

## Game Functionality:

### 1. Player Login and Authentication:

- **Feature:** Players must be able to create an account and log in.
- **Purpose:** Manage player sessions, track their progress, and store personal data like poker statistics and game history.
- **Details:** Use Express.js for authentication, and Postgres to store user credentials.

### 2. Main Menu:

- **Feature:** After login, players press “Play” and are randomly placed in an available game.
- **Purpose:** Simplify user experience by directly placing players in games without showing a lobby screen.
- **Details:** Players can also enter a specific code to join a friend’s game if needed.

### 3. Poker Game Logic:

- **Feature:** Implement poker game mechanics, including dealing cards, betting rounds, winning conditions, and player actions (e.g., check, call, raise, fold).
- **Purpose:** Handle the main poker gameplay according to standard poker rules.
- **Details:** Ensure support for poker with standard actions. Each game will manage blinds, community cards, hand rankings, and chip stacks (points?).

### 4. Multiplayer Mode :

- **Feature:** Real-time gameplay allowing multiple players to participate in a poker game.
- **Purpose:** Provide the core multiplayer experience, with players joining the same game session and interacting in real time.

- **Details:** This will use Socket.IO or WebSockets to handle real-time communication between players (e.g., actions, chat, game state).

#### 5. **Game Room Management (Optional Lobby Code System):**

- **Feature:** Players can join a game via random matchmaking or by entering a code to join a specific friend's game.
- **Purpose:** Provide flexible game joining options, allowing friends to play together without a traditional lobby system.
- **Details:** Each game room will have a unique code that players can use to join, which will be managed via the backend.

#### 6. **Poker Betting System:**

- **Feature:** Implement a full betting system where players can bet, call, check, raise, or fold during each round.
- **Purpose:** Ensure the core poker experience, with chip management and betting rounds like in a real poker game.
- **Details:** The system will include pre-flop, flop, turn, and river betting rounds. Players' chip stacks will be updated in real time based on their bets.

#### 7. **Player Actions and Turn-Based System:**

- **Feature:** Implement a turn-based system where each player has a set amount of time to make their move.
- **Purpose:** Control the flow of the game, ensuring that each player takes turns and has a time limit to act.
- **Details:** A timer will prompt players to make decisions in a timely manner. After the timer expires, the game will automatically fold or check for that player.

#### 8. **Card Dealing and Hand Evaluation:**

- **Feature:** Automatically deal cards to players and evaluate hands at the end of each round.

- **Purpose:** Ensure that players are dealt random cards and that hands are evaluated correctly to determine the winner.
- **Details:** Use a standard deck of 52 cards and implement hand evaluation logic (e.g., pair, flush, straight) to determine winners.

#### 9. **Game Over and Rejoining System:**

- **Feature:** When a game ends, the system will declare a winner and allow players to start a new game or exit.
- **Purpose:** End the game properly and allow players to continue playing or leave the game session.
- **Details:** Once all betting rounds are complete, and a winner is declared, players can either play another round or exit the game.

### **Required Features:**

#### 1. **Backend Server (Node.js with Express.js):**

- **Feature:** Serve the static HTML, CSS, and JavaScript files for the game.
- **Purpose:** Provide the backend to run the game logic and manage players.

#### 2. **Postgres Database:**

- **Feature:** Store game-related data such as player information, game sessions, and hand history.
- **Purpose:** Required for maintaining persistent data across game sessions or tracking statistics.

#### 3. **Deployment on Render:**

- **Feature:** Host the game on Render, making it accessible online.
- **Purpose:** Required for deployment, making the game available to users publicly.

Poker

LOGIN SCREEN

localhost:3000/login

# Poker

by CodingBlocks

GAME REQUIRES LOGIN

Log-in

Email:

johndoe@email.com

Password:

\*\*\*\*\*

SIGN IN

New User

SIGN UP

Users will login using a unique email. If the SIGN-UP button was pressed, the fields will switch to the signup fields, where they can enter their information

Sign-up

Email:

johndoe@email.com

User Name:

johndoe

Password:

\*\*\*\*\*

CREATE



