

MILESTONE 3:
SLIDES

Texas Hold 'em *POKER*

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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*

