

MILESTONE 3: SLIDES

Texas Hold 'em

POKER

Group Member: Kataliya, Yuvraj, Daniel, Junhui

QUICK GAME SUMMARY:

- Turn-based multiplayer Texas Hold'em with real-time updates
- Players join a lobby, sit at a table, and play using A shared community DECK OF cards
- Server controls all game flow: blinds, dealing, betting rounds, ETC.
- The game supports multiple hands per session, rotating the dealer button and continuing until players run out of chips or the table ends.



API STRUCTURE

- *Create room*
- *Join Game*
- *Start Game*
- *Get Game Status*
- *Action(Fold, raise, check, call)*
- *Next Phase(Flop, turn, river)*
- *End Hand>Showdown, Pot distribution)*
- *Leave Game*
- *New hand*



COMPLEX ENDPOINT 1

START GAME ENDPOINT

PURPOSE: Start the first Hand

VALIDATION:

- User is authenticated
- User is part of this game
- Minimum players reached
- Game not already started

STATE UPDATES:

- Shuffle deck
- Assign dealer button
- Post blinds
- Deal hole cards

SOCKET EVENTS FIRED:

- game:state:update (public)
- game:hand:update (private hole cards)



COMPLEX ENDPOINT 2

SHOWDOWN ENDPOINT

PURPOSE: analyze all players' hands, determine winner, and distribute pot. then, end game or

VALIDATION:

- *The game exists*
- *User is authenticated with the session*
- *User is a participant of the game*
- *Game state is 'showdown'*
- *OR only 1 active player remains*

SPECIFIC CHECKS:

- *If phase is 'showdown' at least 2 players haven't folded*
- *If only 1 player remains, award pot immediately without hand evaluation*

STATE UPDATES:

- *Update player's committed chips*
- *Update pot size*
- *Update current highest bet*

SOCKET EVENTS:

- *game:action:played (public)*
- *game:state:update*



EVENT SUMMARIES WITH SOCKET.IO

PUBLIC EVENTS:

- *GAME:STATE:UPDATE — BOARD, POT, ACTION ORDER, PHASE*
- *GAME:ACTION:PLAYED — FOLD/CALL/BET UPDATES (MAYBE OR LEAVE VISUAL WITH THE BUTTONS)*
- *GAME:PLAYER:JOINED — NEW PLAYER SITTING*
- *GAME:HAND:SHOWDOWN — REVEAL FINAL HANDS ON LAST TURN*

PRIVATE EVENTS:

- *GAME:HAND:UPDATE — HOLE CARDS FOR 1 PLAYER*
- *GAME:HAND:RESULT — Winnings/losses*
- *GAME:ACTION:INVALID — MOVE REJECTED*

