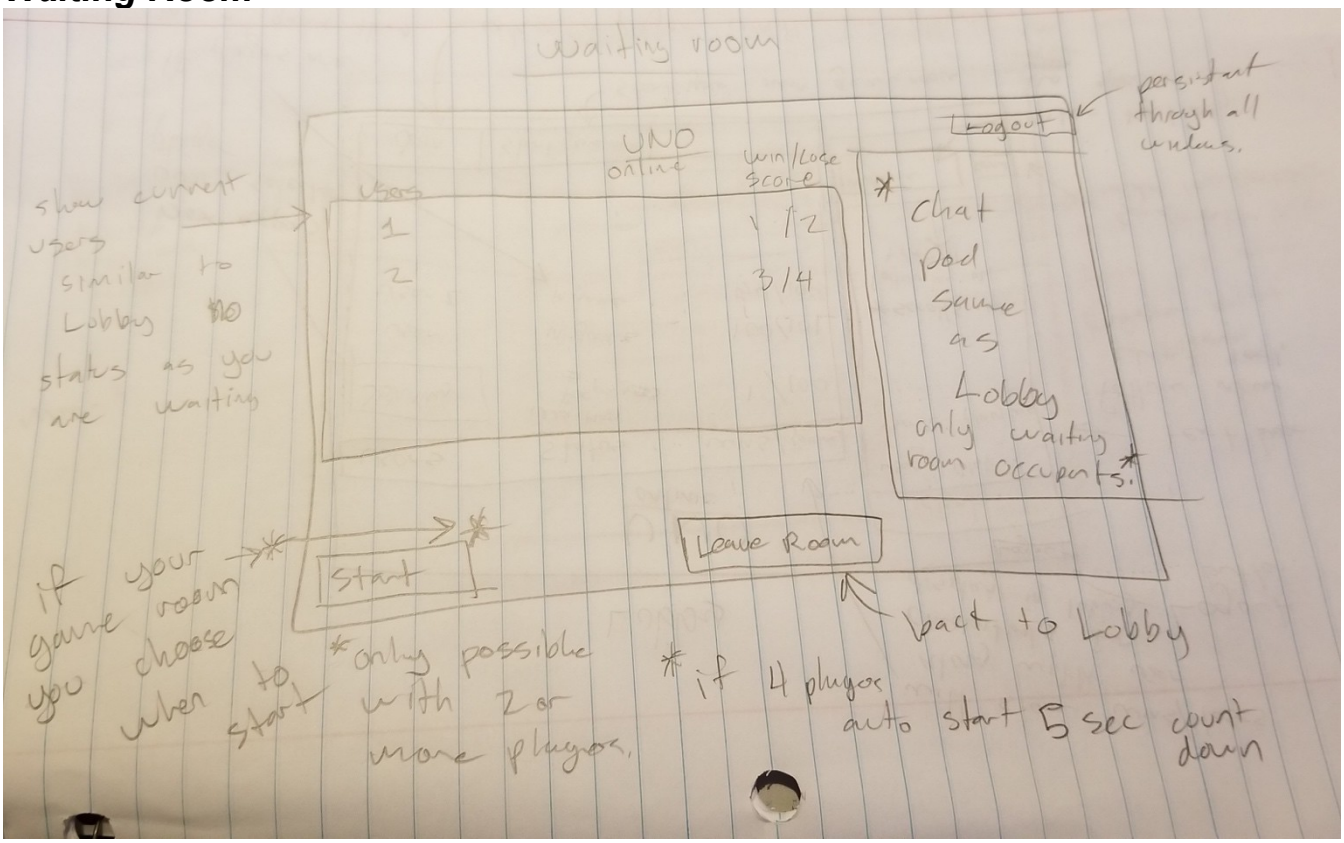
Register



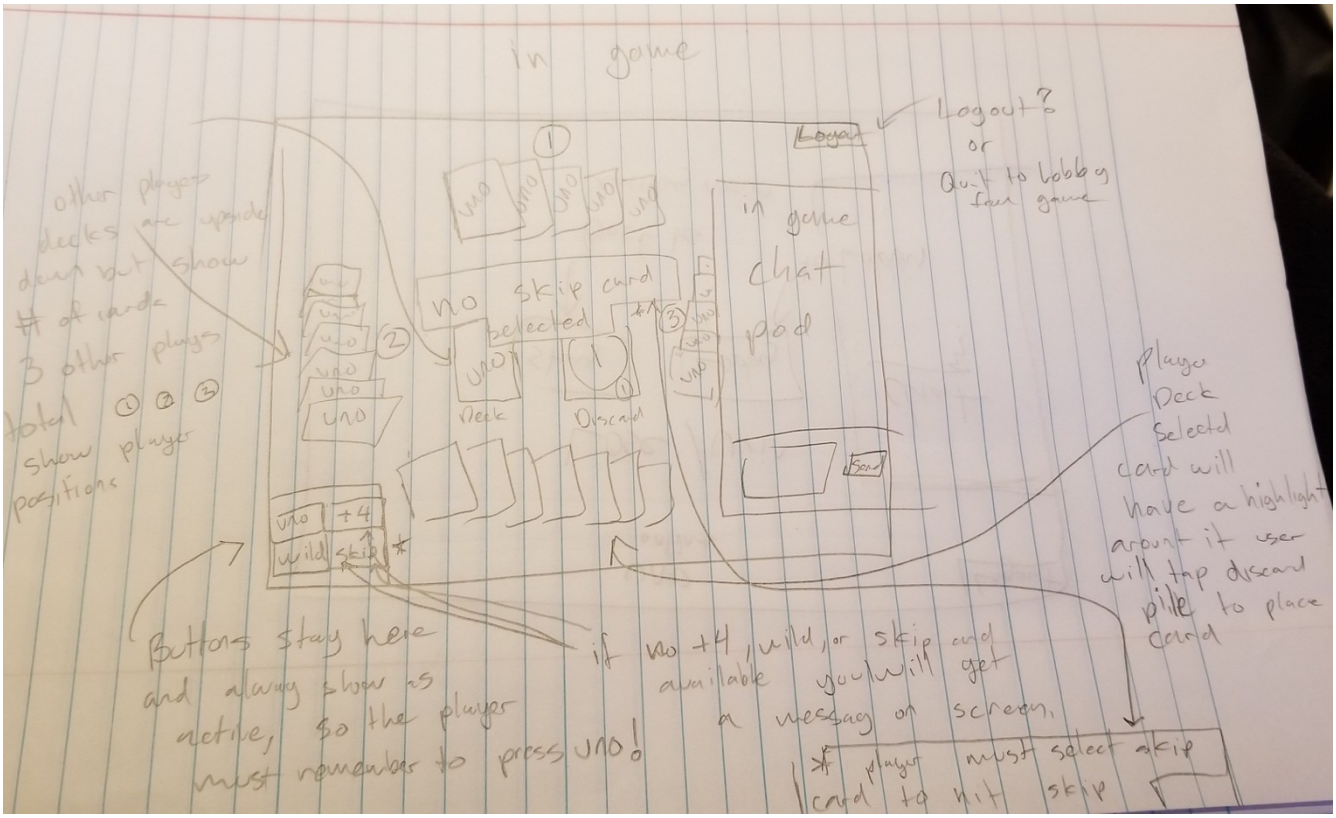
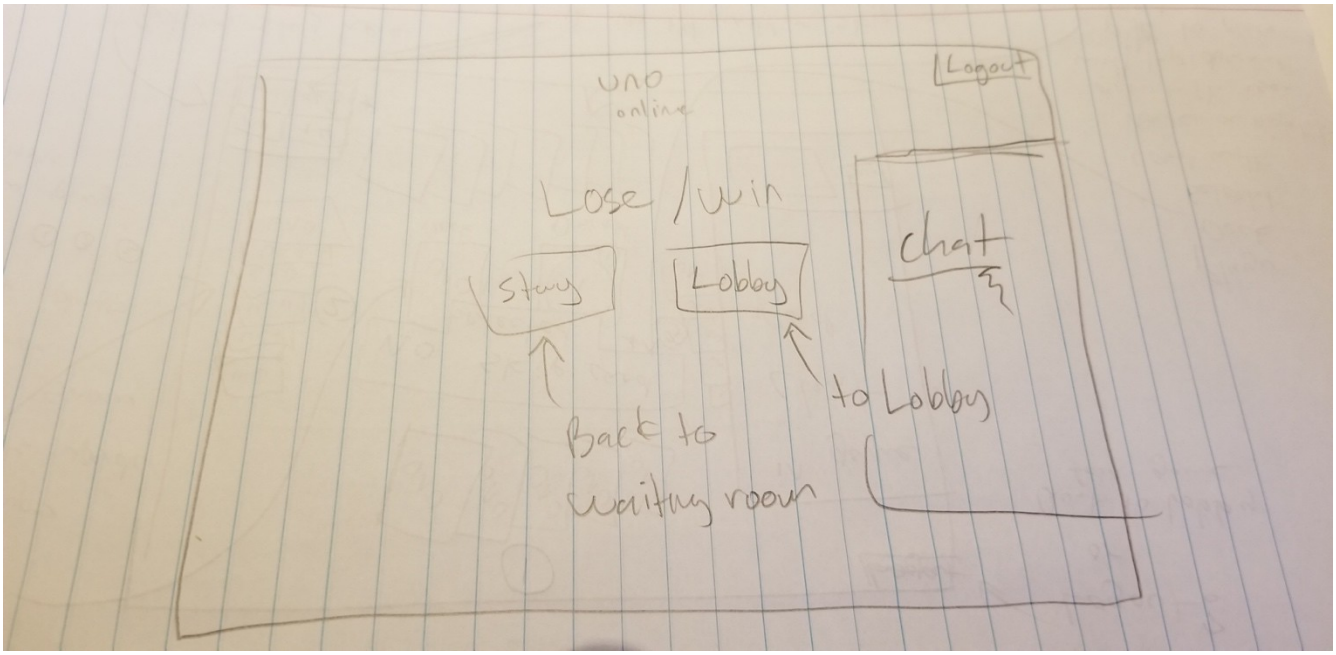
Lobby



Waiting Room



Gameroom



Result