Team Draw10 - Milestone 1

GitHub Repository

https://github.com/sfsu-csc-667-fall-2024-roberts/term-project-draw10

GitHub Project Board

https://github.com/orgs/sfsu-csc-667-fall-2024-roberts/projects/3

Overview:

This week, our group decided to create the card game Uno for our term project. We started by reviewing the required features that the project asked for, then added the specific features that we thought were necessary for Uno. After determining that we didn't plan to use any special technology outside of what was demonstrated in the lectures, we began to describe what each main page of the website hosting our game would look like, and the functionality it would provide to the user. Finally, we turned these page descriptions into wireframes, simple sketches of what we envisioned the complete game website to look like.

1. Features that we will implement:

General Requirements:

- User authentication (register/log in)
- Global chat (in main lobby when picking a game server)
- In-game chat (specific to one server)
- Persistent game state
- Multiplayer functionality
- Multiple instances
- Creating game lobbies
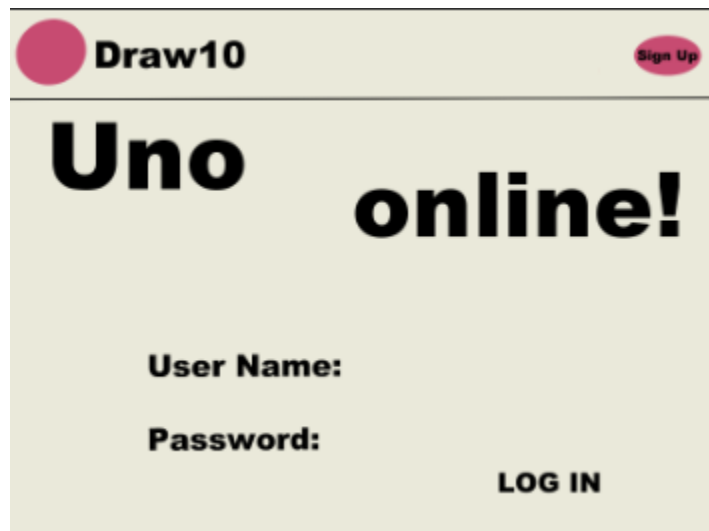- Joining game lobbies

Uno Requirements:

- Deck
- Cards
- Hand(s)
- Turn Order
- Button to say Uno
- Drawing cards (normal and forced by opponent)

2. Technologies that we will use:

- Render
- Node
- Express
- Postgres

3. Wireframes:

- Log-in Page
  - The user can input a username and password, then click Log In
  - Log In button
    - Redirects to the Main page if user authentication is successful
    - Displays error message and stays on this page if login failed
  - Sign Up button -> Redirects to the Sign Up page

- Sign Up Page
  - The User needs to input a user name and password to create an account
  - Users can pick from a set of predefined avatar images
  - Create Account button
    - Redirects to Log In page if registration succeeded
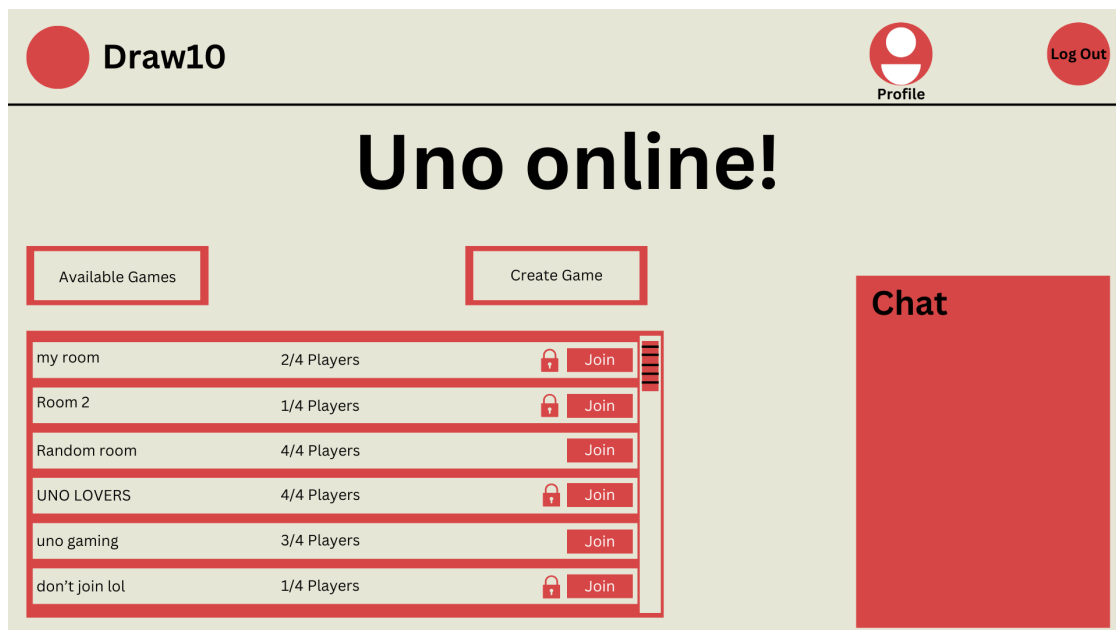   - Displays error message and stays on this page on failure

- ■
- Main Game Page (to select a game room)
  - ○ Global Chat
    - ■ Chat with other players that are logged in, but not in a game
  - ○ Inaccessible to guests
    - ■ The user has to be registered and log in to reach this page
  - ○ Registered users can join a game room or create their own
  - ○ Create Game button -> Redirects to Create Game Lobby screen
  - ○ Log Out button -> Redirects to Log In page after logging the user out
  - ○ User avatar is displayed in top-right corner

- Create Game Page
  - ○ User can input lobby name in Game Name field
  - ○ If a lobby password is desired, the user can type it in Password field

- ○ Back Home button -> Redirects to the Main Game Page
- ○ Log Out button -> Redirects to Log In page after logging the user out
- ○ User avatar is displayed in top-right corner
- ○ Global Chat: chat with other players that are logged in, but not in a game

- ● Waiting Lobby of Game Room
  - ○ Log Out button -> Redirects to Log In page after logging the user out
  - ○ Game Chat: Chat with the other players in this lobby
  - ○ The Lobby host can start the game by clicking Start Game
    - ■ Can't start unless there are 2 or more players
  - ○ User avatars are displayed in the center panel after users join the room
  - ○ All players can click Go Back to Home -> Redirects to the Main Game Page
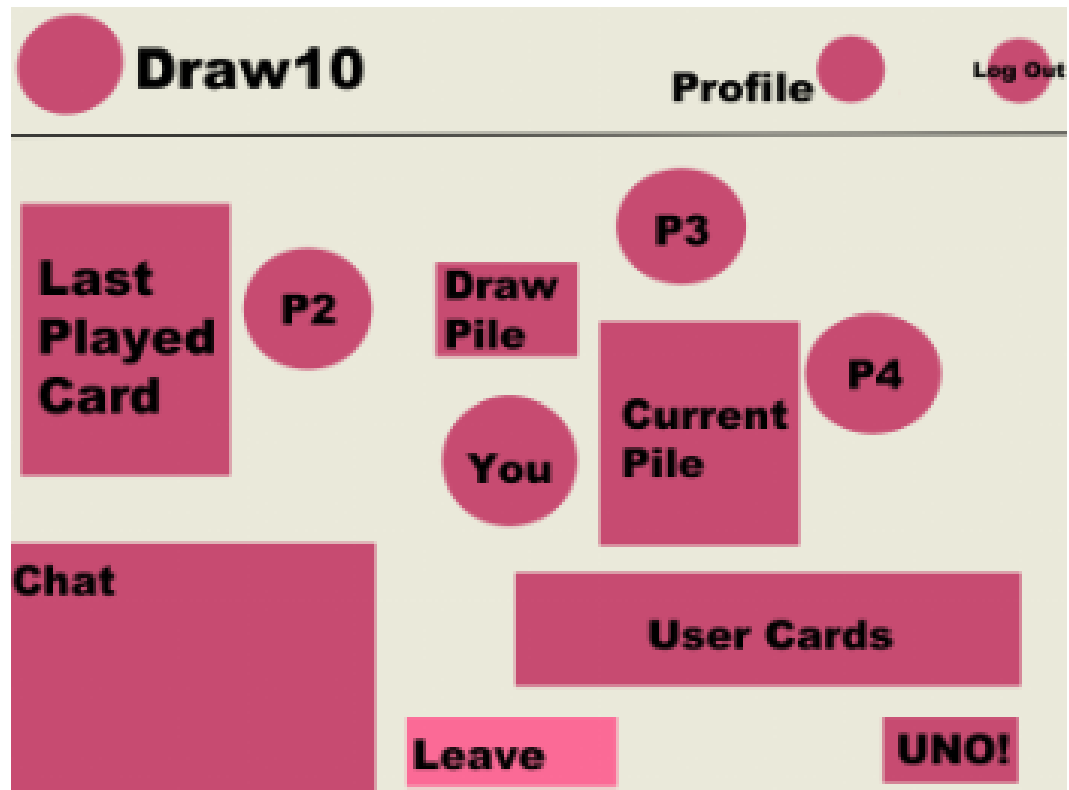
Draw10

Host ●

P1 ●

● P2

● P3

Chat

Go Back to Home

- In-Game Room
  - Log Out button -> Redirects to Log In page after logging the user out
  - Users play a game of Uno
    - Players can view their own cards and those discarded by others
  - 4 sides of the "room"
    - Users' avatars are displayed on each side
    - Other users' hands displayed face-down next to their avatars
  - Draw Pile: players automatically draw a card from here once at the start of their turn, and more if attacked by a card effect (Draw 2, Draw 4)
  - User Cards: The user's hand of cards that can be played to the discard pile
  - Current Pile (discard pile): cards that have already been played and discarded
  - Last Played Card: The card that was played by the previous player, which the current player has to try and match
  - Chat: Chat with the other players in this game
  - Leave game button -> Redirects to Main Game Page
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- Game End Screen
  - Shows the winner of the match
  - Options:
    - Leave Game -> Redirects to the Main Game Page
    - Keep Playing -> Redirects to the Waiting Lobby of this game
  - Chat: Chat with the other players in this game
  - Log Out button -> Redirects to Log In page after logging the user out

Draw10   **Profile**   Log Out

Winner!

Player Name

Chat

Keep Playing

Leave Game