**Documentation:**

Created By:

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Process:

1. Prioritized functionality by creating the deck of cards, opening hand, hitting, standing, end states, ace calculation, and opponent probability. This could only be seen through the console with no visuals being present
2. Focused on making visuals for the functionality, assigned card faces, buttons for hitting and standing, background, and a title.
3. Added feedback for the player, they could no longer see the opponent’s hand or total until either an end state has been reached or both players are ready, created player total count, alerted player when the opponent has stood, and stated the winner of each hand based on their values.
4. Created additional content for the game, the player can now press the refresh icon to start a new hand, added ambient, shuffling and, flipping sounds, and added the opportunity for the player to place bets on their hand before they hit or stand for the first time and save their total money.
5. Finalized CSS and overall look of the page for a variety of monitor sizes including 1024 x 768.

Notes:

* Opponent hit odds:
  + Hand Value: < 12 | Bust Odds: 0%
  + Hand Value: 12 | Bust Odds: 31%
  + Hand Value: 13 | Bust Odds: 39%
  + Hand Value: 14 | Bust Odds: 56%
  + Hand Value: 15 | Bust Odds: 58%
  + Hand Value: 16 | Bust Odds: 62%
  + Hand Value: 17 | Bust Odds: 69%
  + Hand Value: 18 | Bust Odds: 77%
  + Hand Value: 19 | Bust Odds: 85%
  + Hand Value: 20 | Bust Odds: 92%
  + Hand Value: 21 | Bust Odds: 100%
* The opponent will choose to stand if they do not beat the odds of busting.
* The opponent can continue to hit after the player has chosen to stand.
* The opponent hand and total are only shown once one of the end states have been reached.
* If the player has an ace the value will be recorded as 11 until the value of the hand is over 21 where the value will then be changed to 1.
* The player cannot hit on a hand value of 21.
* If either the player or opponent ever busts the game will instantly end.
* The player must press the refresh icon to begin a new hand.
* The player can bet on intervals of 5, 10, or 25 by clicking the correspondingly labeled chips.
* If the player wins, all bets are doubled, if they lose, all bets are lost, if they tie, all bets are returned.
* If the player loses all of their money, they will be provided with 5 money to restart.

Team Members:

Both of us met on two sperate occasions and spent a number of hours working collaboratively to develop the logic and look of this game. Following this we independently finalized the game by testing and fixing the logic of the game and ensuring the game was easily viewable on a variety of page sizes.

Resources:

* Programing Assistance – w3schools.com
* Blackjack Rules - blackjack.org
* Blackjack Strategies – blackjack.org
* Font - dafont.com
* Background - cheerspokernh.com
* Cards – mozavis.kourge.net
* Poker Chip - pngtube.com
* Refresh - stickpng.com
* Sound - freesound.org, youtube.com