

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

Texas Hold 'em

[Sign In / Sign Up](#)

POKER



Team Z-j

Welcome!

Already a member? [Sign in](#)

☐ By creating an account, I agree to the Terms of Service and Privacy Policy.

Sign-up

Ready to Play?

Not a member? [Sign up](#)

☐ Remember me

Log in

Signed-in Landing

Table 1 Players: 1/4

Players:

- 1.
- 2.
- 3.
4. John Doe (Owner)

Join Lobby

Table 2 Players: 1/4

Players:

- 1.
- 2.
- 3.
4. John Doe (Owner)

Join Lobby

Table 3 Players: 1/4

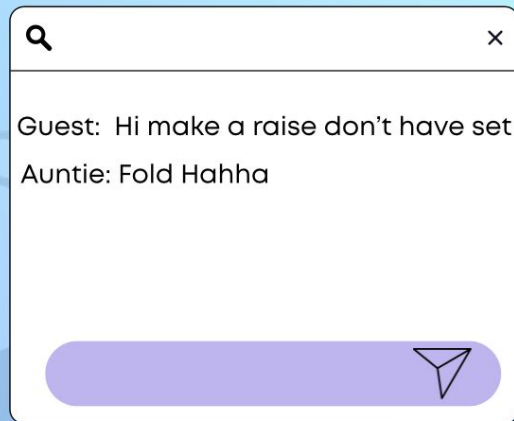
Players:

- 1.
- 2.
- 3.
4. John Doe (Owner)

Join Lobby

POKER

Game Room



Fold

Check

Raise

33%

50%

75%

Max

50.00



POKER

Game Results

#1. Username TOkens

#2. Username TOkens

#3. Username TOkens

#4. Username TOkens

Play Again

Return to Lobby

Texas Hold 'em

Sign in / Sign Up

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POKER

Sign in / Sign up

Welcome!
Already a member? Sign in

username or email

password

confirm password

☐ By creating an account, I agree to the Terms of Service and Privacy Policy.

Sign-up

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- In the landing page, the Sign in/sign Up button can lead the users to either sign up or sign in page.

POKER

Sign in / Sign up

Ready to Play?
Not a member? Sign up

username or email

password

☐ Remember me

Log in

Team Z-j

Ready to Play?

Not a member? Sign up

username or email

password

☐ Remember me

Log in

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Table 1	Players: 1/4	Table 2	Players: 1/4	Table 3	Players: 1/4
Players:					
1.					
2.					
3.					
4. John Doe (Owner)					
Join Lobby		Join Lobby		Join Lobby	

- Once user logged in, it will bring the user to the game lobby, then from the game lobby, by clicking the join lobby button it can bring the user to each individual room.



Guest: Hi make a raise don't have set Auntie: Fold Hahha

Game Results

Play Again

[Return to Lobby](#)

Game Room



Fold

Check

Raise

10

50.0

1



1

Signed-in Landing

Table 1 Players: 1/4

Players: 1/4

Players: 1/4

Players:

Players:

Players:

- 1.
- 2.
- 3.
4. John Doe (Owner)

- 1.
- 2.
- 3.
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- 1.
- 2.
- 3.
4. John Doe (Owner)

[Join Lobby](#)

Join Lobby

- In the game result page, if the user choose the play again button, then it will bring the user back to the game room page again. Clicking the return to lobby will bring the user back the 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

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