# Testing

♣ ♠ ♦ ♥

## Test table

Does spilt pot where 1 winner goes all-in work? probably

Hands are ordered by card precedence

Player 1: dealer

Player 2: SB

Player 3: BB

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test no | Test description | Expected outcome | Actual outcome | Video timestamp |
| 1 | Player has cards:  4♥ 4♦ 4♠ K♣ K♦ 10♦ 8♦ | Detects a full house hand, 4s take precedence over the kings | As expected |  |
| 2 | Player has cards:  8♥ 7♥ 6♥ 5♥4♥ 10♦ 8♦ | Detects a straight flush hand, only uses cards 4-8 | As expected |  |
| 3 | Player 1 hand:  7♥ 7♦ K♠ J♠ 6♠  Player 2 hand:  7♥ 7♦ K♠ 10♦ 6♠ | Player 1 hand beats player 2, as the Jack kicker is higher than the 10 | As expected |  |
| 4 | Player 1 and 2 calls BB, player 3 raises the bet by 10, player 1 goes all-in, player 2 folds, player 3 calls the all-in | The betting round continues back round to the player 3 as he was the last to bet in the round. The game is then skipped to showdown as only player 2 is capable of betting. | As expected |  |
| 5 | Player 1 hand:  7♥ 7♦ K♠ J♠ 6♠  Player 2:  K♠ 7♠ 6♠ 5♠ 2♠  Player 3:  7♥ 7♦ K♠ 10♠ 6♠ | Player 1’s cards are shown as he is first to the left of the dealer, player 2 cards are hidden as he has folded, player 3 cards are not shown as he can not beat player 1’s hand. | As expected |  |
| 6 | Player 1 hand:  7♥ 7♦ K♠ J♠ 6♠  Player 2 hand:  7♥ 7♦ K♠ J♠ 6♠  Player 3 hand:  K♠ J♠ 7♦ 6♠ 2♣  Player 1 raises 1 and player 2 and 3 call the bet. All players check till the round is finished. | Player 1 and player 2 have the same hand, so the pot is split between them, showing both their hands in the poker log.  However, the pot cannot be fairly split between the two players so the odd money is allocated to player 2 as he is first in the betting order. | As expected |  |
| 7 | Player 1 hand:  7♥ 7♦ 7♣ K♠ J♠  Player 2 hand:  K♠ K♣ J♠ 7♦ 6♠  Player 3 hand:  K♠ J♠ 7♦ 6♠ 2♣  Player 1 goes all-in with 50, player 2 re-raises 50 and 3 call the bet. | A side pot is created as player 1 cannot stand to win all the money in the pot. Player 1 has the strongest hand so wins the side pot of 150, the remaining 100 goes to player 2 with the second strongest hand. | As expected |  |
| 8 | Player leaves the table | Hand is automatically folded | As expected |  |
| 9 | Player 1 sends message ‘hello’ in chat. | All other players in the table receive a message in the chat log: ‘Player 1: hello’ | As expected |  |
|  | User tries to enter a full poker table, tries to enter a table with not enough money to meet the buy-in, not logged in users try to join a table | User is redirected to the home screen | As expected |  |
|  | Any user accesses leaderboard page | A table of all players on the website shown, ordered by their total money. | As expected |  |
|  | User signs up and logs in | If the data given by the user complies with profile restraints, the users profile is stored in the database.  The user can then log in with username and password. | As expected |  |
|  | Passwords stored using strong hashing algorithm SHA-256 | The password ‘test11’ will be stored in the database as: | As expected |  |
|  |  |  | As expected |  |

## Possible tests

* 2 random unique cards are dealt to each player and 5 more dealt as community cards
* Hands consist of the strongest set of 5 of the above 7 cards
* The algorithm detects hands:
  + High card
  + Pair
  + Two Pairs
  + Three of a kind
  + Straight
  + Flush
  + Full house
  + Straight flush
  + Royal flush
* The card rank is used to judge cards of same strength e.g. Ace beats a King
* Flush and straight use highest ranking cards first
* The full house 3 of a kind takes precedence in comparing hand rank
* Kickers (cards not used to contribute to the hand strength) used to break ties in strength
* Stronger hands beat weaker hands e.g. three of a kind beats a pair
* The dealer button moves clockwise each round
* Betting turns move clockwise around the table from the dealer
* If a player bets betting continues to that player, i.e. the round continues until every player has either matched the largest bet, gone all-in or folded
* If a player goes all-in, they will not be asked to bet again
* If players are all-in and can no longer bet the community cards are shown and the game goes to showdown
* The algorithm detects if people have same ranking hand and shares pot between them -----
* each split pots are calculated based on how much money each player put in ------
* hand not shown if folded
* hands shown from dealer left
* hand not shown if hand cannot beat the current best hand --------
* in situations where the pot cannot be shared fairly, the winner last in the betting order gets removed ------
* SB BB compulsary posted
* SB BB rotate with dealer each game
* when players leave they automatically fold the current hand ------
* when players left their money in table added to their total money
* the amount of money in a game stays consitent i.e. no lost chips
* deck is randomly shuffled each game
* each player recieves two random unique cards to any other cards in game
* users can raise call or fold
* call button replaced with check if current bet = 0
* users can only fold if they do not match the current bet
* players cannot make a player action if it is not their turn ------
* player action buttons disappear if not their turn
* pot, hand, current money in table, dealer, community cards shown to player on page
* total player money updated in top right
* poker log:
* the winners and necessary players cards are shown along with money won and card strength -------
* player actions shown
* community cards shown once turned
* SB BB shown
* 'It's your turn' shown to tell user it is their turn
* players recieve each others messages in chat -----
* player sending message has <username>: prepended to message
* words in censor list censored out with appropiate amount of \*
* players cannot enter messages more than 100 characters
* logged in users:
* (check by button and url)
* users can join tables they have enough money to enter and not full, -----
* if not redirected to table page
* users cannot create tables with buy in under 100, max players 2-8
* logged in users can click their profile to see their profile -----
* website recognises user accessing their own profile -----
* users can reset their money to 1000 if less than that amount
* users over 1000 cannot reset their money
* can log out
* cookies saved on website so can log in instantly even after tab closed
* any user:
* view every other player on leaderboard ------
* users can click on player to see their profile
* can see current tables
* no of players in table updated live -------
* can sign up and log in -----
* sign up users must comply with user restraints:
* username:
* max length 25
* alphanumeric and underscores
* password:
* can't be too similar to your other personal information.
* must contain at least 8 characters.
* can't be a commonly used password.
* can't be entirely numeric.
* CSRF token used in sign up and log in process to prevent CSRF attacks
* all new users start with 1000 money
* passwords stored using strong hashing algorithm with salt ---------