

CSC 667-02  
Spring 2021

Term Project Team JAKE members

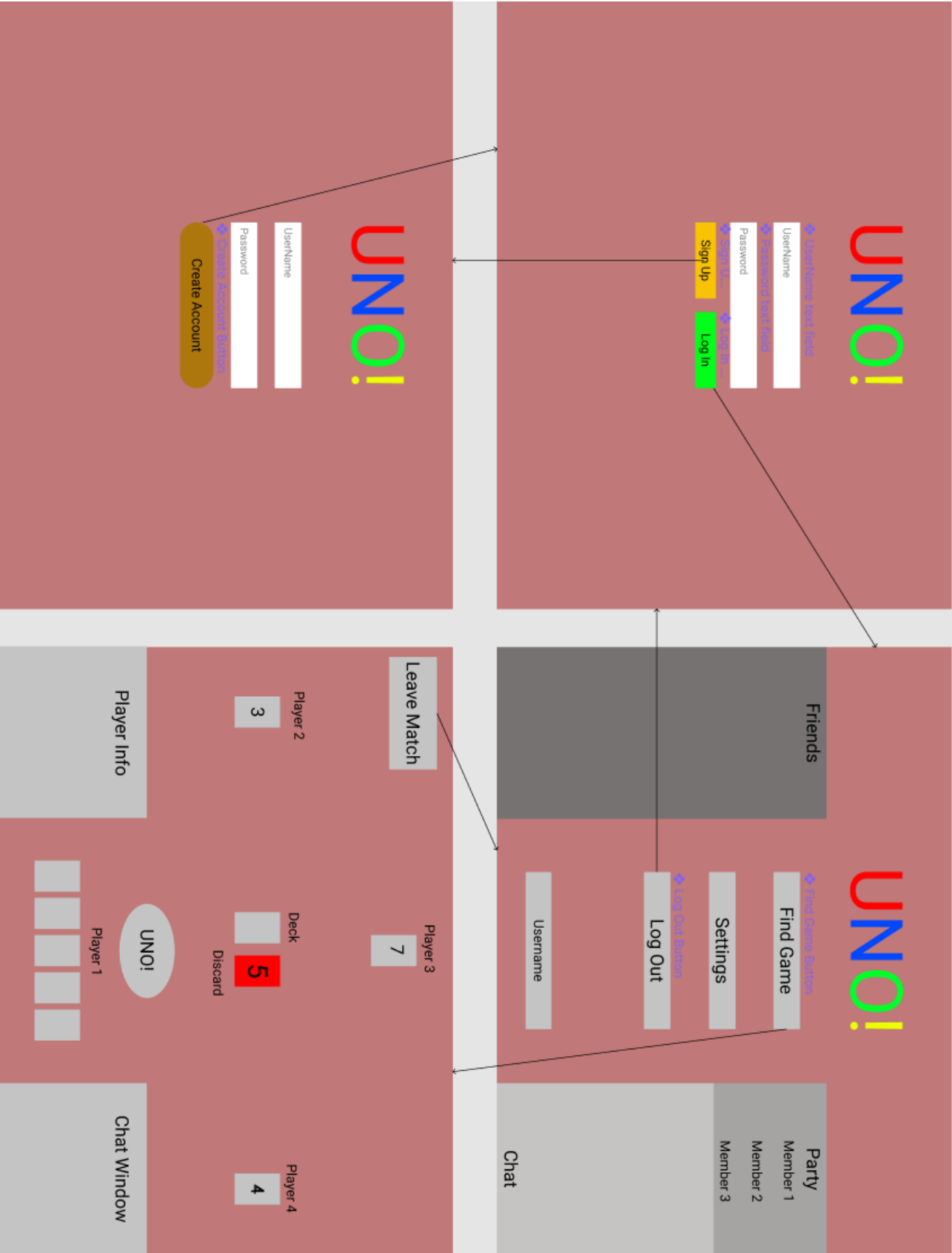
Jahir Hernandez, Alexander Hall, Kamelia Shaharova, Eanguy Eng

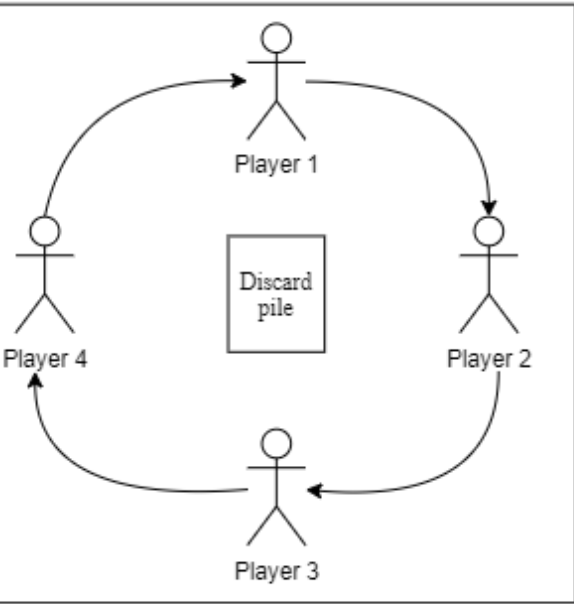
Github Repository: <https://github.com/sfsu-csc-667-spring-2021-roberts/term-project-team-jake>

Project Specifications

For our term project, our features would include an account creation for new users to join, which directs them back to the home page of logging in with their newly created account. On the menu of our game server, users can see the friends that they have added from playing with or will play with. If someone attempts to access the menu without being logged in, they'll be redirected back to the login page instead. Chat windows for communication and banter as your typical multiplayer game includes. Users can log out from the menu screen once they are finished playing. Settings is a work in progress on what possible settings to include to make a user more comfortable with playing our game, one crucial setting being a colorblind filter enabler. Once the user or the party is ready, they can begin finding a game to start playing in a lobby of 4. Uno will have its core rules implemented and used for our game server to keep it traditional, like stacking special cards except for +4, no special actions from 7 or 0 cards, or "jumping in". The deck will have 108 values in a randomized order to draw from and will shuffle the play pile except the most recent card played once the deck is empty. Special cards will be classified differently from regular number cards as they each come with a special effect that affects the game or another player. An example would be when the order array of players who will take their turn next, the Reverse card would flip the order of the array and go backwards. The UNO! button will not be visible until a player plays a card that results in them having 1 card remaining, where that player must draw 2 more cards if they fail to call UNO! before another player does. Users can click on other players' names to see their info and have the option to add them as a friend so that they may play again. A new chat window will be available for display when joining a lobby to communicate with other players. Users will see a number on other players' hands to signify the amount of cards they currently hold. If players wish to quit the match, they can forfeit by pushing the Leave Match button to leave the lobby in search of a new lobby or stop playing, otherwise closing the tab or window would still continue the game in the background. A flow chart is provided at the bottom of this document for a better visual of how the Uno mechanics and its rules will play.

Technologies we will be using for this project would be the required Express, Node, Heroku, and PostgreSQL. SocketIO is an additional technology we will be using to facilitate real-time communication for our multiplayer game.





# Assumptions

- Player turn order is stored in an array
- Wilds will have color type outside the 4 colors
- Checks are designed to get a success with the fewest attempts
- Skip, Draw 2, and Reverse will have their own number values, outside the range of 0-9
- Traditional rules. No stacking +2, using 7s or 0s to swap hands, etc.
- At any time a player's hand-size drops to 1, any player can call UNO! If it was any player except the one whose hand-size is 1, normal play is interrupted and the player whose hand-size dropped to 1 draws two cards

