# Online Poker

# User Manual

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**Producer:** Full House of Fools **Affiliation:** FHF Software Inc. **Version:** 0.0.3 (Alpha)

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#### Glossary:

#### Poker Terms

- 1. *All-in* A type of bet that the player can make, where they put all of their available money into the pot. If the previous player has made an all-in bet which is greater in value than the current player's, then a call will put all of the current player's money into the pot. However, if the current player makes an all-in bet and the next player also wants to go all-in, they can only match the total value of the previous player's all-in.
- 2. Bet The amount of money placed by a player on their cards. A bet contributes to the pot.
- 3. *Blind (small and big)* blinds are mandatory bets that are placed into the pot before any cards are dealt. The blinds are paid each hand by the players who are occupying the "small blind" and "big blind" seats at the table. Poker blinds help drive the action forward and prevent players from simply folding until they are dealt premium cards.
- 4. *Call* One of the options given to the player when betting on their cards. This move is only valid when the player before has placed a bet. If a player wants to check, they match the raise made by the previous player. Check is no longer an option.
- 5. Card hands (in order of strength)
  - a. Royal flush A hand that consists of a straight with Ace, King, Queen, Jack, and a 10, all in the same suit.
  - b. Straight flush Any straight with all five cards of the same suit.
  - c. Four of a kind Any four cards of the same rank.
  - d. *Full house* Three cards of the same rank along with two cards of the same rank that are different from the first three.
  - e. Flush Any five cards of the same suit.
  - f. Straight Any five cards in a sequence.
  - g. Three of a kind Any three cards of the same rank.
  - h. *Two pairs* Two cards of the same rank along with another two cards of the same rank that are different from the first two.
  - i. (One) Pair Two cares of the same rank
  - j. High Card The highest card in the hand.
- 6. *Check* One of the options given to the player when betting on their cards. This move skips the player's bet to the next player.
- 7. Deck The stack of cards being used in the game.
- 8. *Flop* The first three cards shown in Texas Hold'em. There is one card discarded before the flop.

- 9. *Fold* One of the options given to the player when betting on their cards. This move is always available to the player, and allows the player to back out of the game. The bets made by the player during the game are still lost to the player, and they sit out for the rest of the game.
- 10. Formal card hand names (Other names card hands are known by)
  - a. Quads Another name for a four of a kind.
  - b. Boat Another name for a full house.
  - c. Pocket queens Another name for a pair of Queens.
  - d. Pocket rockets Another name for a pair of Aces.
- 11. *Hand* The cards given to the player that only they can see.
- 12. House Also known as the Dealer, they are the ones who deal all of the cards.
- 13. *Player(s)* The person(s) playing the game.
- 14. *Pot* The cash prize that is made up of bets contributed by all of the players in the game and is given to the player who wins the game.
- 15. *Raise* One of the options given to the player when betting on their cards. This option is always available to the player, and allows them to place a bet. The bet placed has to be more than the current bet amount. Only call allows the player to match a bet made by a previous player.
- 16. Pre-Flop The round of betting before the first 3 cards are revealed. As the name suggests, it is before the flop.
- 17. *Position* The order in which a player acts for their turn.
  - a. Small Blind First to act
  - b. Big Blind Second to act
  - c. Under The Gun Third to act
  - d.  $Under\ The\ Gun + 1$  Fourth to act
  - e. Middle Position / Lojack Fifth to act
  - f. Middle Position + 1 Sixth to act
  - g. Hijack Seventh to act
  - h. Cutoff Eighth to act
  - i. Button Ninth to act
- 18. River The last card shown in Texas Hold'em, after a card is discarded.
- 19. *Rank* A category used in a deck of cards. There are 13 ranks (in order of ascending value): Ace, 2, 3, 4, 5, 6, 7, 8, 9, 10, Jack, Queen, and King. The Ace can be placed either under a 2 or above a King.
- 20. *Suit* A category used in a deck of cards. There are four suits: Club, Spade, Diamond, and Heart.

- 21. Straddle bet Usually the player Under the Gun, optionally, will place a bet before any cards are dealt. This bet is higher than the big and small blind, and makes them the last to act on the pre-flop if no one raises.
- 22. Texas Hold'em A type of poker game. At the start of the game, each player is dealt two cards. The small blind places their bet first, ... after all of the bets have been placed and no one else raises the bet, a card is discarded from the deck and the Flop is dealt. Betting is started with the small blind again, and is finished when no one else raises the bet. Then, a card is discarded from the deck and the Turn is dealt. Again, betting is started with the small blind again, and is finished when no one else raises the bet. And finally, a card is discarded from the deck and the River is dealt. Betting is started with the small blind again, and is finished when no one else raises the bet. Once all of the bets have been placed, the players reveal their cards in turn, with the player with the best hand winning the pot.
- 23. Turn The second card shown in Texas Hold'em, after a card is discarded.

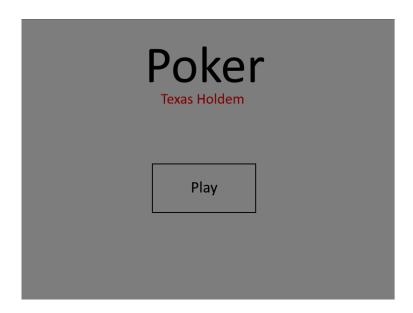
#### 1 Online Poker Overview

#### 1.1 Usage scenario

- Start Menu
- Waiting Room/Create Server
- Flop
- Check/Raise/Fold
- Player Wins

#### Start Menu

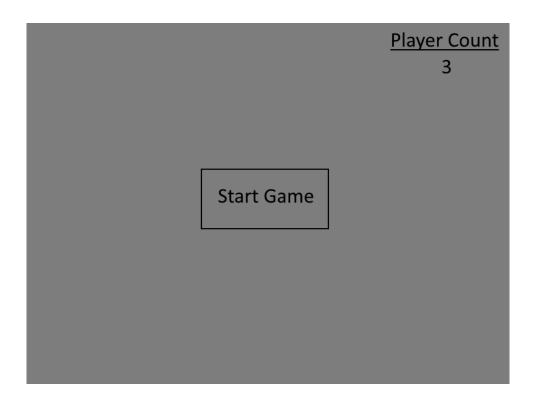
When user starts the program it launches into the start menu GUI Button Usage: Selecting play moves into the Waiting Room/Create Server. Screenshot:



#### Waiting Room/Create Server

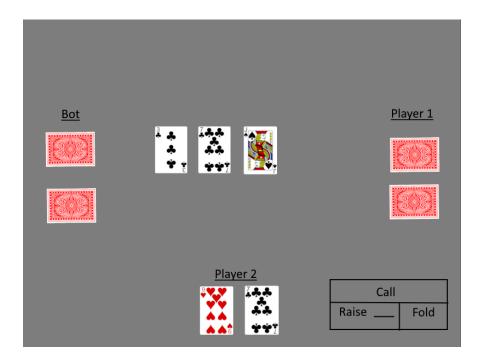
The pregame waiting room to allow players to connect to the server. Current amount of players connected indicated in top left

Button Usage: Selecting play starts the game and moves all players to the table



<u>Flop</u> The flop

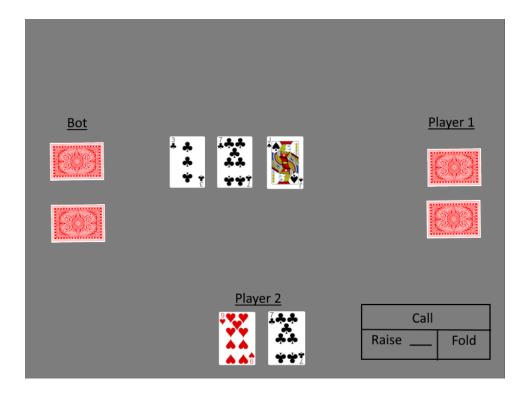
Button Usage: N/A



#### Check/Raise/Fold

Player prompt to check, raise or fold the hand

Button Usage: Check cause the player to match the current raise if any, raise cause the player to increase the current bet, fold cause the player to give up the hand pulling them from the game Screenshot:



#### Player win

Occurs at the end of hand when a player has won

Button Usage: quit to exit game and a timer will show indicating the amount of time before the next round

Screenshot:



### 1.2 Goals (How To Play)

- Welcome menu
- Choose how many players total
- Starting the game
- Win against other player(s)
- Tell user how to play (goal of game)

#### 1.3 Features

- Client and Server Communication
- Card Distribution
- Poker Game
- Player(s) vs bot(s)
- Hand Percentage
- Bot difficulty levels

#### 2 Installation

#### 2.1 System requirements

- Windows/Mac with built in terminal
- Able to use/SSH into a linux server
- Download Xming(windows) to be able to display the online poker GUI in separate window
- Internet/WiFi connection

#### 2.2 Setup and configuration

- mkdir poker
- cd poker
- Download files online poker directory in linux server
- tar -xvzf Poker\_V1.0.tar.gz
- make all
- cd bin/
- ./Poker
- Connect to server

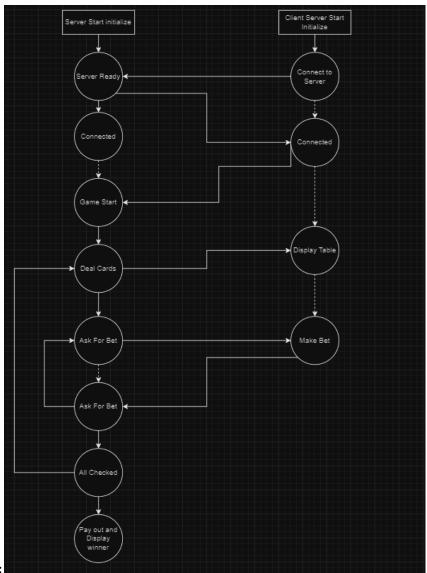
#### 2.3 Uninstalling

- Navigate to the parent directory of "poker/"
- Type "rm -rf poker/" to remove the entire "poker/" directory

#### 3 Online Poker Functions and Features

#### 3.1 Client And Server Communication

User input: Buttons on GUI to Raise, Fold, Call, start game, and change bot difficulty Program output: The server hosts all game content and information. Client servers receive commands from the server to display cards and make bets.

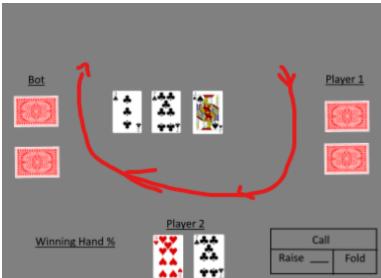


Screenshot:

## 3.2 Card Distribution

User input: N/A

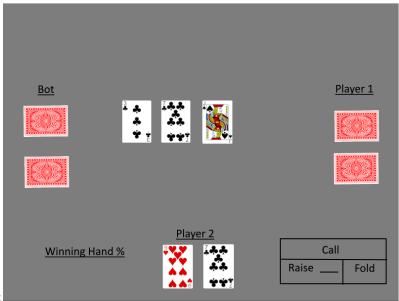
Program output: Cards are dealt going clockwise beginning with the big blind at the start of every round.



Screenshot:

#### 3.3 Poker Game

User input: Buttons on GUI to Raise, Fold, Call, start game, and change bot difficulty Program output: Poker game and an interactable GUI. Plus prompts for turns, raising, folding, etc.

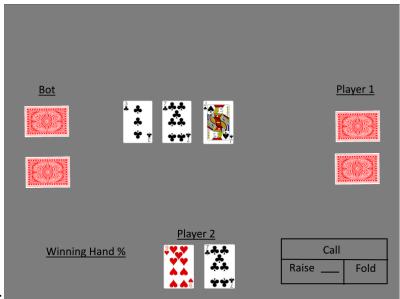


Screenshot:

# 3.4 Player Vs. Bot

User input: N/A

Program output: Bot and player against each other in game

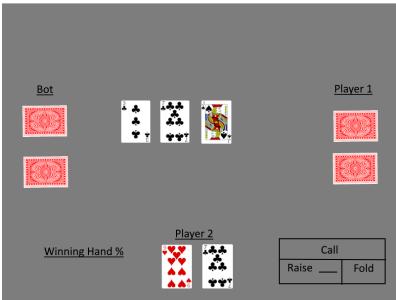


Screenshot:

### 3.5 Hand Percentage

User input: N/A

Program output: Will display the winning percentage of hand



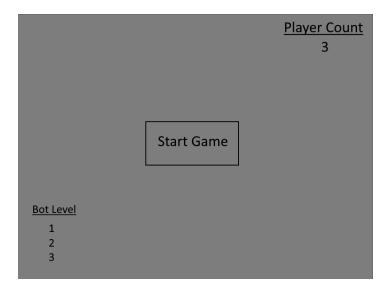
Screenshot:

### 3.6 Bot Levels

User input: select bot difficulty level in drop down

Program output: Different bot difficulty levels

Screenshot:



## Error messages

**Invalid Bet Amount** 

• Betting outside of max amount of money

Cannot Exit Mid Round

- Error prompt for when player attempts to exit or leave the round before its end Unable to Connect
  - User is unable to connect to the server or the server is at max capacity

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