# Project Overview

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Game: Texas hold 'em (Poker game)

Description: Our project features one of most popular poker game Texa hold 'em, allowing users to create a room to play the game at a minimum 2 players and up to maximum 10 players.

# Features:

### **Core Features (Required)**

- User Authentication Secure sign-up and login system using JWT.
- **Database Integration** PostgreSQL database with Prisma ORM for managing users, game data, and scores.
- Express.js Backend API RESTful routes built with Node.js and Express.js to handle all game logic and data flow.
- **Frontend** Built with React + TypeScript + TailwindCSS for clean, dynamic UI.
- Render Deployment Full-stack deployment on Render for a live, production-ready website.

# Features:

### **Game-Specific / Application Features**

- Global Lobby Displays active game rooms and lets users create or join matches.
- **Real-Time Gameplay** Live interactions using Socket.io for multiplayer sync and game updates.
- Chip System Virtual chips for betting, raising, and tracking total winnings.
- **Dealer Logic** Automatic card dealing, turn rotation, and pot calculation.
- Game Room Chat In-room text chat to communicate with other players.
- Game Results Screen Shows hand rankings, pot winners, and updated balances after each round.

# Features:

### **Optional Enhancements**

- Leaderboard Displays top players by total chips or win streak.
- Game Rules We need decide the winner based on their cards.
- **Private Tables** Create password-protected poker rooms for friends.
- **Responsive Frontend** mobile-friendly UI.
- **Dark/Light Mode Toggle** Smooth theme switching using Tailwind.
- **Animation Effects** Framer Motion for smooth transitions and gameplay feedback.
- Error Handling UI Friendly alert messages for invalid inputs or connection issues.

# Technologies

#### **Backend Stack**

- Render Deployment platform for hosting the app
- Node.js + Express.js Backend server and routing
- PostgreSQL Relational database for storing user and game data

#### **Frontend Stack**

- **React (with Vite)** Client-side framework
- TypeScript Adds static typing for safer and cleaner code
- TailwindCSS Utility-first styling for fast and responsive UI design

#### **Supporting Tools**

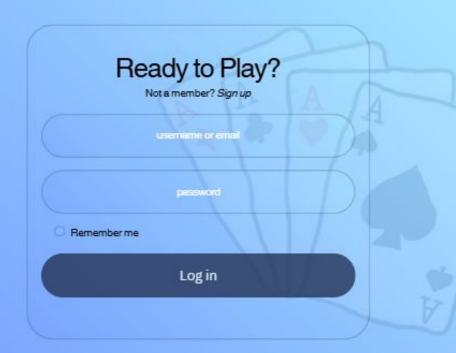
- Prisma ORM Database modeling and query management
- Axios / Fetch API For communicating between frontend and backend
- Socket.io Enables live updates and player interaction
- **JWT / Passport.js** secure user login and authentication



Poker Sign in / Sign up



# Sign in / Sign up



# Signed-in Landing

Players: 1/4

Players: 1/4

Players: 1/4

Table 1

Table 2

Table 3

Owner: Joho Doe

Owner: Joho Doe

Owner: Joho Doe

Join Lobby

Join Lobby

Join Lobby

### Game Room





Fold Check Raise



### Game Results

#1. Usemame TOkens

#1. Usemame TOkens

#3. Username TOken:

#4. Username TOkens

Play Again

Return to Lobby

# Wireframes

### TODO: draw a picture of major screens,

- Show key UI elements (buttons, input fields, labels, etc.)
- Indicate user interactions (e.g., "click → navigates to Game Room")
- Include short captions or arrows showing behavior

### Required Screens

- Signed-out Landing Page
- Sign Up
- Log In
- 4. Signed-in Landing (global lobby)
- Game Room
- 6. Any additional screens your game requires (e.g., results screen, settings)